

SELF STUDY REPORT (PART -I)

Submitted to
NATIONAL ASSESSMENT & ACCREDITATION COUNCIL
(NAAC)



by



GraphicEra
UNIVERSITY

Deemed University under section 3 of UGC Act, 1956

566/6, Bell road, Clement, town, Dehradun -248002.
(September -2015)



Graphic Era UNIVERSITY

(Declared as Deemed-to-be-University under section 3 of UGC Act, 1956)

566/6, Bell Road, Clement Town
Dehradun, Uttarakhand, India
Ph : 0135-2642727, 2642799, 2643420
Fax : 0135-2644025 www.geu.ac.in

Prof. V.K Tewari
Vice Chancellor
Ph.D (Brussels), FIE
Ex Prof & Head MMED.JIT Roorkee,
Ex-Vice Chancellor, Uttarakhand Tech. Univ, DDN

22.09.2015

To,

Dr. (Mrs.) K. Rama
Deputy Adviser,
National Assessment and Accreditation Council,
P.O.Box No. 1075, Nagarabhavi,
Bangalore = 560072

Sub: Submission of Self Study Report, Executive Summary with University Profile, Evaluative Report, of the Departments, Duly filled 50 points Questionnaires and Compliance Certificate of Graphic Era Deemed-to-be University, Dehradun for NAAC Accreditation.

Ref: - Letter No. NAAC/NR-KR/UAUNGN11461/2015 of July 17, 2015

Dear Madam,

This is with reference to your letter no. NAAC/NR-KR/UAUNGN11461/2015 dated July 17, 2015. Please find enclosed 12 copies of

- 1) Self Study Reports
- 2) Executive Summary with University Profile
- 3) Evaluative Report of the Departments
- 4) Duly filled 50 points Questionnaires
- 5) Compliance Certificate
- 6) Soft Copy of the above mentioned documents (CD)

for Graphic Era deemed-to-be University submitted for your perusal, consideration and further necessary action for NAAC Accreditation.

Thanking you,

Yours faithfully,

(V.K.Tewari)
Vice Chancellor

PS: A Demand Draft of Rs 3 Lacs, No. 318141, PNB, Hudson Circle, Bangalore dated 22.09.2015 is attached as processing fees.

Vice Chancellor
Graphic Era University
566/6-Bell Road, Clement Town, Dehradun



Prof. V.K Tewari
Vice Chancellor
Ph.D (Brussels), FIE
Ex Prof & Head MMED.IIT Roorkee
Ex-Vice Chancellor, Uttarakhand Tech Univ, DDN

Declaration by the Head of the Institution

This is to certify that the data included in this Self-Study Report (SSR) are true to the best of my Knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the Peer team visit

Vice -Chancellor

Place : Dehradun
Date : September 28, 2015



Prof. V.K Tewari
Vice Chancellor
Ph.D (Brussels), FIE
Ex Prof & Head MMED.IIT Roorkee
Ex-Vice Chancellor, Uttarakhand Tech Univ, DDN

Statement of Compliance

(Deemed University)

This is to certify that Graphic Era University has complied with all the provisions of the following University Grants Commission (UGC) Regulations governing it:

- ❖ Minimum Qualification for Appointment of Teachers and other Academic Staff in Universities and Colleges and Measures for the Maintenance of Standards in Higher Education 2010 and further amendments, if any, notified by the UGC.
- ❖ Minimum Standards and Procedure for the Award of M.Phil./Ph.D. Degree, Regulations 2009 and further amendments, if any notified by the UGC.
- ❖ UGC (Institutions Deemed –to-be –Universities) Regulations 2010 and further amendments, if any, notified by the UGC.
- ❖ Specification of Degrees, March 2014 and further amendments, if any, notified by the UGC.
- ❖ UGC-DEC approval for distance education programme.
- ❖ Approval by the UGC and MHRD for main campus, off- campus and off-shore - as applicable.

Any false or misleading information provided by the institution, will be viewed seriously by NAAC and the accreditation given is liable to be withdrawn.

Date: 22 September 2015

Name and signature with seal
Of Vice Chancellor

Vice Chancellor
Graphic Era University
566/6-Bell Road, Clement Town, Dehradun

Table of Content

S. No.	Particular	Page No.
1	Preface	i
2	Executive Summary	ii
3	Profile of the University	xxi
4	Evaluative Report	

CRITERION I:	CURRICULAR ASPECTS	1
CRITERION II:	TEACHING-LEARNING AND EVALUATION	13
CRITERION III:	RESEARCH CONSULTANCY AND EXTENSION	31
CRITERION IV:	PHYSICAL FACILITIES	79
CRITERION V:	STUDENT SUPPORT AND PROGRESSION	98
CRITERIA VI:	GOVERNANCE, LEADERSHIP AND MANAGEMENT	111
CRITERIA VII:	INNOVATION AND BEST PRACTICE	126

PREFACE



The roots of this great temple of teaching and research date back to the year 1998 when it was named as Graphic Era Institute of Technology. Within a short period of ten years this Institute earned name and fame for itself in the field of technical education, and it was then reckoned and elevated to Graphic Era Deemed to be University in the year 2008. It has continued its journey towards excellence in the fields of engineering, computer applications, management and allied sciences. Presently the University offers 15 undergraduate and 17 postgraduate programmes and provides rich avenues for research in various specializations, leading to Ph.D.

This document has been prepared with a view to showcase the strengths and achievements of this University. We wish to present it for perusal and assessment for accreditation by our county's renowned organization popularly known as NAAC.

Executive Summary

Preamble

The roots of this premiere university date back to the year 1998, when Graphic Era institute of Technology was established. With the glorious history of academic excellence, this temple of quality education was elevated and conferred to the status of Deemed to be University on August 14, 2008. **GEU is Declared as Deemed University U/S 3 of the UGC Act, 1956 vide Notification F.9-48/2007-U.3(A) dated August 14, 2008 and Approved by Ministry of Human Resource Development, Government of India. Governing systems of GEU strictly adheres to UGC regulations.**

Vision

We visualize GEU as an internationally recognized, enquiry-driven, ethically engaged diverse community, whose members work collaboratively, for positive transformation in the world, through courageous leadership, in teaching, research, and social action.

Mission

The mission of the University is to promote learning in the true spirit. The University offers the knowledge and skills needed to succeed as professionals, and the values and sensitivity needed to become responsible citizens of the world. The University will distinguish itself as a diverse, socially responsible learning community of high quality scholarship and academic rigor sustained by an effort that does justice.

Vision & Mission of the university have been associated with the following core values.

- ❖ Continuous learning & improvement
- ❖ Ethics
- ❖ Simplicity
- ❖ Integrity and trust

In order to achieve this, priority has been given to the following areas.

- ❖ Encouraging academic excellence.
- ❖ Developing programmes for awareness of the newly emerging areas of technology & growth.
- ❖ Promoting interdisciplinary skills.
- ❖ Inculcating ethics & values.
- ❖ Encouraging creativity & innovativeness.
- ❖ Cultivating managerial skills

Growth of Organization is measured by its Quality. Hence GEU has the following Quality Policy and Quality Objectives.

Quality Policy

- ❖ Provide organizational support for achieving "quality" at all levels.
- ❖ Involve and empower all in the process of continual improvement.

- ❖ Encourage problem solving, innovation and research by inter-disciplinary teams.
- ❖ To ensure dissemination of information in the best possible way.
- ❖ Encourage young minds to perform in the era of constant technological advancement.

Quality Objectives

- ❖ To be a world class technical institution fostering innovation, leadership and entrepreneurial spirit.
- ❖ To provide quality education and long term value creation.
- ❖ To organize continuing education programs regularly in order to keep the faculty and students abreast of ever changing technology.
- ❖ To anticipate and fulfil the requirement of the student, industry and community by adopting best practices.
- ❖ To enhance the quality of life through R & D, team work and industry interface.

Governance

- GEU involves its faculty members, staff and experts from outside (eminent professors from institutions of national & international repute (IIT, NIT, IIM, Central universities etc), R & D organizations, industries etc in all decision making policies. It is to be noted that **none of the members of the promoter's family or any of the relatives is on the Board of Management or in any other Committee or authorities of the University**. Governing system of Graphic Era University strictly follows the UGC guidelines/regulations of 2010.
- Major administrative and other functional bodies of the university are:
 - ❖ Board of Management (Apex Board)
 - ❖ Academic Council
 - ❖ Planning & Monitoring Board
 - ❖ Finance Committee
 - ❖ Board of Studies
 - ❖ Research & Consultancy Board
 - ❖ Examination Committee
 - ❖ Welfare Committee
 - ❖ Selection Committee
 - ❖ Proctorial Board
 - ❖ Discipline Committee
 - ❖ Grievance Redressal Committee
 - ❖ Women's Grievance Redressal Committee
 - ❖ SC/ST Cell.

Student Strength

- Undergraduate Programs : 4588
- Post Graduate Programs : 637

- Doctoral Programs : 156

Curriculum

Curriculum design is focussed on the following aspects.

- ❖ Employability
- ❖ Innovations
- ❖ Research
- ❖ Skill development
- ❖ Healthy living & Professional ethics.

Curriculum is designed by taking the inputs from various stake holders like domain experts, alumni, students, parent, eminent academicians from the institutions of national and international reputation like IITs, NITs, IIM, Central Universities, Research & Development Organizations etc. With these inputs, Academic departments design the curriculum and it is placed before the board of studies consists of all faculty members of concerned department and outside experts for its deliberations & modifications if required. The recommendations of Board of Studies is placed before the Academic Council for the due considerations and approval. These recommendations and approvals are finally placed before the Board of Management for approval and implementation. Designed curriculum is aimed to meet the global trends in the field of education and to fulfil the industry requirements.

- Curriculums of 15 UG, 1 Dual-degree and 17 PG programmes are designed in consultation with industry leaders like Infosys, Wipro, EMC², IBM, ORACLE and ONGC.
- GEU offers several interdisciplinary programs.
- Many B. Tech. programs have specialization resulting in students getting special training in highly industry relevant areas. For example, B. Tech. (Computer Science and Engg.) has specialization in Cloud Computing, Big Data Analytics etc.

Faculty

Faculty play an important role in the growth of an institution. After obtaining the deemed status, GEU developed and followed strategies enough to attract qualified faculty from Institutions of National & International reputation, Research & Development Organization, domain experts etc. Following table summarizes the Faculty profile of the University.

Faculty Details

Sl.No	Faculty with qualifying degree from	No. of Faculty
1	Foreign University	16
2	IITs/ IIMs	64
3.	Central Universities	57
4.	NITs/IITs/Other University and Institutions	179
	Total Strength	316

Faculty profile Vis-a- Vis Ph.D degree:

Sl.No	Faculty Profile	Number
1	Faculty with Ph. D qualification	101 (out of which 8 are from foreign universities)
2	Pursuing Ph. D from IIT	9
3.	Pursuing Ph. D from NIT	2
4	Pursuing Ph. D from GEU	25
5	Pursuing Ph. D from other institutes	29

Infrastructure & Learning Resources

The University is endowed with excellent physical infrastructure facilities

- ❖ Separate hostels for boys (5) and girls (4)
- ❖ Medical facilities with 4 ambulances, in-house clinic having resident Doctor
- ❖ Libraries (107761 books & E-books, 4453 E-Journals, 970 CD/DVDs)
- ❖ LAN/Wi-Fi Communication facility having bandwidth of 1 Gbps (BSNL) and 55Mbps (Tata Communication)
- ❖ Transportation facility with 32 buses, 1 minibus and 28 light vehicles
- ❖ Sports ground facilitating indoor and outdoor sport activities.
- ❖ University has excellent computing facilities (2002 units) with 11 centralized servers with high speed LAN networking, institutional repository and resource sharing networks.
- ❖ Facility of online resources for sharing knowledge and information data is accessed by students as well as faculty for their research /teaching/learning works (like NPTEL, Online access to E-Learning resources etc).

To support the teaching-learning process, it has spacious seminar/conference halls, ICT-enabled classrooms, well equipped laboratories. Apart from regular laboratories (augmented laboratories in support of research) as listed below:

- CAD/CAM laboratory
- C and S band laboratory
- Hybridoma laboratory
- Microbiology laboratory
- Molecular biology laboratory
- Animal cell culture laboratory
- Plant tissue culture laboratory
- Central instrumentation facility (CIF) laboratory
- Advanced communication systems & RF Propagation Laboratory
- VLSI system design(Cadence back end tool, VLSI front end)
- Xilinx, FPGA boards to test the real time systems, Semi automated PCB machine

- Advanced control system laboratory
- Advanced power electronics and renewable energy laboratory
- FMS-flexible manufacturing systems laboratory
- Modeling and simulation laboratory
- High performance and cloud Computing laboratory

Teaching Learning Process

- GEU has the academic calendar which is followed by all departments. Semester based system with 90 working days for academic classes are in place.
- Credit and grade based scheme with Innovative Pedagogy is used.
- CBCS system following UGC guidelines has been implemented from 2015-16 session onwards.
- All the classrooms have built in multimedia facilities to effectively adopt and implement ICT in the teaching learning process. Faculty use digital pad, and smart class room technology.
- Continuous evaluation system with Mid Term examination and the assessment based on assignments, quizzes etc. is in place. To maintain high academic standard, questions papers with the ratio of (50:50) are set by both internal and external faculty.
- Regular faculty training in creating interesting learning sessions as per the needs of the industry through Mission 10-X program of WIPRO Education, Foundation and Campus Connect Program of INFOSYS, and TCS Accreditation has resulted in introduction of group discussions, quizzes, role plays, case studies and field visits alike in the learning process.
- Self study is promoted amongst the students in any topic and the assessment is done through presentation/seminar/in the form of project realization in the subsequent semester.
- GEU is a nodal centre for NITTTR-Chandigarh which organizes several ICT enabled faculty development programs in emerging and thrust areas.
- Signed MOU with CII (Confederation of Indian Industries), IAU (Industry Association of Uttarakhand), helps in conduction of invited lectures from industry experts.
- Mini Project is emphasized in Under graduate Program to realize “Transfer of Technology (TOT)”
- Emphasis is given to cooperative and collaborative learning by providing the opportunities to discuss ideas together and solve the problem.
- Outdoor industrial visits and field based experience are provided to the students and faculty members.
- Feedback is taken from the students about the courses taught in each semester and analyzed to improve teaching learning process.
- Apart from classical experiments, students are encouraged to add on new and innovative experiments. Students are required to submit the report on the outcomes of the experiment with its possible applications in real life.

- Faculty is encouraged to conduct classes in an interactive student friendly environment.
- As an outcome of the improvements in teaching learning process, performance of students is reflected by:
 - Successful performance in Competitive examination like GATE, TOEFL, CAT, GMAT, Civil Services etc
 - Publications by several Undergraduate students in IEEE Explore, Springer etc.
 - Admission in Foreign Universities (with scholarship upto Rs. 40 lacs).
 - High level placement in very reputed MNC's and Indian Organizations.

Research & Development

Research & Development Activities of the university is valued by its publications, sponsored research/consultancy projects, Patents, international collaborations etc.

Details of Publications

Sl. No	Publication Detail	Journal	No. of Papers Published	Total
1	Scopus Indexed Journal	IEEE Transactions	07	
		Elsevier	07	
		Springer	07	
		Taylor & Francis	06	
		others	191	
		Total	218	218
2	Scopus Indexed International Conference	Elsevier/Springer/ACM	09	
		IEEE Explore digital library	59	
		Others	108	
		Total	176	176
3	Books/book chapters	Books in Wiley, Springer	22	
		Others	32	
		Total	54	54
				448
Other indexed journal and conference papers (Google Scholar, Ebsco etc.)				691

Scopus indexed journal/Conference Papers

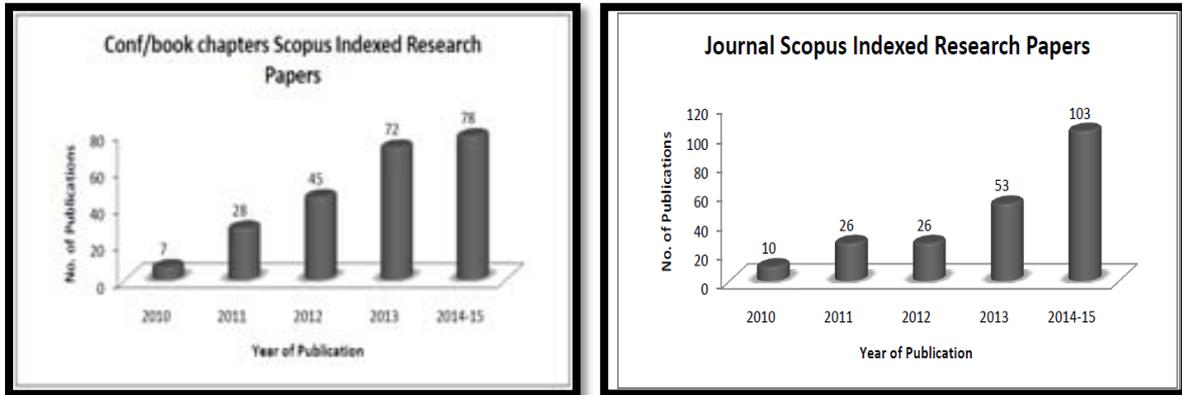


Fig :1 Scopus Indexed Publications

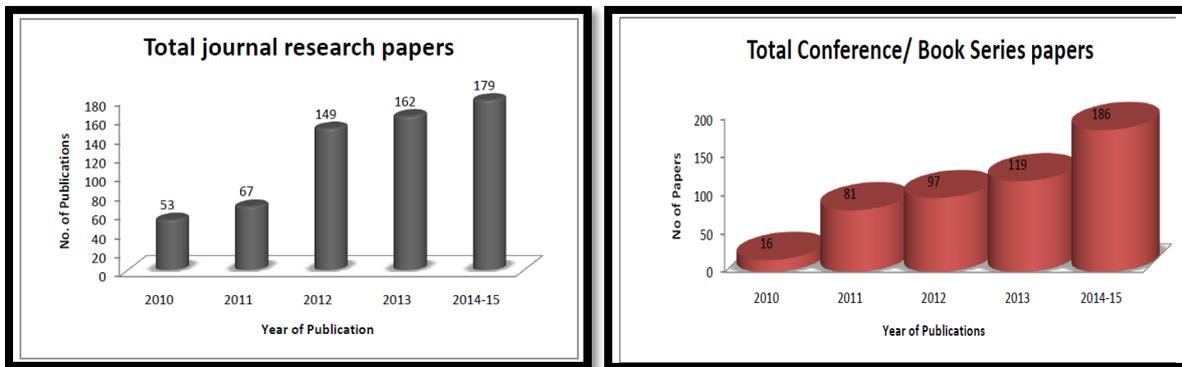


Fig.2 : Total Publications

A. University funded projects

Sr. No	Name of PI	Name of Project	funding Amount in Rs.
1.	Prof Dr. Kamal Ghanshala	Rural Informatics (<i>Design and implementation of village empowerment model through leveraging ICT and associated technologies</i>).	75,00,000.00
2.	Dr. Ashish Thapliyal	Development of dairy, animal cell culture and molecular diagnostic facility	75,00,000.00
3.	Abhilash Semwal	Mobile Bomb Detector	25,00,000.00
4.	Dr. Vijay Gupta	Renewable Energy Project On Paper Recycling	12,00,000.00
5.	Team GEU Motorsports from ME/AME Deptt	Racing Car	4,00,000.00
6.	Team gagnents from ME/AME Deptt	Gocart Racing Car	1,50,000.00
7.	Team GEU Motorsports Effi Car from ME/AME Deptt	Racing Car	68,000.00
8.	Mechame Racers from ME/AME Deptt	EcoCart Racing Car	1,00,000.00

B. Sponsored Projects

Sl.No	Funding agency	Number of projects	Sanctioned Amount (in Rs. lakh)
1	ISRO	01	11.98
2	DRDO	01	18.97
3	DST	02	27.31
4	Government of India Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS)	02	42.86
5	UCOST	07	27.34
6	USBD	02	13.95
7.	DBT	01	14.56
8.	Technology Business Incubator (TBI)	01	294.20
	Total	17	451.17

Details of completed Research Projects

Sponsored Projects

Sl. No	Funding agency	No of projects	Sanctioned amount (Rs. lakh)
1	AICTE	01	14.00
2	ISRO	01	13.52
3	DRDO	02	15.75
4	USBD	01	3.00
5	Institution of Engg.	02	2.00
6	DST (CV RAMAN)	02	3.20
	TOTAL	09	51.47

University Funded Projects

Sr. No	Name of PI	Name of Project	Funding Amount in Rs. Lakhs
1.	Prof Dr. Kamal Ghanshala	Baseline survey to assess IT awareness in Uttarakhand	35.7
2.	Dr. P Thakur	Solar Energy Light Project	55.0
3.	Dr. D R Gangodkar	Establishing private cloud computing facility for offering infrastructure and storage as service	3.00
4.	Dr. D R Gangodkar	Developing infrastructure for storage and analysis of big data	2.00
5.	Akhilesh Sharma	Alumni Website development	2.0
6.	Akhilesh Sharma	Mobile application for Women safety	2.0
7.	Dr. Devesh P Singh & Garvit Duggal	Android based software projects	2.0
8.	Mr Bordolai and Sameer Goyal	Admission Counseling software development	2.0
9.	Mr Kamlesh Purohit Mr Ramesh Rawat	MIS based software for Library management	2.0
10	Mechame Racers team from Department of Mechanical and Automobile Engineering	EcoCart/ Gocart Racing Car	1.5
11	Team VONK team from Department of Mechanical and Automobile Engineering	EcoCart/ Gocart Racing Car	3.0

Details of Research Scholars & Supervisors (Ongoing)

Sl.No.	Department	Active Research Scholars	No. of supervisor available
1	ECE	16	09
2	CSE	23	16
3	EEE	03	03
4	ME	05	10
5	CE	01	04
6	Biotechnology	27	11
7	Allied Sciences	51	24
8	Management Studies	24	17
9	PE	Nil	06
Total		150	100

Status of Research Scholars (submitted/awarded)

Sr. No	Department	No. of Research Scholars awarded Ph. D	Under evaluation process
1.	Management Studies	01	01
2.	CSE	07	
3.	ECE	01	
4.	Allied Sciences	07	03
5.	Biotechnology	-	01
6.	CE	-	01
Total		16	06

Consultancy Projects received (By GEU STEP- UCOST)

Minor Consultancy					
S. No	Consultancy Assignments/ Training program	Department	Project Tenure	Amount (in Rs.)	Faculty Incharge
1.	Provision of expertise service on Testing of Material Strength for Ashmeet Associates Engineers & Contractors (at 3 projects sites in UP & Uttarakhand)	Civil Engg.	Nov 2014- Oct 2015	2.00 lakh	Dr Pawan Kr Emani, Prof Alim Rawsan

2.	Training for Fabrication and pipe design for Uttarakhand Construction Company (practical teaching and on the site training program)	Mech Engg.	Nov 2014- Oct 2015	1.00 lakh	Prof Gurmeet Kalra Prof Prem Singh
3.	Provision of expertise service on Testing of Material Strength and Soil Testing for Alankrita Constructions (at two projects sites in Dehradun, Uttarakhand- 1. Abhimanyu Cricket Academy , Jouri Gram, DDN 2. Construction of King's avenue Apartments at Teg Bahadur Road DDN)	Civil Engg.	Oct.2014- Sept 2015	2.00 lakh	Prof KK Gupta Prof Sanjeev Kumar Prof Prabhat Kumar
4.	Training programme for sales and promotion team for Business Development AMOGEO ITES	Management Studies	Jan 2015- Dec 2015	1.5 lakh	Prof Sandeep Chaudhary Prof Sachin Ghai
5.	Training for Software Development and testing for AMOGEO ITES	CSE	Nov 2014- Oct 2015	2.0 Lakh	Dr Sushil Dimri Dr Devesh Pratap
6.	Market sensitization for publications of Savera Educational and Book Suppliers Meerut	Management Studies	Nov 2014- Oct 2015	1.00 lakh	Dr M P Singh Prof Sachin Ghai
7.	Training programme for marketing and sales team for market outreach for Savera Educational and Book Suppliers Meerut	Management Studies	Oct 2014- Sept 2015	1.00 lakh	Dr M P Singh Dr Happy Paul
8.	Skill Enhancement program for Pipe design and modelling for Prakash Pipe Industry, Bijnor , UP	CE/ME	Dec 2014- Nov 2015	2.00 lakh	Dr Pravin Patil Dr KK Gupta
9.	Academic / New Courses function Bharatam Institute, Selaqui, Dehradun	Biotech	2013-14	17,005	Dr. Ashish Thapliyal
10.	Academic and Research Gautam Buddha University, Noida	Biotech	2015	20,000/-	Dr. Nishant Rai

11.	Acad. and Res. Amity University, Noida	Biotech	2015	8,000/-	Dr. N Rai
12.	Academic and Research Maharishi Markandeshwar Univ., Mullana, Ambala	Biotech	2015	4,000/-	Dr. Nishant Rai
13.	Short term training(STS) in plant tissue culture and transformation studies(June- July2014)	Biotech	2014	96500/-	Dr. Manu Pant and Ms. Ankita Lal
14.	Hands on Training on Gene Cloning and Related Techniques (Scheduled July 03 to July 08, 2015)	Biotech	2015	20,000/-	Dr. Navin Kumar and Dr. Nishant Rai
15.	Short term training(STS)in Bioinformatics(June- July2014) TotalStudents:15(all from GEU)	Biotech	2014	46,500/-	Dr. Tribhuwa n Chandra and Mrs. Kumud Pant

Major Consultancy

Sr. No	Name of the consultancy project	Funding agency	Grants received in Rs. Lakhs
1	Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works	M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Kamal, Haryana.	309.25
2	Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,	Nainital, Uttarakhand. (a UNDP Project)	2.10
3	Running Operation & Maintenance of Effluent treatment plant (ETP)	M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar,	27.90

		Tonk Road, Jaipur, Rajasthan for a period of 3 years.	
4	Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of Uttarakhand	Hydel Projects in different locations of uttarakhand	75.00
5	Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	23.94
		Total	438.19

Patents :

- Total 13 patents filed so far (9 in India and 4 in foreign countries including US and Canada).
- 4 PCT applications have also been filed.

The detail of filed patents is as follows:

- a) Indian Patent Application 1447/DEL/2014: A Synergistic Camellia Sinensis Based Anticandidal Composition
Priority date - 31/May/2014 Filed Complete on 29/May/2015
Inventors - Jigisha Anand, Nishant Rai, Ashish Thapliyal
- b) Indian Patent Application 1500/DEL/2014: Primers Probes And Test Kit For The Detection Of Salmonella
Priority date - 05/Jun/2014 Filed Complete on 04/Jun/2015
Inventors - Pankaj Gautam, Navin Kumar, Nishant Rai, Ashish Thapliyal
Also filed PCT on 05/Jun/2015 - PCT/IB2015/000859 (ISA - IN).
- c) Indian Patent Application 1625/DEL/2014: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof
Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2014
Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly
Also filed PCT on 16/Jun/2015 - PCT/IB2015/000950 (ISA - IN).
- d) Indian Patent Application 2247/DEL/2014: A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 07/Aug/2014
Inventors: Puneet Goyal, Nitin Khanna
Also filed PCT on 28/Apr/2015 - PCT/IB2015/053080 (ISA - EP).
- e) Indian Patent Application 2646/DEL/2014: Secure Authentication using dynamic passcodes
Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan
Also filed PCT on 15/Sep/2015 - PCT/IB2015/057079 (ISA - IN).
- f) US Patent Application 14/809746: A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 27/Jul/2015
Inventors: Puneet Goyal, Nitin Khanna

- g) Canada Patent Application 2899803 : A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 06/Aug/2015
Inventors: Puneet Goyal, Nitin Khanna
- h) Canada Patent Application (Appln. No. yet to receive) : A System and Method for Security Enhancement
Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan
- i) Nepal Patent Application 1786: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof
Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2015
Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly
- j) Indian Patent Application 728/KOL/2015 filed on 7/08/2015: Semi Rigid Joint By Somjit Mondal
- k) Indian Patent Application 729/KOL/2015 filed on 7/08/2015: AFS Automatic Flow Stopper by Using Negative tensile spring By Somjit Mondal
- l) Indian Patent Application 730/KOL/2015 filed on 7/08/2015: Self Stabilizing Parallel Shaft Gears By Somjit Mondal
- m) Indian Patent Application by Abhilash Semwal filed in 2014: Mobile Bomb Detector

Inter disciplinary/international collaborative research

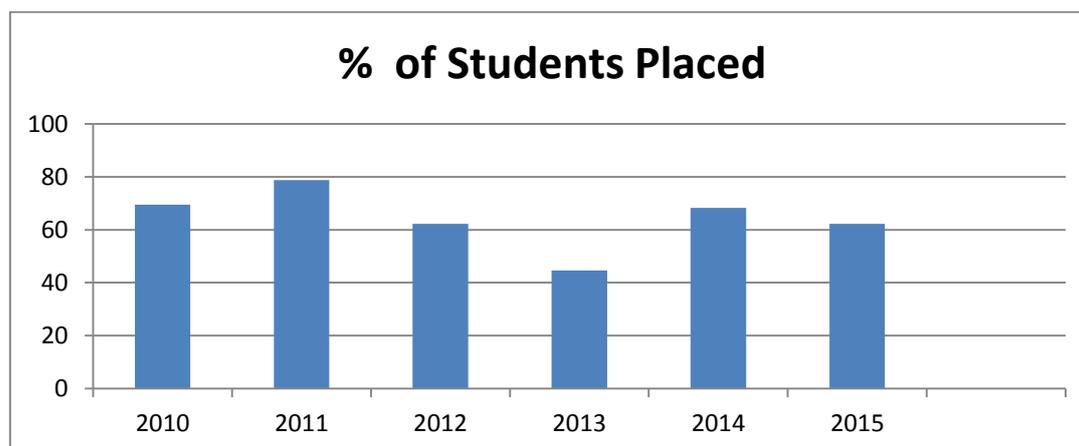
- ❖ GEU has signed an MOU with following foreign universities
 - **California State University, San Bernardino, California (CSUSB), USA**
 - **Birmingham City University, West Midlands, United Kingdom (UK)**
 - **Polytech Nantes, the Graduate School of Engineering of the University of Nantes, France**
 - **University of Worcester, UK**
 - **Sheffield Hallam, University UK**
 - **UFA State Petroleum Technological University, Russia**
 - **UFA State Aviation Technological University, Russia**
 - **Universite De Haute-Alsace, France**
 - **Hochschule Fulda, University of Applied Sciences, Germany**
- ❖ Defence Electronics Applications Laboratory, Instruments Research Establishment Laboratory, National Research & Development Corporations etc.
- ❖ Memorandum of Understanding was signed between Industry Association of Uttarakhand (IAU), Confederation of Indian Industries (CII) and Ph.D chamber of Commerce.
- ❖ Various centres in the field of Animal Bio technology, Plant Biotechnology, RF communication, High performance computing and cloud computing etc are nucleated.

Performance of Students

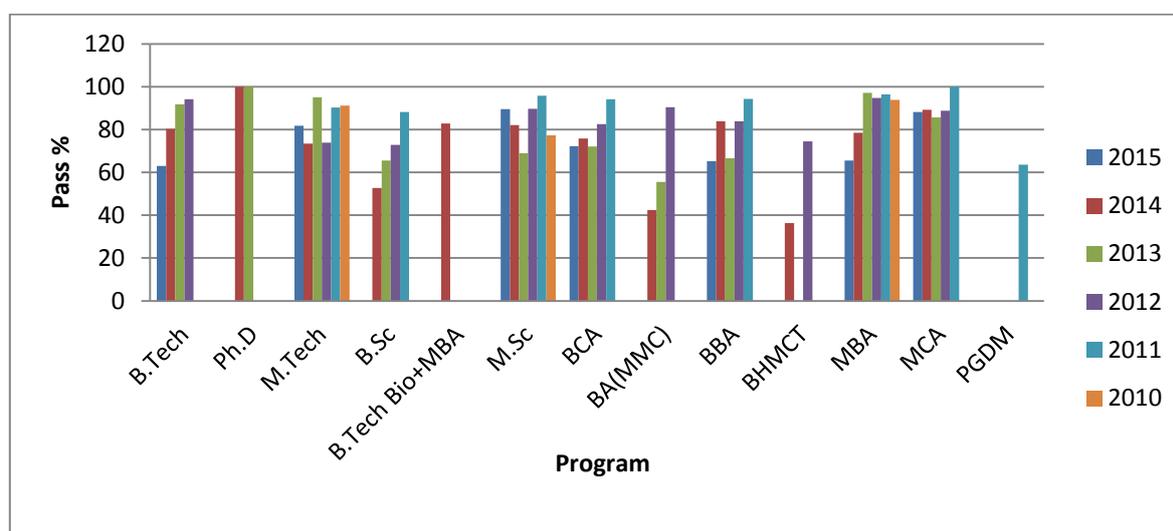
- 275 students scored above 90 percentile in GATE in last 4 years (including AIR 14, 70, 99, 112).
- 10 students cleared CAT, 29 Defense Services, 17 Banking Services & 25 were selected in Central and State Public Services.
- Gaurav S. Chuphal (B.Tech-ME) secured 99.68 percentile in GATE (ME) in 2015, but he preferred to join Indian Army
- Out of total 12 students selected from all over India in BARC in Computer Science in 2014, three of them were GEU students.
- Subodh Kumar (B.Tech-CSE) secured rank 1 in BARC (CSE) final selection in 2015. Also, out of total 15 students selected from all over India in BARC in Computer Science in 2015, five of them were GEU students.
- Sugam Gupta, Payal Gupta & Ravi Saini each won “Young Scientist Award” in 8th Uttarakhand State Science and Technology Congress 2013 for their research contributions.
- Several GEU students go to Universities abroad for higher studies, like
 - Tushar Gupta (B.Tech-ME) awarded scholarship of over Rs. 40 lacs by the University of Texas at San Antonio, USA for MS programme.
 - Kalyani Kumar (B.Tech-CE) awarded scholarship of Rs. 35 lacs by the Aalto University, Finland. She also received admissions offer from Imperial College of London - UK, Univ. of Illinois Urbana Champaign-USA.
 - Nihar Gupta (B.Tech-ME) awarded scholarship of over Rs. 22 lacs by the University of Texas at San Antonio, USA for MS programme.
 - Rohit Joshi (2012) got admission for higher studies in New Zealand University.
 - Skand K. Sharma (2012) got admission in Nanyang Technological Univ., Singapore.
 - Shivam Gupta was awarded UTSA COE Valero Competitive research Scholarship by the University of Texas at San Antonio, USA for MS programme (2013).
- Rakesh Biswas (B.Tech-BioTech) received a financial grant of Rs 23.89 lacs from Youth Time Intl. Movement at Rhodes youth forum 2013, Prague, Czech Republic
- Abhilash Semwal (B.Tech-CSE) awarded cash prize of Rs. 5 lacs by Hon’ble Chief Minister, UK for his breakthrough innovation - Portable handheld explosive detector. He also won the award at IIT Kharagpur for his innovation.
- B.Tech-CSE 3rd year students’ team (S. M. Ali, V. Pande and S. Kumar) won the 3rd prize in National Finals of Microsoft Imagine Cup 2014 under World Citizenship category, receiving prizes worth more than Rs. 1 Lacs (60000+ teams from India had participated in this contest).
- Ankit and Amit Rawat (B.Tech-CSE) won the Infosys Aspirations 20-20 Chandigarh DC competition 2013 beating 300+ teams coming from 41 different institutes of North India.

- Payal Gupta (M.Sc.- BioTech) received DST INSPIRE research Fellowship of around Rs. 12 lacs for research on anti fungal drug development.
- Tanya Kukreja (B.Tech-CSE) participated in 2014 Summer Workshop on Design & Innovation at IIT Delhi, receiving stipend of Rs 10000 per month. (There were only 25 students selected from all across the country).
- Megha Saraswat (B.Tech-CSE) received Special Jury Award during Regional finals of prestigious IET India Scholarship Regional Finals 2014. She came within top 0.8% amongst around 4000 nationwide applicants.
- Atul Joshi (B.Tech-ECE 2014 batch) - ranked 1st in ISRO Scientist Selection Examination 2015. He also secured AIR 34 in Indian Engineering Services (IES) 2015.
- Anurag Butola (B.Tech-ME 2014 batch) selected as Scientist-B in ISRO 2015 .
- Several GEU alumni are currently serving in Indian organizations like DRDO, IOCL, India Meteorological department, Hindustan Aeronautics, Indian Air Force, Indian Military Army, etc.
- Ramashish Yadav from 2011 batch qualified IES with AIR 159.
- Ishank Sachdeva (B.Tech-ME, 2013 batch) and Shivam Batra (B.Tech-ME, 2014 batch) placed in Olam International Pvt. Ltd. at Gabon, South Africa with pay package of Rs 22 lacs per annum.
- Several alumni members serving in top positions in top MNCs abroad
 - U. Shrivastava in Dow Jones, New Jersey, USA
 - Anuj Choudhary in Apple, USA
 - Vikas Gurung in J.P. Morgan Chase, UK
 - Rahul Aggarwal in Droisys, USA
 - Varun Vikram Singh in CISCO, USA
 - Shipra Singhal in Nielson, USA
 - Smita Pandey in Telco System, USA
 - Ankur Kashyap in J.P Morgan Chase, New Jersey
 - Harneet Singh in Microsoft, USA
 - Vasudev Yadav in Polaris Consulting, Singapore
 - Amardeep Virk in General Electric, New York, USA
 - Lalit Chimwal in Toyota, Bahrain, UAE
 - Deepak Mittal in CRISIL, India
 - Kulvinder Choudhary in Royal Bank of Scotland, United Kingdom (UK)
 - Charu Gulati in Scotia Bank, USA and many more...
- Prakhar Gairola (B.Tech-CSE 2013 batch) & Vishesh Parshav (B.Tech-CSE 2014 batch) placed in Amazon-India with pay packages of Rs 25 lacs per annum.
- Prachi Sharma (B.Tech-CSE 2014 batch) is serving in United Nations, Geneva.
- University Performance is evaluated by students' placement. Following graph summarizes the placement record of Graphic Era University.

Placements Summary



Academic Performance



Students of GEU are encouraged to participate in co-curricular and extracurricular activities.

- Mohd. Aasif, student of Civil Engineering won the gold, silver and bronze medal in state level shooting competition held at Dehradun in 2014.
- Ms. Aprajita Verma, student of Civil Engineering won the Miss North India Title, 2015.
- Gokart team of Mechanical Engg won “First position in Northern India and 5th position in India in Elite Kartling-15,
- Vonk team of ME department won All India third position in Ecocart -2015
- Third Prize in Relay Race, at Maharana Pratap Sports Meet-2013.
- Megha Saraswat (B.Tech-CSE) awarded state level Rani Laxmibai Award (Rs. 50,000 cash, Bronze Statue of Rani Laxmi Bai and a citation) from UP Chief Minister

Akhilesh Yadav on occasion of Birth Anniversary of Hockey Wizard Major Dhyan Chand on 29th Aug 2015.

- Mr. Akshay Anand, student of Petroleum Engineering won three medals Gold, Silver and Bronze in the 13thUttarakhand state Shooting Championship
 - **Team Gold Medal** .22 open sight rifle (junior men category)
 - **Silver Medal individual** .22 open sight rifle (junior men category)
 - **Bronze medal** 10m air rifle (senior men category)

Cultural Activities

- First Prize, in Solo Dance in IIT Roorkee (Saharanpur Campus), Shashank Pathak, BCA VI, in event Rahpsody-2014, 7, 8, 9 March 2014.
- Second Prize, in Group Dance IIT Roorkee (Saharanpur Campus), Vivek Negi, Nitish Rawat, Deepak Dhami, of BCA IV and Shashank Pathak of BCA VI in event Rahpsody-2014, 7, 8, 9 March 2014.
- First Prize, in Solo Dance in UPES, Shashank Pathak, BCA VI, in event Music Art Dance-2013, 26 October 2013.
- First Prize, in Solo Dance in IIT Roorkee, Shashank Pathak, BCA VI, in event Foot Loose, August 2013.
- Third Prize, in Group Dance IIT Roorkee (Saharanpur Campus), student group of BCA VI in event Foot Loose, August 2013.
- First Prize in Dance Competition at UPES, Harshit Sharma, on 25 October, 2013.
- First Prize in Dance Competition at Pantnagar University, Harshit Sharma, 07-09 February, 2014.
- Lokendrapal, student of ME dept –semifinalist in “India Got Talent - 2015”.

1. Profile of the University

1. Name and Address of the University

Name	Graphic Era University		
Address	566/6, Bell Road, Clement Town.		
	City: Dehradun	PIN: 248002	State: Uttrakhand
Website	www.geu.ac.in		

2. For Communication

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor	Prof (Dr). V.K.Tiwari	O : 0135 -2642799 (Extn-239)	9897277180	0135 -2644025	vicechancellor@geu.ac.in
		R :			
Pro Vice Chancellor (s)	Prof. AK Awasthi	O : 0135 -2642799 (Extn -233)	9897081518	0135-2644025	akapvc@gmail.com
		R :			
Registrar	Shri. SC Sharma	O : 0135 2642799 (Extn -208)	8755480086	0135-2644025	registrar@geu.ac.in
		R :			
Steering Committee / IQAC Co-ordinator	Dr. R. Gowri	O : 0135 2642799 (Extn -208)	9997620642	0135 -2644025	deanengg2014@gmail.com
		R :			

3. Status of the University

State University

State Private University

Central University

University under Section 3 of UGC (Deemed University) Institution of National Importance

Any other (please specify)

4. Type of University

Unitary

Affiliating

5. Source of funding

Central Government

State Government

Self-financing

Any other (please specify)

✓

6. a. Date of establishment of the university:..... **14/08/2008**

b. Prior to the establishment of the university, was it a/an

PG Centre

Yes

No

Affiliated College

Yes

No

Constituent College

Yes

No

Autonomous College

Yes

No

Any other (please specify)

If yes, give the date of establishment: **07/09/2001**

7. Date of recognition as a university by UGC or any other national agency:

Under Section		Date	Month	Year	Remarks
i.	2f of UGC*				
ii.	12B of UGC *				
iii.	3 of UGC #	14	08	2008	Declared as deemed to be university U/S 3 of UGC act 1956 vide Notification F.9-48/2007-U.3(A) dated August 14, 2008 and Approved by Ministry of Human Resource Development, Government of India MHRD
iv.	Any other ^ (specify)				

* Enclose certificate of recognition

Enclose notification of MHRD and UGC for all courses / programmes / campus/ campuses.

^Enclose certificate of recognition by any other national agency/agencies, if any

8. Has the university been recognized

(a) By UGC as a University with Potential for Excellence?

Yes

No

If yes, date of recognition:

(b) For its performance by any other governmental agency?

Yes

No

If yes

Name of the agency: **Defence Electronics Applications Laboratory (DEAL), Instruments Research & Development Establishment(IRDE), Dehradun**

Date of recognition:2009.....

9 Does the university have off-campus centres?

Yes

No

If yes, date of establishment.....

date of recognition.....

10 Does the university have off-shore campuses?

Yes

No

If yes, date of establishment... ..

date of recognition.....

11 Location of the campus and area:

		Location *	Campus area	Built up area
			in acres	in sq. mts
i.	Main campus area	Hilly slope of Doon valley – Semi Urban area	25	97496.86
ii.	Other campuses in the country	--	--	--
iii.	Campuses abroad	--	--	--

(* Urban, Semi-Urban, Rural, Tribal, Hilly Area, Any other (please specify))

If the university has more than one campus, it may submit a consolidated self-study report reflecting the activities of all the campuses.

12 Provide information on the following: In case of multi-campus University, please provide campus-wise information.

- Auditorium/seminar complex with infrastructural facilities
 - Auditorium : 02 with capacity of 450 students each
 - Seminar rooms : 10 with seating capacity of 150 members each

- Conference rooms : 04
- ICT enabled Class Rooms & Lecture theatres : 39





- Sports facilities

Play Ground which can accommodate the outdoor games like cricket, valley ball, foot ball, basket ball etc. Also Indoor games like badminton, Table-tennis, chess, carom etc are also available to the students for availing the sports facility.









- Swimming pool : Not Available
- Gymnasium: Besides Main Gymnasium, small Gyms are also available in both boys and girls hostels



- Any other (please specify): Wi-Fi enabled campus and computer facility are available in both boys and girls hostels apart from the regular university labs. Also, Judo, Karate, Mountain trekking, Taekwondo activities are also encouraged.



- Hostel

- **Boys' hostel**

- Number of hostels : 05
 - Number of inmates : 763

Sl.No	Name	Capacity	Occupancy
1	Chandra Shekhar Azad Hostel	156	156
2	Sardar Patel Hostel	77	77
3	Subhash Chandra Bose Hostel	330	330
4	Maharana Pratap Hostel	130	130
5	APJ Abdul Kalam	70	70

- Facilities : News Paper, Television, magazines, Gym, Yoga center, Computer facility with internet access(24x7) as wi-Fi enabled campus, indoor games, Dept store, mini stationary store,24x7 electricity & water supply, Fire extinguisher, laundry/dry cleaning and transport.

- **Girls' hostel**

- Number of hostels : 04
 - Number of inmates : 681

Sl.No	Name	Capacity	Occupancy
1	Laxmi Bai Hostel	143	143
2	Sarojini Hostel	222	222
3	Priyadarshini Hostel	240	240
4	Sai Girls hostel	76	76

- Facilities : Common room with news Paper, Television, magazines, Gym, Yoga center, Computer facility with internet access(24x7) as wi-Fi enabled campus, indoor games, Dept store, mini stationary store, 24x7 electricity & water supply, Fire extinguisher, laundry/dry cleaning and transport.
 - Working women's hostel : Available
 - Number of hostels: One
 - Number of inmates: 20
 - Facilities: Facilities mentioned above are available
- Residential facilities for faculty and non-teaching: 20 staff quarters are allotted to faculty and office bearers of university.
- Cafeteria : Available (Three canteens are available, two mini snacks and coffee shop)
- Health centre – Nature of facilities available –

The university has a dispensary with a qualified MBBS medical officer, and three medical assistants (compounders) on the University campus for providing 24x7 medical assistance and services. University has four adequately equipped ambulances for quick access to city hospitals in emergency. The university has hospital tie-up with Shri Mahant Indresh hospital and St. Paul's Hospital, Dehradun to cater into emergency services.
- Facilities
 - Banking : In house PNB Branch with ATM facility
 - Post office: Daily courier service is available and post office is just 5 minutes walk from the university.
 - Book shops, etc. : Mini stationary shop within the campus is available to cater the needs of the students with reprographic facility., state of the art departmental store to be commissioned soon.
- Transport facilities to cater to the needs of the students and staff: University owned 32 buses, 1 mini bus and 28 light vehicles are available to fulfil the needs.
- Facilities for persons with disabilities: available (Lifts , Ramps), wheelchairs

- Animal house: University owned animal house named, “Goshala”.



- Incinerator for laboratories – Burning the garbage, Obsolete Computers are distributed to Schools etc.
- Power House : Separate Substation distributing 755 KW to various buildings of Graphic Era University like (500 KW -Main Campus,100 KW-CS/IT block, 125 KW –Hostel & 30 KW- APJ Kalam Hostel), UPS for computer labs etc. The campus has adequate facilities of Solar Light and water heating panels.
- Waste management facility: GEU adopts two methods of utilizing waste management facility.
 - (i) Arrangement for being disposed by cantonment board, Clement town.
 - (ii) Vermi compost



- 13 Number of institutions affiliated to the university –N/A as **Graphic Era University belongs to Unitary category.**

Type of colleges	Total	Permanent	Temporary
Arts, Science and Commerce			
Law			
Medicine			
Engineering			
Education			
Management			
Others (specify and provide details)			

- 14 Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University –N/A as

Yes No Number

15 Furnish the following information

Particulars		Number	Number of Students
a.	University Departments		
	i. Undergraduate	9	4588
	ii. Post graduate	8	637
	iii. Centralized Research lab (centre of excellence)*	09+01	156
b.	Constituent colleges	N/A	N/A
c.	Affiliated colleges	N/A	N/A
d.	Colleges under 2(f)	N/A	N/A
e.	Colleges under 2(f) and 12B	N/A	N/A
f.	NAAC accredited colleges	N/A	N/A
g.	Colleges with Potential for Excellence (UGC)	N/A	N/A
h.	Autonomous colleges	N/A	N/A
i.	Colleges with Postgraduate Departments	N/A	N/A
j.	Colleges with Research Departments	N/A	N/A
k.	University recognized Research Institutes/Centres	N/A	N/A

16 Does the university conform to the specification of Degrees as enlisted by the UGC?

Yes No

If the university uses any other nomenclatures, please specify.

*Utilized by all students

17 Academic programmes offered by the university departments at present, under the following categories: (Enclose the list of academic programmes offered

Programmes	Number
UG	15
PG	17
Integrated Masters	--
M.Phil.	--
Ph.D.	13
Integrated Ph.D.	--
	--
Certificate	--
Diploma	--
PG Diploma	--
Dual Degree	1
Total	46

18 Number of working days during the last academic year. 180

19 Number of teaching days during the past four academic years.
180
180
180
180

(‘Teaching days’ means days on which classes were engaged. Examination days are not to be included)

20 Does the university have a department of Teacher Education? -
 Yes No

If yes,

a Year of establishment

b NCTE recognition details (if applicable) Notification

No.:

Date: (dd/mm/yyyy)

c Is the department opting for assessment and accreditation separately?
 Yes No

21 Does the university have a teaching department of Physical Education?
 Yes No

If yes,

a Year of establishment

b NCTE recognition details (if applicable) Notification

No.:

Date: (dd/mm/yyyy)

c Is the department opting for assessment and accreditation separately?

Yes No

22 In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered?

Yes No

If yes, please enclose approval / recognition details issued by the statutory body governing the programme.

23 Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon

- NBA accredited departments (EC,CS,IT,MBA,MCA- (Prior to formation of University))
- ISO 9001 -2008 Certified Institution

24 Number of positions in the university

Positions	Teaching faculty			Non-teaching staff	Technical staff
	Professor	Associate Professor	Assistant Professor		
Sanctioned by the UGC/ University/ State Government	48	50	218	148	68
Recruited					
Yet to Recruit					
Number of persons working on contract basis	0	0	0	0	0

25 Qualification of the teaching staff

Highest Qualification	Professor		Associate professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Lit.	1	0	0	0	0	0	1
Ph.D.	31	3	27	2	14	13	90
M.Phil.	0	0	0	0	3	2	5
PG	2	0	17	2	129	56	206
Temporary teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0
Part-time teachers							
Ph.D.	8	0	0	0	0	0	8
M.Phil.	0	0	0	0	0	0	0
PG	3	0	2	0	1	0	6
Study leave	0	0	1	1	7	0	09
TOTAL							325

26 Emeritus, Adjunct and Visiting Professors.

	Emeritus	Visiting	Adjunct
Number	0	16	1

27 Chairs instituted by the university:

	Chairs
School / Department	

28 Students enrolled in the university departments during the current academic year, with the following details:

Students	UG	PG	Integrated Masters	M. Phil.	Ph.D.	Integrated Ph.D.	D.Litt./ D.Sc.	Certificate	Diploma	PG Diploma
	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F	*M *F
From the state where the university is located	(M) 1819 (F) 683	(M) 218 (F) 191			(M) 57 (F) 40					
From other states in India	(M) 1646 (F) 440	(M) 130 (F) 98			(M) 40 (F) 19					
NRI Students										
Foreign Students										
Total	(M) 3465 (F) 1123	(M) 348 (F) 289			(M) 97 (F) 59					

*M - Male *F – Female

29 'Unit cost' of education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled) as per 31-3-2015

a Including the salary component = Rs 1,17,794

b Excluding the salary component = Rs. 83,959

30 Academic Staff College – **Not Applicable**

Year of establishment

Number of programmes conducted (with duration)

UGC Orientation

UGC Refresher

University's own programmes

31 Does the university offer Distance Education Programmes (DEP)?

Yes

No

If yes, indicate the number of programmes offered.

Are they recognized by the Distance Education Council?

32 Does the university have a provision for external registration of students?
 Yes No

If yes, how many students avail of this provision annually?

33 Is the university applying for Accreditation or Re-Assessment? If Accreditation, name the cycle.

Accreditation	Cycle 1	<input checked="" type="checkbox"/>	Cycle 2	<input type="checkbox"/>	Cycle 3	<input type="checkbox"/>	Cycle 4	<input type="checkbox"/>
Re-Assesment	<input type="checkbox"/>							

34 Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only) – Not Applicable

Cycle 1: (dd/mm/yyyy), Accreditation outcome/Result
 Cycle 1: (dd/mm/yyyy), Accreditation outcome/Result
 Cycle 1: (dd/mm/yyyy), Accreditation outcome/Result
 Cycle 4: (dd/mm/yyyy), Accreditation outcome/Result
 Kindly enclose copy of accreditation certificate(s) and peer team report(s)

35 Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated / constituent / Autonomous colleges under the university. –**Not Applicable**

36 Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).

IQAC ...09/04/2014 (dd/mm/yyyy)

AQAR (i) (dd/mm/yyyy)
 (ii) (dd/mm/yyyy)
 (iii) (dd/mm/yyyy)
 (iv) (dd/mm/yyyy)

37 Any other relevant data, the university would like to include (not exceeding one page).

- Governing system of Graphic Era University strictly follows the UGC guidelines/regulations of 2010. It is to be noted that **none of the members of the promoter’s family or any of the relatives is on the Board of Management or in any other Committee or authorities of the University.**
- After getting the deemed status, GEU was able to attract well qualified faculty members with Ph.D. degree from IITs, NIT, other reputed Universities in India and

abroad like NUS, Purdue University etc with (total number of faculty members with PhD qualification in University is 101), which created better research environment and 65 members are pursuing Ph.D.

- GEU follows UGC 2009 guidelines for Ph.D programs.
- GEU signed Memorandum of Understanding with 9 foreign universities, CII, AIU, DEAL, IRDE, NRDC etc.
- Established Various Centres of research in areas of plant Bio technology, animal Biotechnology, RF Communication, Cloud Computing & high performance computing.
- After successful completion of 20 research projects, 25 research projects are ongoing from funding agencies like DST, DRDO, ISRO, BARC, UCOST, USBD etc with an outlay of around 7 crores in last four years.
- GEU has published more than 1139 research papers in Journals and Conferences out of which 610 research papers in journals and 529 are in conferences.
- GEU has filed 13 patents (including 4 international patents) in the last three years.
- ***GEU faculty Mr. Arvind Mishra has created history & brought laurels to our country by setting Guinness World Records twice - for longest marathon lecture (March 2014) & longest marathon reading loud (May 2015).***
- 275 students scored above 90 percentile in GATE in last 4 years (including AIR 14, 70, 99, 112).
- Many students go to IITs/IIITs//Universities abroad/etc. for higher studies, each year
- Abhilash Semwal (B.Tech-CSE) awarded cash prize of Rs. 5 lacs by Hon'ble CM, Uttarakhand for his breakthrough innovation - Portable handheld explosive detector.
- GEU has implemented Learning Management System (LMS) based on Moodle for the establishment of student faculty interface and for sharing and delivering the contents of the courses; this includes the online discussion boards, online submission of assignments, transparent evaluation, effective dissemination of notices etc.. Faculties use digital pad, and smart class room technology. State of the art Digital Library with subscription to IEEE Explore, Springer link and membership of INDEST helps in access to quality research papers and latest developments in research.

Programs Offered in University

- ❖ **Undergraduate Programs: B.Tech,BCA,BBA,BHM,B.Com(Hons)**
 - B.Tech. :
 - Computer Science & Engineering (Specialization in Big Data Analytics)
 - Computer Science & Engineering (specialization in Cloud Computing)
 - Computer Science & Engineering
 - Information Technology
 - Electronics & Communication Engineering
 - Electrical & Electronics Engineering (Restructured as Electrical Engineering from the current session)
 - Mechanical Engineering
 - Civil Engineering
 - Petroleum Engineering
 - Automobile Engineering
 - Biotechnology
 - Bachelor of Business Administration (BBA)
 - Bachelor of Computer Application (BCA)
 - Bachelor of Commerce (B.Com(Hons))
 - Bachelor of Hotel Management (BHM)
- ❖ **Post Graduate Programs: M.Tech, MCA, MBA , M.Sc.**
 - Master of Computer Application
 - Master of Business Administration
 - Master of Science (Information Technology)
 - Master of Science (Biotechnology)
 - M.Tech (Communication Systems)
 - M.Tech (Control Systems)
 - M.Tech (Instrumentation and Control Engineering)
 - M.Tech (VLSI Design & Systems)
 - M.Tech (Computer Science & Engineering)
 - M.Tech (Computer Network Engineering)
 - M.Tech (Structural Engineering)
 - M.Tech (CAD/CAM and Robotics)

- M.Tech (Geo-informatics)
- M.Tech (Bio-Technology)
- M.Sc. (Micro-Biology)
- M.Tech (Computer Science & Engineering) part-time
- M.Tech (Design Engineering) part-time

- ❖ **Dual Degree Programs.**
 - B.Tech BIOTECH + MBA

- ❖ **Doctoral Programs.**
 - Ph.D in Electronics & Communication Engineering
 - Ph.D in Computer Science & Engineering
 - Ph.D in Mechanical Engineering
 - Ph.D in Civil Engineering
 - Ph.D in Electrical Engineering
 - Ph.D in Mathematics
 - Ph.D in Physics
 - Ph.D in Chemistry
 - Ph.D in Environmental Science
 - Ph.D in Management Studies
 - Ph.D in Biotechnology
 - Ph.D in Hotel Management
 - Ph.D in Computer Applications

CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 How is the institutional vision and mission reflected in the academic programmes of the university?

Following initiatives give reflection of vision and mission in academic programs.

- Encouraging creativity, innovativeness and entrepreneurship development apart from quality teaching & research.
- Framing the syllabus with inputs from professors of institutions of National & International repute, scientists of R & D Organizations & industry experts.
- Developing programs for awareness of the new & emerging technologies such as business analytics, VLSI design, cloud computing, bioinformatics, health care informatics etc.
- Allowing the students to undergo internship programs in Indian and foreign Universities (industries) R & D organizations.
- Promoting interdisciplinary skills.
- Encouraging students & faculty members to get actively involved in Conference/ Symposium research through research paper presentation, publications, sponsored/consultancy research projects.
- Besides technical skills help in cultivating managerial skills through projects, dissertations and atleast one compulsory course of study on managerial skill across all academic programs.
- Inculcating ethics and values by incorporating one course on human values & ethics in every program.

1.1.2 Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).

Yes, the university follows a systematic three stage process in the design and development of curriculum as mentioned below and depicted in Fig: 1.

1. **Feedback about existing curriculum:** Existing curricula are periodically assessed through feedback from students, faculty, alumni, domain experts from industries, R&D organizations, Institutions of excellence (IIT, NIT, and Universities etc) .
2. **Restructuring the curriculum:** With these inputs, designed curriculum is placed in Board of Studies (BOS) of various departments. Which consists of faculty & outside experts.

3. **Approval & implementation:** Recommendations after deliberations in BOS of the individual department are considered for the approval of Academic Council (AC), Planning & Monitoring Board (PMB), Board of Management (BOM), for implementation. All these functional bodies have outside experts also. Through this process, the curriculum is continually reviewed and modified by removal of obsolence and inclusion of new courses in upcoming and emerging thrust areas.

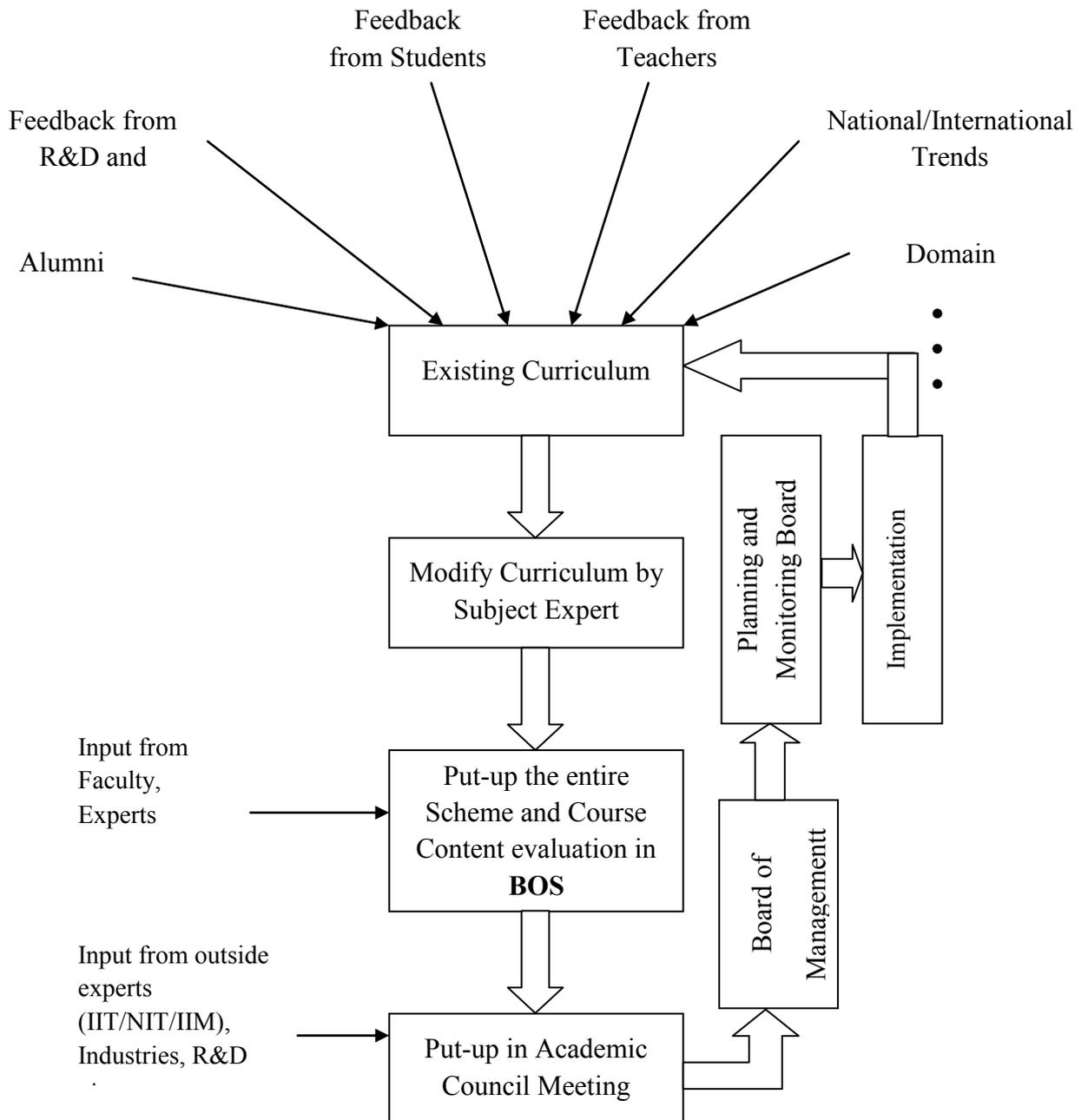


Fig: 1 Process in Design & Deployment of Curriculum

1.1.3 How are the following aspects ensured through curriculum design and development?

➤ **Employability:**

- Regular upgradation of curriculum and course delivery by taking feedback from recruiters and thereby fulfilling industry needs.
- Designing specialized and interdisciplinary courses, incorporating industry needs.
- Design & development of good quality projects.
- Internship and problem oriented projects/dissertations by students on applied aspects of their technical study.
- Hands on experience and industrial exposures on one hand and training through soft skills on other.

➤ **Innovation :**

- Students at all levels are provided with various opportunities to implement innovative ideas via internships, course related projects, participation in various competitions at National & International level, research projects, dissertations, online courses etc.
- Seed money is also provided to the faculty and students for innovative projects.
- Faculty and Students are encouraged to file patents.
- Value added experiments in labs.
- Using e-learning resources like NPTEL lectures, acquiring additional knowledge through E-lab software tools from IIT-Bombay.

➤ **Research :**

- Feedback from industries and R & D organization in curriculum development has promoted research and development activities in University resulting in various publications by faculty and students in peer reviewed journals and Proceedings of National & International Conferences.
- Active participation of students in research & design competitions at National & International level.
- Faculty members are encouraged to submit research proposal to external funding agencies. The students are also involved in research projects. Findings of the projects are published in conferences/journals.
- Students present seminar on innovative topics as a part of the curriculum.
- Major & minor projects on emerging areas and real time applications at

both UG & PG level courses are carried out.

1.1.4 To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created a national impact?

University adopts the guidelines of the regulatory bodies such as AICTE & UGC for developing and restructuring the curriculum.

University has taken initiative towards designing and implementing the following Courses:

- ❖ **“Healthy living & fitness”**, is included in the curriculum. This unique programme is meant to infuse awareness about personal health care which has created huge impact on the society at large. Periodic invited talks are also conducted to assuage the menace of drugs and alcohols from the society.
- ❖ **“M.Tech (Structural Engineering)”** with emphasis on disaster management, considering the need for skilled manpower resources in disaster prone areas, this programme has been activated.

1.1.5 Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?

Yes, University interacts with industry, research bodies and civil society for the revision of curriculum.

- ❖ University has representation from industry, research organizations and civil society in its various statutory bodies like Board of Studies, Academic Council etc. Their inputs are incorporated in the periodic revision of curriculum and in the introduction of new courses. These steps have resulted in getting financial support of around Rs 7 crores from leading agencies like DST, DRDO, ISRO, BARC, UCOST, DBT etc.
- ❖ Formal collaborative arrangements with academic and R&D Institutions such as
 - National Research Development Corporation (NRDC), an Enterprise of DSIR, Ministry of Science & Technology, Defense Electronics & Applications Laboratory (DEAL) and Instruments Research & Developments Establishment (IRDE), Govt. of India, USAC, USERC. Faculty are highly benefitted by getting the research guidance from eminent scientists.
- ❖ Regular faculty training in creating interesting learning sessions as per the needs of the industry through Mission 10-X program of WIPRO

Education Foundation and Campus Connect Program of INFOSYS and TCS Accreditation has resulted in introduction of group discussions, quizzes, role plays, case studies and field visits etc.

- ❖ University has signed MOU with CII (Confederation of Indian Industries), IAU (Industry Association of Uttarakhand) etc and periodic guest lectures and invited talks are organized by their experts.
- ❖ Microsoft Campus Agreement, IBM center of Excellence etc are nucleated so that students get free access to current ongoing newly available tools.
- ❖ GEU is the nodal center for NITTTR-Chandigarh in Uttarakhand for organizing ICT enabled faculty development programs in emerging and thrust areas.

1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

Not Applicable as Graphic Era University is Deemed to be University.

1.1.7 Does the university encourage its colleges to provide additional skill-oriented programmes relevant to regional needs? Cite instances (not applicable for unitary universities)

Not Applicable

1.2 Academic Flexibility

1.2.1 Furnish the inventory for the following Programs taught on campus

Programs	Strength of enrolled Students (as on August 2015)
UG	4588
PG	637
Ph.D	156
Total strength	5381

- ❖ **Undergraduate Programs: B.Tech, BCA, BBA, BHM, B.Com(Hons)**
 - B.Tech. :
 - Computer Science & Engineering (Specialization in Big Data Analytics)
 - Computer Science & Engineering (specialization in Cloud Computing)
 - Computer Science & Engineering
 - Information Technology
 - Electronics & Communication Engineering
 - Electrical & Electronics Engineering (Restructured as Electrical Engineering from the current session)
 - Mechanical Engineering
 - Civil Engineering
 - Petroleum Engineering
 - Automobile Engineering
 - Biotechnology
 - Bachelor of Business Administration (BBA)
 - Bachelor of Computer Application (BCA)
 - Bachelor of Commerce (B.Com (Hons))
 - Bachelor of Hotel Management (BHM)
- ❖ **Post Graduate Programs: M.Tech, MCA, MBA , M.Sc.**
 - Master of Computer Application
 - Master of Business Administration
 - Master of Science (Information Technology)
 - Master of Science (Biotechnology)
 - M.Tech (Communication Systems)
 - M.Tech (Control Systems)
 - M.Tech (Instrumentation and Control Engineering)
 - M.Tech (VLSI Design & Systems)
 - M.Tech (Computer Science & Engineering)
 - M.Tech (Computer Network Engineering)
 - M.Tech (Structural Engineering)
 - M.Tech (CAD/CAM and Robotics)

- M.Tech (Geo-informatics)
- M.Tech(Bio-Technology)
- M.Sc(Micro-Biology)
- M.Tech (Computer Science & Engineering) part-time
- M.Tech (Design Engineering) part-time
- ❖ **Dual Degree Programs.**
 - B. Tech BIOTECH + MBA
- ❖ **Doctoral Programs.**
 - Ph.D in Electronics & Communication Engg
 - Ph.D in Computer Science & Engg
 - Ph.D in Mechanical Engg
 - Ph.D in Civil Engg
 - Ph.D in Electrical Engg
 - Ph.D in Mathematics
 - Ph.D in Physics
 - Ph.D in Chemistry
 - Ph.D in Environmental Science
 - Ph.D in Management Studies
 - Ph.D in Biotechnology
 - Ph.D in Hotel Management

The above mentioned programmes are currently ongoing

- * Overseas programmes offered on campus : Not Applicable
- * Programmes available for colleges to choose from : Not Applicable

1.2.2 Give details on the following provisions with reference to academic flexibility

- a. **Core / Elective options:** The Choice based credit system is followed as per UGC guidelines. Along with core subjects, the students are allowed to choose from a list of electives.
- b. **Enrichment courses:** Courses like Healthy living & Fitness, Personality Development, need based elective courses are offered to all students.
- c. **Courses offered in modular form:** Specializations papers are offered in modular form.

- d. **Credit accumulation and transfer facility:** available
 - e. **Lateral and vertical mobility within and across programmes, courses and disciplines:** Lateral Entry scheme is available at B.Tech (Bachelor of Technology) and in MCA courses. Branch change is allowed in B.Tech after first year based on merit and availability of seats.
- 1.2.3 Does the university have an explicit policy and strategy for attracting international students?**
- Yes. As per University policy, seats are available for foreign, NRI & PIO students. 10 percent of the total seats are reserved There is a designated Dean International Affairs looking into all issues concerning international affairs of students. Also hostels of international standards are available to accommodate these students.
- 1.2.4 Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.**
- The University has spectrum of programmes of repute to attract international students. Many students from African and Asian countries have shown keen interest in these programmes. The process of admitting these students is in progress.
- 1.2.5 Does the university facilitate dual degree and twinning programmes? If yes, give details.**
- Yes, University offers dual degree program B. Tech BIOTECH + MBA. Presently university has no twinning programs.
- 1.2.6 Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?**
- Yes. Graphic Era University is 100% Self financed academic institution. The fee structure is decided by the fee committee. Faculty qualifications and salaries are as per the guidelines of UGC & AICTE. Admissions are done on the basis of merit. All programs are approved by Academic Council following UGC guidelines.
- 1.2.7 Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.**
- No, the University does not offer any programmes through distance mode of education.
- 1.2.8 Has the university adopted the Choice Based Credit System (CBCS)? If**

yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?

Yes. University has adopted choice based credit system as per UGC guidelines across all programs offered. University being unitary category does not have any affiliated colleges.

1.2.9 What percentage of programmes offered by the university follow:

- * Annual system : 0%
- * Semester system : 100%
- * Trimester system : 0%

(All the Programs offered by the university follow semester system.)`

1.2.10 How does the university promote inter - disciplinary programmes? Name a few programmes and comment on their outcome.

In each programme, the University has a large pool of electives from varied disciplines. The students are encouraged to choose electives as per their inclination from inter-disciplinary areas.

In addition to above, following inter disciplinary programs are also available:

- M.Tech(CAD/CAM and Robotics)
- B.Tech BIOTECH + MBA.
- M.Tech (Geo-informatics).

1.3 Curriculum Enrichment

1.3.1 How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented /knowledge intensive and meeting the emerging needs of students and other stakeholders?

The Board of Studies meets periodically (once in a year) to keep track of the advancements in technology and update accordingly to make the curriculum more contemporary, socially relevant and job oriented. Major changes are implemented once in every three years on an average and minor changes may be made every year.

1.3.2 During the last four years, how many new programmes at UG and PG levels were introduced? Give details.

❖ **Post Graduate Programs:**

- M.Tech (CAD/CAM and Robotics)

- M.Tech (Geo-informatics)
- B.Tech BIOTECH + MBA Dual Degree program
- M.Tech (VLSI Design & Systems)
- M.Tech (Structural Engineering)

❖ **Undergraduate Programs:**

- B.Tech (Petroleum Engineering)
- B.Tech (CSE with specialization in Cloud Computing)
- B.Tech (CSE with specialization in Big Data Analytics).

1.3.3 What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision?

The following strategies are adopted for the revision of existing curriculum.

- Inputs from all stake holders.
- Need for revision by identifying shortfall and need for reinforcement.
- Design the framework for revision and putup in various bodies for approval.
- Implementation after due approval.

Around 20-30 % of courses underwent syllabus revision.

1.3.4 What are the value-added courses offered by the university and how does the university ensure that all students have access to them?

Following Value added courses are available to all students as regular course.

- | | | |
|--------------------------------------|---|-----------|
| ○ Healthy Living & Fitness | : | 1 credit |
| ○ Human values & professional ethics | : | 1 credit |
| ○ Personality Development Programme | : | 2 credits |
| ○ Career skills | : | 1 credit |
| ○ Disaster management (DM) | : | audit |
| ○ General Proficiency | : | 1 credit |

All the above courses are compulsory in every program.

1.3.5 Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?

Following higher order skill development certificate programs were conducted by the university.

- CNC programming

- Computer Aided Drafting and Design (CADD)
- Engine Overhauling
- Web designing
- Computerized Financial Accounting
- Advanced Welding Program

1.4 Feedback System

1.4.1 Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

Yes, the students fill the feedback form regarding curriculum. In addition, each department has a Consultative Committee in which students share their feedback about curriculum.

Above inputs are forwarded to the Board of Studies for necessary action.

1.4.2 Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.

Yes.

- University accepts the feedback from faculty of National & International repute (IITs, IIMs, NITs, Central Universities), Scientists from R & D organizations as members of various functional bodies of university such as board of studies, academic council, board of management and Planning & Monitoring board at various stages of functioning of the University for curriculum design and enhancing performance in academic and administrative functionalities.
- Regular faculty training is conducted in association with Wipro through mission 10X and IBM for capacity building and providing industry specific inputs to the faculty members.
- Foundation and campus connect programmes of Infosys are conducted to design industry based curriculum.
- University has signed MOU's (Memorandum of Understanding) with CII (Confederation of Indian Industries) and IAU (Industry Association of Uttarakhand). Their periodic inputs through the invited talks or seminars play important role in the revision of the curriculum, industry visits etc.
- Alumni feedback is obtained for periodic updation of curriculum.

1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.

Not Applicable as the University is of UNITARY category.

1.4.4 What are the quality sustenance and quality enhancement measure undertaken by the university in ensuring the effective development of the curricula?

- GEU is ISO certified institution. ISO itself ensures quality assurance.
- Periodic review of curriculum design & development helps the university to maintain the quality and enhance the performance.
- Periodic revisions are carried out to meet requirements of industry.
- Need based new course/case study and new academic program if required.

Any other information regarding Curricular Aspects which the University would like to include.

- Courses on communication skills/ personality development/soft skills etc.
- Regular faculty development programs in association with industries to keep updated with industries.
- Choice based credit system to learn electives within the department and inter department level
- Regular Alumni interaction with students to make them industry ready.
- To enable students to pursue higher education from reputed institutions, coaching for GATE, CAT, GMAT and GRE is provided at the University.

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

2.1.1 How does the university ensure publicity and transparency in the admission process?

Graphic Era University brings out admission notifications for its academic programs in leading national and regional dailies. Advertisements are also published in magazines giving the details regarding eligibility and admission processes. In addition, University also uses electronic media and other means of communication such as Hoardings, Radio broadcasting, participation in Career Fairs organized by Education Promotional Agencies and associations like Association of Indian Universities, besides university website (www.geu.ac.in).

Admissions are made purely on merit, through open counseling in all academic programs. To maintain transparency, the allocation of seats in the most sought after B. Tech. programs is displayed on screens and announced through loud speakers for public. It is important to note that there is no management quota of seats and there is a uniform fee structure for all seats offered in every program.

2.1.2 Explain in detail the process of admission put in place by the university. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify).

The process of admission:

Graphic Era University follows following process of admission:-

Step 01: Notification about the admission in various media

Step02: Students interested in admission register themselves at the University or through online process through University website.

Step: 03: University prepares merit list of registered students for each academic programs based on the eligibility criteria given below in the table.

Step 04: Registered students are informed about the date of admission counseling through various means.

Step 05: On date of counseling students are allotted seats on merit basis as per the admission criteria mentioned below.

Step 06: The admissions are confirmed after the student deposits the program fee within a stipulated time as per the notifications.

List of criteria for admission to various academic programs:

1. UG Courses.	
	Admission Criteria
B.Tech.	First preference is given to the merit drawn on JEE Mains score (upto specified cutoff) and remaining seats on merit drawn on 10+2 board examination.
BBA, B.Com (Hons) & BHM	Merit drawn on 10+2 board examination.

BCA	Merit drawn on 10+2 board examination with Mathematics
2. PG Course	
M.Tech	Merit drawn on valid GATE score. In case of vacant seats, merit is drawn on qualifying examination(B. Tech/MCA/M. Sc CS)
MBA	Merit drawn on CAT/MAT/XAT scores. In case of vacant seats, merit is drawn on graduation examination. GD/PI scores are added to prepare final merit.
MCA & M.Sc (Information Technology)	Merit drawn on qualifying examination.
M.Sc (Biotechnology) & M.Sc (Microbiology)	Merit drawn on qualifying examination.
3. Doctoral Programs	
Ph. D.	The admissions for eligible candidates are made on the merit drawn on GATE/NET/SLET scores or merit prepared on the basis of written test. The above process is followed by an interview conducted by the Department concerned.

2.1.3 Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.

Graphic Era University being a deemed -to-be university does not have any affiliated colleges.

2.1.4 Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?

Yes, feedback is taken from all stakeholders for review of the admission process and the student profile. The analysis of admitted students is done annually on following basis:

For B. Tech

- Highest and lowest JEE Mains score of admitted candidates.
- Average JEE Mains scores.
- Highest and lowest 10+2 percentage of CBSE, ISC and various state boards.
- Average 10+2 percentage.
- Amount of scholarship awarded based on admission merit.
- Year wise comparison of students coming from different states.

For other courses

- Similar type of data mining exercise is done on database of admitted students of all other courses every year on merit of qualifying examination, Board/University, states.

Every year after analyzing the database of admitted student, the admission policy for next year is formulated by University Admission Committee.

Action taken

- Promotion of University strengths, achievements and Academic programs offered through print, electronic and social media.
- Establishment of University Information Centers in different parts of the country.
- Provision of online registration through University website and center based online counseling.
- Providing responsive website for mobile phones.
- Provision of mobile phone based registration and online payment.
- Participation in national and international education fairs.

Outcome

- Increase in visibility of the University and outreach from 4 states to 20 states across India.
- Increase in admission of International students.
- Increase in total admissions.
- Improvement in the quality of the students admitted.
- Increase in student population from diverse socio-cultural backgrounds.
- Entire admission process has become more transparent, smooth and convenient for outstation candidates.

2.1.5 What are the strategies adopted to increase / improve access for students belonging to the categories Like: SC/ST, OBC, Women, Person with varied disabilities, Economically Weaker section & Outstanding achievement in sports and extracurricular activities

The following strategies are adopted:

- The University follows all the guidelines of UGC and MHRD regarding reservations of SC/ST, OBC, Women and persons with varied disabilities.
- University supports and facilitates SC/ST students for preparing documentation required for reimbursement of academic fee from Government authority.
- Additional classes are conducted and guidance is provided to academically weaker students.
- Fee waiver/discount is given to students from Economically Weaker sections.
- Ramps, lifts and wheelchairs are provisioned at suitable locations for ease of access of differently-abled students.
- Outstanding sportsmen are facilitated to participate at state and national level competitions by providing travel grants, boarding and lodging. Required equipment, kits and other facilities are also provided to motivate the students.
- In recognition to their performance cash awards are also given by the university

- The University follows high degree of discipline by which women candidate feel safe and confident in campus.

2.1.6 Number of students admitted in university departments in the last four academic years:

Categories	2015-16		2014-15		2013-14		2012-13	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	27	10	21	9	37	10	32	7
ST	9	4	5	1	5	2	6	3
OBC	146	54	126	30	25	9	22	1
General	1045	511	827	391	886	335	1111	429
Others (KM/FF/Gen (AF))	7	2	7	7	0	0	4	2
Total	1234	581	986	438	953	356	1175	442

2.1.7 Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.

Yes, data regarding demand ratio for the last three years is given in the table below.

It is observed that there is a greater demand for the courses like B. Tech. Computer Science and related courses, B. Com (H) in comparison to other disciplines. The reason for this could be attributed to the growing trend of the students towards better job markets in service industry as compared to manufacturing industry.

Programs	2015-16			2014-15			2013-14		
	NOA	NOSA	DR	NOA	NOSA	DR	NOA	NOSA	DR
UG	4551	1501	1:3	3451	1106	1:3	3229	1011	1:3
PG	848	294	1:3	720	305	1:2	721	375	1:2
Ph.D.	81	20	1:4	63	13	1:5	22	4	1:5

Note: NOA: Number of Applicants, NOSA: Number of students Admitted, DR: Demand Ratio

2.1.8 Were any programmes discontinued/staggered by the university in the last four years? If yes, please specify the reasons

Yes, the University has discontinued B. Tech. (Instrumentation and Control Engg.) and B.A (Media & Mass Communication). This is due to the limited demand in this region for students graduating in these courses.

2.2 Catering to Students Diversity

2.2.1 Does the university organize orientation / induction programme for fresher's? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Yes, the University conducts orientation and induction program for fresher's spanning 05 days for MBA and 03 days for all other courses. The program is conducted as below:

- First days starts with phase one where university officers enlighten about ethos of the university, rules and regulations, expectations from students, as well as the challenges they would confront in the world. In the second phase Dean Student Welfare addresses students regarding various facilities available at the university like sport, NCC, NSS, Cultural Clubs, Hostel Facilities, central labs and library and supporting cells. Further, Controller of Examination explain students regarding the way by which university conducts it examination.
- Second day starts with departmental introduction, in which Head of the Department along with course coordinators provide the comprehensive view of the course/program, course structure, academic evaluation, labs, projects, internships, etc.
- On third day, the well placed University Alumni along with the industry experts speak to the students on the industry profile, industry expectations, career opportunities, and the learning curve that they need to adopt to make themselves industry ready on completion of their course.
- For MBA, the 4th & 5th day are used for ice-breaker activities and outbound group exercises followed by industry visit.

Student feedback is taken to improve the delivery mechanism of induction program.

2.2.2 Does the university have a mechanism through which the “differential requirements of the student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

Yes, during admission process, each admitted student along with parents is required to go to a team of academic counselors, where a form is to be filled with the information such as demography and educational background. The counselors also understand the strength and weak areas of the students and this data becomes the input for analysis and for understanding the ‘differential requirements’ of students.

Accordingly, special classes and bridge courses are conducted. The University also conducts classes for those weak in English language and soft skills.

Also, to meet up the differential requirements of physically challenged students, ramps are maintained and ground floor rooms in the hostels are allotted.

2.2.3 Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

Yes, the University offers bridge/add-on/remedial courses incorporated in daily time-table as well as after classes and during vacations. It includes career advancement courses like GATE classes, value-added courses on proprietary and open source technologies, Web designing, Programming languages, Robotics, Cloud computing, course on Product Design Cycle, English Language classes and Personality Development Programmes. In addition, foreign language classes like French and Chinese are offered to the students in collaboration with reputed organizations/embassies.

2.2.4 Has the university conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

Yes, the University identifies slow learners based on their performance in midterm, end term examination, seminars, assignments, quizzes and participation in other co-curricular activities. Subsequently, provisions are made for special mentoring and conducting remedial classes for slow learners. Students from economically weaker sections are provided with fees waivers. Special attention is given to physically challenged students to cope-up with academics.

2.2.5 How does the university identify and respond to the learning needs of advanced learners?

Based on the student's performance faculty members identify advance learners. From the very first semester such students are provided with special guidance and mentoring to perform and excel in their identified area of interest. They are motivated to work on their innovative ideas as well. Faculty members also engage and guide such students to carry out research based projects.

University facilitates advanced learners through following initiatives:

- Interaction with the Vice Chancellor in Achiever's Meet conducted periodically.
- Encouragement and financial support to students to carry out innovative projects and for presenting their research papers in national and international conferences.
- Encourage participation in various tech-fests organized by national and international organizations.
- The University identifies and sponsors them for advanced training thereby enabling high-end employability.

Outcome of the above stated initiatives:

- A University student ranked first in ISRO's Scientist Recruitment –2015.
- In Bhabha Atomic Research Center's scientist recruitment - 2015, 5 out of 15 Computer Science graduates selected on All India basis are from the University, including the first rank holder.
- 143 students got above 95 percentile in GATE (2014 & 2015).
- A number of students have been admitted with fellowship in premier universities across the globe for their higher studies.
- University students have been offered annual package upto Rs. 25 Lacs p.a.

- One of the students secured Outstanding Research Award at Birmingham City University, United Kingdom in the year 2015.
- The University students participated in Tech Great Mind Challenge (TGMC) conducted by IBM and IBM placed GEU in top 30 institutes in India.
- Students secured position in top three teams in Microsoft Imagine Cup.
- Students have also brought laurels in competitive events organized by Infosys and Texas Instruments.

2.3 Teaching-Learning Process

2.3.1 How does the university plan and organise the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?

Semester based academic calendar is prepared and uploaded on the university website www.geu.ac.in and circulated internally. Each department prepares the time table which is notified and circulated before the commencement of the semester.

Faculty members prepare teaching plan for subject(s) allocated to them based on the specified format. Evaluation schedule is part of academic calendar. Evaluation is done on continual basis through quizzes, surprise tests etc. in addition to mid-semester (between 45-50 working days) and end-semester examinations in each of a 90 working day semester.

2.3.2 Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?

Yes, based on the academic calendar, each faculty member makes his/her course plan based on the syllabus of the allotted courses. Students are apprised of the course plan. Effectiveness of the process is ensured by evaluating progress report of faculty members by the respective HODs. Course outline is shared on LMS to all the students.

2.3.3 Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.

Generally the course curriculum is covered in the stipulated time frame. However, if any faculty finds it difficult to cover their curriculum, the university provides the freedom and facility to take extra classes in some free slots or in evening hours to cover the course.

2.3.4 How is learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

The learning process is made student centric by following measures:

- In the University, the teachers focus on being a facilitator. The teachers focus more on engaging students and making students participate & perform, rather than merely teaching.
- The teachers share the topic for discussion before hand for students to come prepared, and the session is utilized for interaction, analysis, practice and problem solving connected to real life situations. In this way the results achieved transcend beyond traditional classroom teaching.
- The University pedagogy has been made more effective using a blend of activities such

as discussions, role plays, case studies, quizzes, presentations, classroom activities, etc.

- Projects on latest technologies, laboratory based experiments provide practical insight into the subject.
- The students are prepared and trained in such a way that they are open to learn throughout their life.
- The students are motivated for self and lifelong learning by encouraging them to obtain online certifications offered by Coursera, Edx, MIT Open Courseware etc.

2.3.5 What is the university's policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?

University encourages individual departments to invite domain experts and people of eminence for delivering lectures in their areas of specialization, problems and future challenges. From time to time, university invites experts from industry, academia, and government organization to hold seminar for students and faculties. In addition, eminent experts from foreign universities/organizations are also invited for delivering lectures, seminars, workshops in upcoming and emerging areas.

University facilitates experts by providing funds for travel, honorarium, lodging & boarding.

2.3.6 Does the university formally encourage blended learning by using e-learning resources?

Yes. The University has excellent IT infrastructure including 24x7 Internet and Wi-Fi facility, Digital Classrooms and Libraries and LMS to enable e-learning. Provisions are made for streaming academic videos like NPTEL. Besides, some faculty members provide the notes and other related material through personal website. Faculty also interacts with students through online discussion forums and blogs. Usage of LCD projector, audio/video presentation in classrooms & labs is also facilitated.

University is also a nodal center for offering online programs of NITTTR – Chandigarh. This center facilitates online programs for teacher/student training supported by AICTE and MHRD. University also has training facility for Free Online Open Software's (FOSS) courses in collaboration with IIT-Bombay. Spoken Tutorials are being offered to students through this association.

2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?

Faculty demonstrates concepts through virtual demonstrations using MATLAB or other softwares like Pro-E, AutoCAD, CATIA, video clips, and Virtual lab from IITR, etc. Lecture Theatres are equipped with LCD projectors and sound system. Students have successfully completed open online courses offered by renowned universities like MIT, Carnegie Mellon University under the guidance of faculty members. University subscribes to online journals to facilitate research and effective teaching. University has provided Netbooks & Laptops to faculty members to enable them deliver ICT based lectures.

2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?

Yes, the Open Source Group at the university is led by a team, headed by a senior professor. Presently, University is participating in one of the projects with IIT-Bombay on increasing the

awareness and learning of open source softwares such as Libre office, Octave, Scilab etc. Some workshops have been conducted with IIT-Bombay to train students in open source resources.

2.3.9 What steps has the university taken to orient traditional classrooms into 24x7 learning places?

Internet access is provided through two separate leased lines of 1 Gbps and 55 Mbps, for wired and Wi-Fi devices. The library and computer centre timings are from 8 am-10 pm to support student learning. Hostels are Wi-Fi enabled and equipped with Computer lab, working round the clock. The Library has a digital section which facilitates online access to books and learning resources in the campus anywhere anytime. Project activities are carried out beyond scheduled academic timings. Academic course related information is made available to students on LMS and personal course websites which can be accessed 24x7. Thus university supports students learning 24x7.

2.3.10 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.

Yes. The process of student guidance is detailed as below:

Each class/section is under the care and guidance of one or more faculty members called class coordinator. Certain students are assigned to each faculty member who acts as a mentor to track the academic performance and social participation of the mentees and offers guidance. The class coordinator carefully monitors the attendance and students performance of the class. If required, he/she also interacts with parents to give them right feedback of student. The class coordinator works under the guidance HOD.

Students interact with class coordinators to discuss their problems/special requirements etc. Depending upon the nature of the requirement class coordinator forwards the candidate's case to any one of the following officials : Dean of student welfare, Women Grievance cell, Head of the department, Proctor, SC/ST Cell, Anti ragging cell, Psychology Cell, Student welfare fund etc. Concerned authority ensures that the students problems are addressed. An online student grievance portal is also available to the students. Many students have got benefitted by these arrangements.

2.3.11 Were any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

Many faculty members are using LMS like moodle and also teaching through their personal websites. E-learning has helped many students to improve their learning. Innovative practices also include case-based teaching, situation analysis, role plays, simulation exercises, 3D model presentations, experiential and outbound learning, practical etc to develop deeper interest in the subject. Student feedback is obtained by the individual faculty members to ascertain the effectiveness of the new approaches. Result analysis is carried out to understand the improvement in the student performance.

The university encourages faculty for innovative teaching by giving Best Teacher award based on students feedback and other academic contributions. Further university provides teacher training for developing e-learning methodologies.

2.3.12 How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?

In order to nurture creativity amongst students, special sessions on creative thinking, critical thinking and reasoning are conducted for students. This is further strengthened by conducting some engaging activities to show the role and importance of creativity. Good time is invested in developing analytical skills by having dry runs of the solutions and developing algorithms in line with identified Graduate attributes and learning outcomes. Students are encouraged to present innovative and creative ideas to senior faculty members. Based on the merit, students are supported to transform/develop their ideas into product through partial funding by university and are also guided for applying for external funding. Some of the students are working on formula style racing car, eco motor cart etc.

University regularly conducts workshops and training programs to infuse scientific temperament among learners.

2.3.13 Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been (percentage of total) made mandatory?

Yes. Projects are integral part of all academic programs (100%)

2.3.14 Does the university have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

Yes, the university has a pool of well qualified faculty members. Many of the faculty members have obtained degrees from IIT's, NIT's and universities abroad. Shortfall, if any, is supplemented by appointment of visiting professors.

2.3.15 How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?

The university provides latest configuration computing facilities to faculty members along with high speed Internet connection. The campus is wi-fi enabled so that faculties can access Internet through their personal laptops. Faculties are also provided with latest software by the university to prepare computer aided teaching material. The software include, Windows OS, MS Suite, NetBeans, Eclipse, MS office (word, power point, excel), Matlab, Adobe Acrobat etc. FDPs are organized to enhance the teaching-learning and presentation skills by using advanced multimedia tools.

2.3.16 Does the university have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

Yes, student feedback is taken for the evaluation of teachers and is sent to the individual HOD. HOD discusses with faculty for appropriate suggestions and improvement. If required they are sent for faculty development programs. During alumni meetings, feedback about their experience at the university with respect to curriculum, teaching, infrastructure and facilities is obtained. In addition alumni also provide inputs on introduction of new courses and facilities that should be available at university. A dedicated website has been developed to interact with the Alumni and receive their inputs and suggestions. These inputs are used to further improve the delivery mechanism.

2.4 Teacher Quality

2.4.1 How does the university plan and manage its human resources to meet the changing requirements of the curriculum?

In order to meet changing requirements of the curriculum faculty members are facilitated for quality improvements by sponsoring them for higher studies, conducting FDPs & workshops, sending them for FDPs and QIPS, inviting domain experts, holding short-term training programs etc.

The University also focuses on recruiting domain specific faculty from academia, industry and R&D organizations.

2.4.2 Furnish details of the faculty

Highest Qualification	Professor		Associate professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Lit.	1	0	0	0	0	0	1
Ph.D.	31	3	27	2	14	13	90
M.Phil.	0	0	0	0	3	2	5
PG	2	0	17	2	129	56	206
Temporary teachers							
Ph.D.	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0
Part-time teachers							
Ph.D.	8	0	0	0	0	0	8
M.Phil.	0	0	0	0	0	0	0
PG	3	0	2	0	1	0	6
Study leave	0	0	1	1	7	0	09
TOTAL							325

2.4.3 Does the university encourage diversity in its faculty recruitment? Provide the following details (Department / school-wise).

Department / School	% of faculty from the same University	% of faculty from other universities within the state	% of faculty from universities outside the state	% of faculty from other countries
Bio-Tech	12.5	25	43.75	18.75
Civil Engg.	11.76	29.41	58.83	0
CSE	5.68	46.59	45.45	2.27
ECE	7.7	21.0	71.3	0
EE	0	50	50	0
ME	20	0	80	0
PE	0	10	90	0
Allied Sc.	0	56	36	8
BHM	30.7	15.3	54	0
Management	25.64	2.64	46.14	0.03

2.4.4 How does the university ensure, that qualified faculty are appointed for new programmes / emerging areas of study (Bio-technology, Bio-informatics, Material Science, Nanotechnology, Comparative Media Studies, Diaspora Studies, Forensic Computing, Educational Leadership, etc.)? How many faculty members were appointed to teach new programmes during the last four years?

Through wide advertisements on University website, job portals, social and print media, indicating our requirements to teach and carry out research in emerging areas, applications are invited from well qualified applicants. The selection process starts with short-listing and personal interviews by selection committee consisting of domain experts. Selected candidates are appointed on the university rolls for such academic programs. Around 20 faculty members have been appointed in the emerging areas like forensic computing, VLSI, material science, bio-technology etc.

2.4.5 How many Emeritus/Adjunct Faculty/Visiting Professors are on the rolls of the university?

University has 16 visiting professors and 1 adjunct professors on its roll.

2.4.6 What policies/systems are in place to academically recharge and rejuvenate teachers (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)?

The university has following provisions to recharge and rejuvenate faculty academically:

- Research Grant
- Laptop / Netbook
- Provision of study leave
- Funding for participation in national/international conferences/seminars
- In-service training
- Funding for organizing national and international conference
- Sponsoring for Quality Improvement Programs, FDPs etc.

2.4.7 How many faculty received awards/recognitions for excellence in teaching at the state, national and international level during the last four years?

Mr. Arvind Mishra, faculty, Department of Mechanical Engineering delivered longest lecture for around 140 hrs. His feat was recorded in Guinness World Records.

2.4.8 How many faculty underwent staff development programmes during the last four years (add any other programmes if necessary)?

Academic Staff Development Programmes	No. of Faculty
Refresher Course	10
HRD Programmes	14
Orientation Programmes	23
Staff training conducted by other Universities	14
Staff training conducted by other institutions	16
Summer / Winter School, Workshops. Etc	24

2.4.9 What percentage of the faculty have

- been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies? ---- **37 %**
- participated in external Workshops / Seminars / Conferences recognized by national /international professional bodies? ----- **23 %**

- Presented papers in workshops/ Seminars / Conferences conducted/recognized by professional agencies? ----- 16 %
- teaching experience in other universities / national institutions and other institutions? ---56 %
- Industrial engagement? ----- 35 %
- International experience in teaching? --- 11 %

2.4.10 How often does the university organize academic development programmes (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching learning process?

Academic development programmes are organized every alternate month.

2.4.11 Does the university have a mechanism to encourage

- Mobility of faculty between universities for teaching? ----- Yes it has
 - Faculty exchange programmes with national and international bodies? ----- Yes it has
- If yes, how have these schemes helped in enriching the quality of the faculty?

The university has entered memorandum of understanding with a number of International Universities, which have a provision of faculty exchange programs. Through these programs faculty gets opportunities to exchange and share new ideas, help organize conferences, short-term courses, special lectures to students and faculties. This keeps them abreast with the latest technological advances in the respective fields and help to take up projects and research in emerging areas.

2.5 Evaluation Process and Reforms

2.5.1 How does the University ensures that all the stakeholders are aware of the evaluation processes that are in place?

The stakeholders are informed regarding the process via printed, email and SMS communication. Also, Registrar office issues notices from time to time regarding evaluation process.

2.5.2 What are the major evaluation reforms initiated by the college and to what extent have they been implemented in the University? Cite a few examples which have positively impacted the evaluation management system.

- The centralized evaluation system has been incorporated.
- Answer books are coded to hide students identity.
- OMR Scanners with built-in Barcode facility is used for scanning answer books
- Answer books are bundled in random order.
- The evaluation is conducted within University's Evaluation hall
- External evaluators are invited to evaluate answer books
- Some of the answer books are randomly sampled
- Decoding, tabulation and announcement of results on university website

The positive impact of these measures has resulted in fair and transparent assessment, time bound evaluation and timely announce of result.

2.5.3 What is the average time taken by the University to declare examination results? In case of delay, what measures have been taken to address them? Indicate mode/media adopted by the University for the publication of examination results. (e.g. website, SMS, email, etc.)

The examination results are declared on University Website (www.geu.ac.in) within a month of the completion of examinations. So far there has been no delay in declaring the results.

2.5.4 How does the University ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?

University has a system of showing evaluated answer scripts to students on demand, in presence of competent authorities. The University also has provision for scrutinizing the answer scripts on student demand. This ensures transparency in the evaluation system and process.

University uses bar coded answer books to maintain confidentiality by hiding student information. This ensures that evaluators do not know the identity of the candidate. In majority of the courses, external examiners are also invited for evaluation.

2.5.5 Does the college have an integral examination platform for the following process?

Pre-examination processes –

Time table generation. The Exam date sheet is prepared by the Controller of Examination(COE) in consultation with the Registrar. This gets displayed on the notice boards and the website.

Paper setting and printing. The internal and external paper setters are invited to set question papers which are moderated confidentially by a committee and then printed. The printed question papers are held in a strong room under the supervision of the COE and Registrar.

OMR. Student fills the Examination form in 1st semester. Based on this, Examination Cell allots enrolment numbers to the individual student. The examination admit cards are then issued to the students through the HODs.

Student list generation. After the admissions roll list of students is generated for each class.

Invigilators, squads and attendance sheet. With the help of the above list, the attendance sheet for all the courses and the seating plan is prepared. The Invigilation duty chart is prepared from the list of the faculties provided by HODs. A list of the Flying Squad is generated to take rounds during the examinations for checking malpractices.

Examination process –

Examination material management. The answer books are stored and disbursed by the Confidential Section. A stock register is maintained and purchase requirement is sent to the Registrar office. The answer books are provided on demand and recorded in an ‘Issue register’. The used answer books are disposed off after 1 year and with due publication in newspapers.

Post examination process -

Attendance sheet, OMR based exam result, auto processing, generic result processing and certification. The answer books are coded and bundled for easy distribution. The roll part & response part are scanned to prepare the result. The department also sends the list of Sessional and Practical Marks. A tabulation chart is prepared for the final checking of condition for Grace, Grade, Grade Points, SGPA & CGPA. The final result is uploaded on the University website. Then mark sheets are prepared and distributed.

2.5.6 Has the University introduced any reforms in its PhD evaluation process?

The University has adopted the UGC [minimum standards and procedure for awards of M.Phil./Ph.D degree] regulations 2009.

University has subscribed to Turnitin software to check the Ph. D. thesis for a possible plagiarism.

2.5.7 Has the University created any provision for including the name of the college in the degree certificate?

--Not Applicable--

2.5.8 What is the mechanism of redressal of grievances with reference to evaluation?

The University has the process of answer books scrutiny in place. This process incorporates re-totalling of the marks, ensuring that answers are evaluated as per the scheme, marks conversion, if any, are correctly done.

University also has a system of showing evaluated answer scripts to students on demand, in presence of competent authorities.

Any other grievances, like scrutiny, non-display of marks on the website or marksheet are dealt as per the case. For these grievances students submit a written application to the office of Registrar, which are then forwarded to Assistant Controller of Examinations for further necessary action.

2.5.9 What efforts are made by the College to streamline the operations at the Office of the Controller of Examinations? Mentions any significant efforts which have improved process and functioning of the examination division / section?

A senior professor as Controller of Examinations (COE) is appointed to conduct examination process and streamline the operations as mentioned below:

- University has purchased hardware and software for scanning of answer books
- Students are admitted to examination hall only if they produce admit card with photo issued by the COE
- COE has well equipped office and is assisted by dedicated manpower and equipments like Internet connection, computer, printer, strong room etc.
- Regular emails and SMS's are sent to the HOD's / faculties regarding the examination schedule and evaluation status.
- Students are sent SMS regarding exam dates and information in addition to notices/website posting.

- Internal and external examiners are kept informed through email and phone regarding evaluation work of theory and practical examinations
- External faculty members are invited to set question papers, conduct practical examinations and evaluate answer books.

These efforts have contributed to a very efficient exam process and the functioning of exam section.

2.6. Student Performance and Learning Outcomes

2.6.1 Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?

Yes

The university's vision is to produce leaders for research, teaching and social cause. University emphasizes that Graduates are well equipped with:

(a) Inquisitiveness: The student should be eager to explore and inquire about deeper aspects of the course of study undertaken

(b) Innovation: The student should possess ability to devise new methods/approaches in the field of study

(c) Creativity: The student should be able to convert the new and imaginative ideas into reality.

(d) Knowledge: The student should be able to collect facts, information, and skills acquired through the theoretical or practical understanding of a subject

(e) Leadership: The student should have skills and the art of motivating a group of people to act towards achieving a common goal.

(f) Ethics and human values: The student should understand social and civic responsibilities, possess capacity to apply disciplinary knowledge to solving real life problems for the betterment of communities

The university facilitate its implementation by providing the best facilities in the form of infrastructure, well recognized and talented faculty, encouraging participation in co-curricular and extracurricular activities like participation in state and national level projects, NSS, NCC, Blood donation camps, participation in organizing various events etc.

The university monitors its implementation by students' performance through continuous evaluation, surprise quizzes, seminars, incorporating new experiments in laboratories, examinations, student's placements, students going for higher studies in India and abroad, etc. This has resulted in producing well trained, good quality human resource ready to take up new challenges of modern world.

2.6.2 Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?

Yes. Learning outcomes for individual academic programmes are defined. The HOD through department meetings discusses and emphasizes on achieving the learning outcomes. The syllabus is also designed and modified with an aim to achieve the learning outcomes based on the discussions held in board of studies meetings which comprise of experts from academia and industry. The syllabus mentioning learning outcomes is distributed to faculty members and notified to the students. These are also

made available on LMS and websites.

2.6.3 How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?

The learning outcomes defined in the course plan are implemented through the syllabus, lecture plan and assignments.

Assessment is carried out through student performance in Mid semester, end semester examinations, Mini and Major projects, Practical/Laboratories, Research oriented projects and publications, internships, Participation in state and national competitions, Placements, etc. In addition students are motivated to participate in live projects on the basis of self study and innovative ideas.

2.6.4 How does the university collect and analyse data on student learning outcomes and use it to overcome the barriers to learning?

Student data pertaining to learning outcome is collected through:

- Performance in the theory and practical examinations
- Placement results
- Students pursuing higher studies in India and abroad
- Feedback obtained during Alumni meetings
- Feedback obtained from employers (corporate/industries).

Gathered information is analyzed to understand barriers such as:

- Students performing poorly in academics due to language problems, home sickness, carelessness etc
- Poor performance in delivering professional responsibilities
- Under-performance due to lack of technological exposure etc

Based on the analysis corrective measures are taken to overcome the barriers.

2.6.5 What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges?

Most of the class rooms are equipped with LCD projectors and audio systems to enhance the learning process. Many faculties use e-learning resources such as LMS/Moodle or their personal websites to share lecture notes. University provides NetBooks to senior faculty members for multimedia based lecture presentations. Faculties also provide online discussion forums where students discuss with each other, supervised by the faculty. Internet connection through LAN and Wi-fi is available 24x7.

Criterion –III: Research Consultancy and Extension

3.1 Promotion of Research

3.1.1 Does the University have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations, which have been implemented, and their impact.

Yes, the University has Research & Consultancy Board (RCB) to monitor and address issues related to research, whose composition is given below.

Composition of the RCB:

- Vice Chancellor –Chairperson
- Pro Vice Chancellor
- Director Research - Member
- Dean Research – Member Secretary
- Dean Projects -Member
- Dean Academics-Member
- Deans of faculties such as Dean Engineering/ Dean Management/ Dean Allied Sciences/ any other Dean as may be appointed by the University.
- Two external experts from outside the University.
- HOD or his nominee (maximum three).

Furthermore, Departmental Research Committee of various departments is responsible to implement policies formulated by the RCB. It meets at least once in a year where as DRC meets as per requirements. The Student Research Committee further assists DRC for each PhD student.

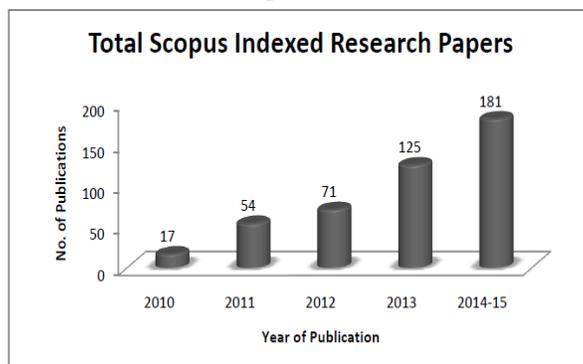
Major recommendations of RCB are in the following areas

- various incentives for promoting research activities
- seed money provision for faculty as well as students
- provision of university funding for research projects of faculty and students
- Focus on Quality publications, patent filing and providing incentives for the same, depending upon quality of research work
- Focus on periodical arrangement of workshops/guest lectures in research thrust areas by the departments
- Encourage undergraduate students for research projects
- Periodic review of PhD regulations as per latest guidelines of UGC
- Provision for plagiarisum checking
- Provision for Fellowships for M Tech and PhD scholars

Based on the recommedations of RCB, the following impact has resulted in following areas;

- Quantum jump in quality of publications from 2009 to till date
- Significant increase in the number of research pubilcations and projects by UG students

- Increase in the number of sponsored projects by govt funding agencies
- Remarkable increase in participation of undergraduate students in research activities
- Increase in the no of awards and fellowships for faculty and students
- Seed money has been initiated for faculties as well as students
- implementation of new regulations for PhD programmes as per latest UGC guidelines.
- Fellowships for M Tech and PhD Scholars has been initiated
- Conference/ Seminar/Workshop on research thrust areas are conducted on a regular basis
- Trend in the enhancement of research publications is evident for scopus indexed papers.



3.1.2 What is the policy of the University to promote research in its affiliated / constituent colleges?

The University has no degree level affiliated / constituent college.

3.1.3 What are the proactive mechanisms adopted by the University to facilitate the smooth implementation of research schemes/ projects?

A. Externally funded projects (both Government and Private agencies)

- **Advancing funds for sanctioned projects:** The University advances funds for approved projects.
- **Providing seed money:** As a startup research grant, the faculties and students are given funds for early initiation of the research.
- **Simplification of procedures related to sanctions/purchases to be made by the investigators:** Principal investigators of the projects are empowered to initiate purchases, invite quotations, technical evaluation of the quotations. Final order is placed by the registrar of the University on the basis of comparative statement and recommendations by a technical committee.
- **Autonomy to the principal investigator/coordinator for utilizing overhead charges:** The principal investigator can utilize the overhead charges, if the need arises, with the prior approval of the competent authority.
- **Timely release of grants:** The grants are immediately made available to the principal investigator after receipt from the funding agency.
- **Timely auditing:** Year-wise audited reports, duly approved by the chartered accountant, are submitted to the sanctioning authority so that grants for the next year are released in

time. The auditing is done as per the prescribed format supplied by the sanctioning authority.

- **Submission of utilization certificate to the funding authorities:** The utilization certificates are submitted within the stipulated time to the various funding agencies after the accounts are audited by the statutory auditor appointed by the University.

The university has an office dedicated to coordinate the various financial aspects of the projects relating to release of the grant, timely auditing, preparation of fund utilization certificate etc.

B. University sponsored projects:

The university provides

- support for writing research proposals through RCB/DRC
- Mentoring by Eminent Experts
- financial aid for arranging workshops/seminars on current thrust areas of research at the department
- availability of E- Journal databases like Elsevier, IEEE, ASME, ASCE, EBSCO etc.

The following table shows proportion of funds dedicated for research in the annual budget

Year of allocation	2010-11 Rs. in Lacs	2011-12 Rs. in Lacs	2012-13 Rs. in Lacs	2013-14 Rs. in Lacs	2014-15 Rs. in Lacs
Funds allocation for equipments + consumables + other miscellaneous items related to research in lakhs	150	500	550	650	675

3.1.4 How is interdisciplinary research promoted?

Between/among different Departments /schools of the University

The interdisciplinary research is promoted between/among various departments as follows:

- Inter-departmental research projects, adoption of co-guides for dissertation involving inter-disciplinary topics
- Active collaborative research activities are pursued by different departments at the university level
- A number of PhD co-guides have been appointed, who are from other departments
- The research areas in the applied sciences and engineering are mostly inter disciplinary and hence there are inter-departmental approaches in their research projects, dissertations and publications.

The following are some of the interdepartmental activities going on in the university

- Department of Science & Technology, Govt of India has approved the establishment of Technology Business Incubation Centre (TBI) with a financial support of 294.20 lakhs. GEU is the only University in Uttarakhand which has been awarded such centre.

- One project on orchids funded by UCOST involves interdisciplinary research and collaboration between Biotechnology and Management departments for the benefit of local growers.
- An interdisciplinary centre of research between Civil engineering and Computer science & Engineering departments works on Seismic behaviour of large pile groups in liquefiable soils using Parallel Processing Methods. A part of the research is also funded by Bhabha Atomic Research Center (BARC), Mumbai for Rs. 24.35 Lakhs.
- To promote Entrepreneurship amongst the students, Science & Technology Entrepreneurs Park (STEP) has been established with the initial financial support of UCOST.

Collaboration with national/international institutes/industries

The University has given emphasis to collaborative research with national and international institutions and industries. National and international institutes and bodies provides financial and experts assistance while the GEU provides the expertise human resource and infrastructure to facilitate collaborative research. Meetings between faculty of different departments of the university and representatives of industries are encouraged. Financial assistance from the university is provided as per the MoUs.

Separate cells for national and international collaborations have been set up for promoting interdisciplinary research. Presently Dean (Projects) is looking after the national level collaborations whereas International collaborations are looked after by Dean (International Affairs). Some of the collaborations are as follows:

- National: DEAL, IRDE, NRDC, USAC, USERC, etc.
- International: Polytech Nantes (France), Birmingham City University (UK), California State University (San Bernardino), etc.

3.1.5 Give details of workshops/ training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.

The various departments of the University conduct workshops/training programmes /short term courses/guest lectures/ sensitization programmes on a regular basis in order to promote research culture within the university. The details of the said programmes are provided on weblink (<http://www.geu.ac.in/geu-research/conferences-seminars-workshops-organized>). So far 143 programmes/workshops have been conducted at the University. In addition, University has organized 23 national level and 7 international level conference/ seminars during the last 5 years, inviting experts from India and abroad. It has enhanced the research culture in the University.

3.1.6 How does the university facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the university?

The University invites eminent national and international researchers from various institutions. The University invites a list of eminent researchers from the departments and the same is then discussed and shortlisted at the highest level based on their credentials and research thrust areas. The short listed researchers are invited to visit the campus. The University also facilitates researchers of eminence to visit the campus by promoting research activities/ projects of national

and international significance and inter institutional collaboration among researchers. The University provides grant for expenses involved in such collaboration and research activities such as travel grant to national/international experts.

Impact

Visit of and interaction with such eminent personalities has resulted in various national and international collaborations. Various collaborative projects have been initiated/ undertaken in consultation with these eminent personalities and their advice has significantly influenced the scientific temperament of the faculty and the students.

For example: Introduction of innovative experiments in labs, initiation of research activities in new areas, award of sponsored research projects from Deptt. of Space; DRDO, Min. of Defence, BARC, DST etc.

3.1.7 What percentage of the total budget is earmarked for research? Give details of heads of expenditure, financial allocation and actual utilization.

On an average, the University earmarks around 6% of its annual budget for various research activities which include development of infrastructure, upgradation of labs by procurement of sophisticated equipments and instruments, consumables, subscription of e-journals/books etc. The budget allocation for research activity is as follows. Almost the entire budget allotted by the University has been utilized.

Year	Percentage of total budget earmarked for Research & Development				
	Total Budget of University (In Lakhs)	Allocation in R & D (In Lakhs)	Allocation of % In respect of Total Budget	Actual Utilization/Expenditure in R & D (In Lakhs)	Actual Utilization of % In respect of Total Budget
2010-11	8312.22	150	1.8	152.02	1.83
2011-12	7895.38	500	6.33	520.85	6.60
2012-13	8368.85	550	6.57	566.55	6.77
2013-14	9661.39	650	6.73	662.23	6.85
2014-15	9876.45	675	6.83	678.13	6.87

3.1.8 In its budget, does the university earmark fund for promoting research in its affiliated colleges? If yes, provide details.

N/A

We are a standalone University with no affiliated colleges

3.1.9 Does the university encourage research by awarding Post Doctoral Fellowships/Research Associate ships? If yes, provide details like number of students registered, funding by the university and other sources.

Yes, the university has one Post Doctoral fellow. The details are as follows:

S.No.	Name	Department	Project Title	Fellowship
-------	------	------------	---------------	------------

1.	Dr. Sushil Bhatt	CSE	Rural Informatics (Design and implementation of village empowerment model through leveraging ICT and associated technologies)	Rs. 36,720 pm
----	------------------	-----	---	---------------

In addition, the admission process for awarding Post-doctoral fellowship, for session 2015-16, is already on.

Other than this, research scholarship/technical assistance-ship is awarded to the qualified and selected PhD/M.Tech candidates based on their academic excellence. The research projects sponsored by various funding agencies like DST New Delhi, DBT, UCOST have provisions for such SRF/JRF Fellowships. Accordingly, the fellowships have been awarded which are as follows:

Name	Department	Project Title	duration	Fellowship
Priti Saxena (Research Associate I)	Civil Engineering	Study of seismic behaviour of large pile groups in liquefiable soils using Parallel Processing Methods	5 September 2013- 30 June 2014	Rs. 26,400/-pm
Nikita Wahane (JRF)			15 July 2014- 30 Sept2014	Rs. 19, 200/-pm
Ankita Kandpal (SRF)			1 October 2014- 30 April 2014	Rs. 21,600/-pm
Shashank Kothari (JRF)			01 May 2015 till date (continuing)	Rs. 19, 200/-pm
Deepa Minakshi	Environmenta l Science	Design Up-gradation of a Vertical Sub-surface Constructed Wetland unit for treatment of Dairy Waste Water	Since 15 th October 2014 to present	Rs. 12000/-pm
Dr Anurag Vidyarthi	EC	Rain fade mitigation for Ka band communication satellites	Oct. 2013-June 2014	Rs. 21600/-pm
Ms. Swati Garg	EC	Rain fade mitigation for Ka band communication satellites	July 2014- contd.	Rs. 21600/-pm
Ms. Eisha Madhwal	EC	Investigation of channel equalization and diversity combining schemes for up surging digital troposcatter communication systems	Sep. 2013	Rs. 21600/-pm
Nikita Wahane	EC	Printed Document Security Using Intrinsic Characteristics of Imaging	3 years (Sanctioned in Dec. 2014)	Rs. 19,200/-pm

		Devices		
--	--	---------	--	--

Payal Gupta	Biotechnology	Identification & Characterization of molecular targets for the development of novel anti-Candida drug	Jan' 2012 to present	Rs. 34,800/- pm
Neema Tufchi	Biotechnology	Elucidation of vaccine candidates for Encephalitis vaccinology approach	July 6 th 2013- April, 2015	Rs. 8000/- pm
Kalpana Nautiyal	Biotechnology	In vitro propagation of orchids and macropropagation in Dehradun district of Uttarakhand	May 2012- January, 2014	Rs. 12,000/- pm
Rashi Sharma	Biotechnology	In vitro propagation of orchids and macropropagation in Dehradun district of Uttarakhand	February, 2014- April, 2014	Rs. 12,000/- pm
Taranjeet Kapoor	Biotechnology	Screening medicinal plants of Uttarakhand for modulation of secretase enzyme activity: Prospect for treatment of Alzheimer's	June 11, 2013 – June 19, 2014	Rs. 12,000/- pm
Raghav Tripathi	Biotechnology	Screening medicinal plants of Uttarakhand for modulation of secretase enzyme activity: Prospect for treatment of Alzheimer's	July 15, 2014- March 31, 2015	Rs. 12,000/- pm
Bipin Sati	Biotechnology	DNA barcoding and population genetics of fishes in Uttarakhand	April 1, 2012- March 31, 2015	Rs. 10,000/- pm

Fellowship list of PhD Scholars

S.No	Student Name	Department	Date of admission	Amount
1	PRASHANT ANTHWAL	(Biotech)	July-12	Rs. 20,000/- pm
2	CHANDANI SHARMA	(Electronics)	Jan-13	Rs. 11,000/- pm
3	JYOTI PARSOLA	(Computer Applications)		Rs. 10,000/- pm
4	PRABHAKAR SEMWAL	(Biotech)		Rs. 13,000/- pm
5	KM SHALINI	(Env. Science)	Jul-13	Rs. 8,000/- pm
6	NUPUR GOYAL	(Mathematics)		Rs. 9,000/- pm

7	NUPUR GUPTA	(Biotech)		Rs. 9,000/- pm
8	PRANJALI GUPTA	(Biotech)		Rs. 10,000/- pm
9	VINAY KUMAR	(Biotech)		Rs. 9,000/- pm
10	GUNJAN AWAL MOUDGIL	(Mgmt. Studies)	Jul-14	Rs. 10,000/- pm
11	POONAM	(Biotech)		Rs. 10,000/- pm
12	SHWETA GOYAL	(EEE)		Rs. 22,500/- pm
13	VARTIKA GUPTA	(Chemistry)		Rs. 10,000/- pm
14	MEDHA GUPTA	(CSE)		Rs. 22,500/- pm
15	NEEMA TUFCHI	(Biotech)	Feb-15	Rs. 10,000/- pm
16	BIPIN KUMAR SATI	BT	JAN- 2013 (SRF Till April 2015 and Fellowship granted from Sept 2015)	Rs. 10,000/- pm
17	VIDIT KUMAR	CS	Aug 2015	Rs. 22500/- pm
18	ARUN PRATAP SINGH RATHOD	ECE		Rs. 22500/- pm
19	SHUBHAM NEGI	ECE		Rs. 22500/- pm
20	FARAZ AHMAD	ME		Rs. 22500/- pm
21	YOGESH KUMAR SHARMA	ME		Rs. 22500/- pm
22	NIKITA RAWAT	EE		Rs. 22500/- pm
23	KALPANA RAUSA	EVS		Rs. 22500/- pm

M. Tech students getting scholarship				
S.No	Student Name	Department	Duration	Amount
1	NAINA RAJPUT	CONTROL SYSTEM	2014-16	Rs. 8000/- pm
2	MOHIT KUMAR	VLSI		Rs. 8,000/- pm
3	NITIN DHAKA	VLSI		Rs. 8,000/- pm
4	ROHIT SINGH TOLIYA	VLSI		Rs. 8,000/- pm
5	AMIT KUMAR SHAKYA	COMM. SYSTEM		Rs. 8,000/- pm
6	HIMANSHU KUMAR	ICE		Rs. 8,000/- pm

The fellowship is awarded for the tenure of the projects and to PhD and M Tech candidates for their full tenure of completion, maximum upto 3 yrs for PhD and 2 yrs for M Tech, and is paid on monthly basis.

3.1.10 what percentages of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad. How does the university monitor the output of these scholars?

At present provision of sabbatical leave is available for faculties who are having more than ten years of experience with the institution; however, faculties are motivated for joining higher studies on study leave.

3.1.11 Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.

The University encourages organizing national and international conference, 23 national and 7 international conferences were organized by the constituent department. The summary of which is as follows:

National and International Conferences/Seminars Organized at the University

Department	National	International	Total
At University Level	10	02	12
Mathematics	--	02	02
Hotel Management	--	01	01
Environmental Science + Electrical Engineering	--	01	01
Mechanical Engineering	02	--	02
Electronics & Communication Engineering	02	--	02
MCA	02	--	02
MBA	01	--	01
ICE	01		01
Biotechnology	02		02
Computer Science Engineering/Information Technology	03	01	04

Some of the National Conferences/Seminars/Workshops

S. No	Title/theme of the event	Date
1.	Seminar on UK Business Buzz	11 Nov 2009
2.	National Seminar on Power Algorithms	8 - 12 May 2010

3.	National Seminar on Renewable energy, emerging technologies and challenges	9 - 10 Aug 2010
4.	Emerging Trends on Industrial Automation and Soft Sensors	4 - 5 Sep 2010
5.	Recent trends in Microwave & Millimeter Wave Technology	4 - 5 Oct 2010
6.	Advanced Manufacturing Techniques in Context with Energy Conservation	18 - 19 Nov 2010
7.	Advances in Natural Product Chemistry and Sustainable development	4 - 5 Jun 2011
8.	Applications of Finite Element Method in Mechanical Engineering	27 May 2011
9.	National Seminar on Recent Trends in Mathematical Techniques and Their Applications	11 Apr 2011
10.	Future Aspects of Artificial Intelligent in Industrial Automation	20 Sept 2011
11.	Network Security Issues and Resource Optimization	27 - 28 Oct 2012
12.	Mentor & Youth 2013	28 Aug 2013
13.	Higher Education in USA - Global Opportunities	4 Apr 2013
14.	Higher Education Opportunities in UK	5 Mar 2013
15.	Higher Education Opportunities in UK	12 Feb 2013
16.	Cloud Computing and high performance computing	30 May 2013
17.	Harnessing Intellectual Property & Its Management for Growth & Prosperity	April 26, 2014
18.	National Level Faculty Training Program on Cloud Infrastructure and Services	28 – 31 May 2014
19.	Enterprise Mobile Application Development Using Work light	22 nd – 25 th July, 2014
20.	SAE NIS 2014 Convention	22 Nov 2014
21.	Advances in Computer networks	February 16 – 20, 2015

22.	All India Seminar on Status of Welding in Research and Advancement Analysis of Welded Structure, in collaboration with Institution of Engineers	20-21 Feb 2015
23.	Interactive Research Seminar	May 22, 2015

Some of the International Conferences/Seminar

S. no	Title/theme of the event	Date
1.	Environment and energy conversion	27 - 28 Nov 2009
2.	Role of Mathematics in Science and Engineering	13-14 May 2011
3.	Hospitality & Tourism Management	11 - 12 May 2013
4.	Mathematical Technique in Engineering Applications	24-25 Oct 2013
5.	Translating Use of Vendor Resources into Employability	21 Jul 2014
6.	International Conference on Soft Computing Techniques for Engineering and Technology ICSTET - 14	7-8 Aug 2014
7.	YITCON 2014, the Youth Festival of ICT, Canberra, Australia, organized by Australian Computer Society was telecasted live through satellite streaming at the GEU.	10 Oct 2014

List of some of the prominent speakers of international repute who contributed to the scientific deliberations in the above-mentioned conferences is as under:

International:

S. no	Name of the prominent speakers & designation	Department /area
1.	Ross Dawson, Australian author, futurist, entrepreneur and former stockbroker	At University Level
2.	Ben Heyes, Cyber Security at Commonwealth Bank of Australia and others	
3.	Adam Spencer, Australian media personality	
4.	Mr. Mak Sharma, Head- School of Computing, Telecommunications and Networks, Birmingham City University, United Kingdom	
5.	Prof. John C Crotts, Professor, Full Bright Scholar	HM
6.	Raghvendra Gupta, Institute of High Performance Computing, Singapore	Mathematics
7.	SL Singh, President, Vijnana Parisada (Science Academy) of India	
8.	P V Arunachalam, Former Vice Chancellor, Dravidian University	
9.	Madhu Jain, IIT Roorkee	
10.	Prasun Das, Indian Statistical Institute, Kolkata	
11.	Revaz Kakubava, Georgian Technical University, Tbilisi, Georgia	
12.	David D Hanagal, Fellow of Royal Statistical Society, London, UK	
13.	Prof. Vitali Milman, Tel Aviv University, Israel	

14.	Dr Rajendra Pant, Walter Sisulu University, Mthatha, South Africa	EVS & EEE
15.	Prof. R. N. Mukherjee, Burdwan University, Burdwan, WB	
16.	Prof. K Ramsubramanian, IIT Mumbai	
17.	Prof. Oscar João Abdounur, Universidade de São Paulo, Brazil	
18.	Prof. Spasoje Mucibabic, University of Defense, Belgrade, Serbia	
19.	Mr. Jens Berktof, Director (GTZ), Indo German Energy Program	
20.	Mr. A J Singh, Joint Project Director UREDA	
21.	Er Vidhu Gairolla, Expert Consultant of Petro & Petro Chemicals	
22.	Dr. SAS Biswas, Scientist 'G', FRI	
23.	Dr. S Cahpathiray, Sr Scientist, ISRO	
24.	Dr. George Philip, Prof HIHG, Coordinator Indo Japanese Tacto Profiling Project	International Conference on Soft Computing Techniques for Engineering and Technology ICSTET - 14
25.	Prof. Lutz Schminke	
26.	Prof.(Dr) V. Sree Hari Rao, IDRBT, Fellow-NAS California	
27.	Prof. Harold Dyck, California State University, San Bernandino	
28.	Prof. Malisa Zizovic, Singidunum University NIS, Serbia	
29.	Prof. Rale M. Nikolic, the Belgrade Metropolitan University, Belgrade, Serbia	
30.	Prof. S.L. Singh, UGC Emeritus Professor, Rishikesh	
31.	Prof. Amir Ahmad, King Abdul Aziz University, Saudi Arabia	
32.	Prof. Shamimul Qamar, Saudi Arabia	

List of some of the prominent speakers of international repute who contributed to the scientific deliberations in the above-mentioned conferences is as under:

National:

Sr. No	Name of the prominent speakers & designation	Department /area
1.	Dr. R.C. Mittal (IIT Roorkee)	Network Security Issues and Resource Optimization
2.	Dr. Mayank Dave (NIT Kurukshetra)	
3.	Dr. Durga Toshniwal (IIT Roorkee)	
4.	Dr. S K Chakraverty, Chairman & Prof NIT Kurukshetra	Industrial Automation
5.	Dr. Rajendra Dobhal, Director General, UCOST	Advances in Natural Product Chemistry and Sustainable development
6.	Dr. Satish C. Sharma-Prof. & Head (Mech.), IIT-Roorkee.	Applications of Finite Element Method in Mechanical Engineering

7.	Prof. H.G. Sharma, IIT, Roorkee	National Seminar on “Recent Trends in Mathematical Techniques and Their Applications
8.	Mr. Pradeep Kumar Motwani, Additional Director, CRC, Ministry of Petroleum and Natural Gas	Advanced Manufacturing Techniques in Context with Energy Conservation”
9.	Shri R C Agarwal, Director DEAL	Recent trends in Microwave & Millimeter Wave Technology
10.	Dr. B.S. Negi, Director Ministry of New and Renewable Energy, New Delhi	National Seminar on Renewable energy, emerging technologies and challenges
11.	Dr. D.K. Khatod, AHEC IIT Roorkee	
12.	Dr. M.P. Sharma, AHEC, IIT Roorkee	
13.	Dr. Ajay Gairola, Prof at IIT Roorkee & Member Secretary Of UEPPCB	
14.	Prof Dr S Mukherjee, Associate Dean, Dept of EEE, IIT Roorkee	Emerging Trends on Industrial Automation and Soft Sensors
15.	Mr Rakesh Uniyal, Regional Manager, MESTO Corpration, Finland	National Seminar on Power Algorithms
16.	Mr Dinesh Kumar Singh, Regional Manager, Prolific Automation Pvt Ltd, Noida	
17.	Dr. Durgesh Pant, Director, USARC	
18.	Dr K P Kulshist, Tech D/R, NIC Dehradun	
19.	Prof K S Vaisala, VCT ,KEC ,Dwarka	
20.	Dr Ram Mohan Rao, Scientist IIRS Dehradun	
21.	Dr R K Sharma Dean CS, Thapar University Patiyala	
22.	Dr Anurag Awasti, CEO, CAMP Corp.	Seminar on UK Business Buzz
23.	Dr Suresh Chandra, IT Consultant, Former Prof, GBPU Pant Nagar	
24.	Prof Rudolph B, Business Management, University of Wolverhampton, U K	
25.	Dr. Vipin Gupta, Co-Director, Global Management Center, California State Univ., San Bernardino, USA	
26.	Mr. Chris Taylor, Sr. International Officer , University of Worcester, UK	
27.	Dr. Michel Doisy and Dr. Annya Réquilé, Dean of the International Graduate School, University of Nantes, France	
28.	Dr. R. Dobhal (CMD, NRDC, New Delhi)	
29.	Shri V. K Dhaundiya (Director General,	

	UCOST & Director, USERC & USAC, Dehradun)	Management for Growth & Prosperity
30.	Shri Y. D Panwar (Principal Scientist, TIFAC, New Delhi)	
31.	Prof (Dr.) S.K Verma (Former Dean & Head Faculty Of Law, University Of Delhi, New Delhi)	
32.	Shri V.K Jain (Dy. Manager; NRDC)	
33.	Ms. Suvarna Pandey (IP Attorney, M/S S Majumdar & Co, New Delhi)	
34.	Dr. Sanjeev K Majumdar (Scientific Officer ,NRDC, New Delhi)	
35.	Shri Amitabh Mishra (Dy Manager, NRDC, New Delhi)	
36.	Mr Revelon Dsouza, Trainer EMC2 Education services.	
37.	Mr Shray Madan, Program Admin, EMC2 Academic Alliance India, Russia, South Asia, Australia, Newzeland	

3.2 Resource Mobilization for Research

3.2.1 What are the financial provisions made in the university budget for supporting students' research projects?

The university provides research equipment and material required for student research projects. Special budgetary provisions are made for the same based on the need and the requisition. The students are free to utilize all the research facilities and consumables to carry out their research projects under the guidance of research guides. Generally 3 to 5 % of R & D budget is made available to student's research project each year based on innovativeness of the projects.

3.2.2 Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Yes, the university has a fully functional Intellectual Property Right (IPR) cell. The cell creates the awareness and sensitizes researchers on the importance of IPR. Special lectures and workshops have been organized on IPR. The University encourages the faculty and students to file patents. The University has a policy to fund for the filing of patents and to support the documentation. The University will also help in legal process of filling.

Summary

- Total 13 patents filed so far (9 in India and 4 in foreign countries including US and Canada).
- 4 PCT applications has also been filed.

The detail of filed patents is as follows:

- a) Indian Patent Application 1447/DEL/2014: A Synergistic Camellia Sinensis Based Anticandidal Composition
Priority date - 31/May/2014 Filed Complete on 29/May/2015
Inventors - Jigisha Anand, Nishant Rai, Ashish Thapliyal
- b) Indian Patent Application 1500/DEL/2014: Primers Probes And Test Kit For The Detection Of Salmonella
Priority date - 05/Jun/2014 Filed Complete on 04/Jun/2015
Inventors - Pankaj Gautam, Navin Kumar, Nishant Rai, Ashish Thapliyal
Also filed PCT on 05/Jun/2015 - PCT/IB2015/000859 (ISA - IN).
- c) Indian Patent Application 1625/DEL/2014: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof
Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2014
Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly
Also filed PCT on 16/Jun/2015 - PCT/IB2015/000950 (ISA - IN).
- d) Indian Patent Application 2247/DEL/2014: A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 07/Aug/2014
Inventors: Puneet Goyal, Nitin Khanna
Also filed PCT on 28/Apr/2015 - PCT/IB2015/053080 (ISA - EP).
- e) Indian Patent Application 2646/DEL/2014: Secure Authentication using dynamic passcodes
Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joohi Chauhan
Also filed PCT on 15/Sep/2015 - PCT/IB2015/057079 (ISA - IN).
- f) US Patent Application 14/809746: A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 27/Jul/2015
Inventors: Puneet Goyal, Nitin Khanna
- g) Canada Patent Application 2899803 : A System and Method for Security Enhancement
Priority date - 07/Aug/2014 Filed Complete on 06/Aug/2015
Inventors: Puneet Goyal, Nitin Khanna
- h) Canada Patent Application (Appln. No. yet to receive) : A System and Method for Security Enhancement
Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joohi Chauhan
- i) Nepal Patent Application 1786: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof
Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2015
Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly

- j) Indian Patent Application 728/KOL/2015 filed on 7/08/2015: Semi Rigid Joint By Somjit Mondal
- k) Indian Patent Application 729/KOL/2015 filed on 7/08/2015: AFS Automatic Flow Stopper by Using Negative tensile spring By Somjit Mondal
- l) Indian Patent Application 730/KOL/2015 filed on 7/08/2015: Self Stabilizing Parallel Shaft Gears By Somjit Mondal
- m) Indian Patent Application by Abhilash Semwal filed in 2014: Mobile Bomb Detector

3.2.3 Provide the following details of ongoing research projects of faculty:

A. University funded projects

Sr. No	Name of PI	Name of Project	funding Amount in Rs.
1.	Prof Dr. Kamal Ghanshala	Rural Informatics (<i>Design and implementation of village empowerment model through leveraging ICT and associated technologies</i>).	75,00,000.00
2.	Dr. Ashish Thapliyal	Development of dairy, animal cell culture and molecular diagnostic facility	75,00,000.00
3.	Abhilash Semwal	Mobile Bomb Detector	25,00,000.00
4.	Dr. Vijay Gupta	Renewable Energy Project On Paper Recycling	12,00,000.00
5.	Team GEU Motorsports from ME/AME Deptt	Racing Car	4,00,000.00
6.	Team gagnents from ME/AME Deptt	Gocart Racing Car	1,50,000.00
7.	Team GEU Motorsports Effi Car from ME/AME Deptt	Racing Car	68,000.00
8.	Mechame Racers from ME/AME Deptt	EcoCart Racing Car	1,00,000.00

B. Other agencies: National/International

Sl. No	Funding agency	Number of projects	Sanctioned Amount (in Rs. lakh)
1	ISRO	01	11.98
2	DRDO	01	18.97
3	DST	02	27.31
4	Government of India Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS)	02	42.86
5	UCOST	07	27.34
6	USBD	02	13.95
7.	DBT	01	14.56
8.	Technology Business Incubator (TBI)	01	294.20
	Total	17	451.17

3.2.4 Does the university have any projects sponsored by the industry /corporate houses? If yes, give details such as the name of the project, funding agency and grants received.

Yes.

Sr. No	Name of the project	Funding agency	Grants received in Rs. Lakhs
1	Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works	M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Karnal, Haryana.	309.25 (sanctioned) 5. 0 (already received)
2	Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,	Nainital, Uttarakhand. (a UNDP Project)	2.10 (already received)
3	Running Operation & Maintenance of Effluent treatment plant (ETP)	M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar, Tonk Road, Jaipur, Rajasthan for a period of 3 years.	27.90 (sanctioned) 8.80 (already received)
		Total	339.25

3.2.5 How many departments of the university have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition.

The Following departments of the university have been recognized for their research activities by national / international agencies as Department with Potential for Excellence

Sr. No	Department	National/International Agencies	Quantum of assistance received in lakhs	Year of receiving
1	Biotechnology and EVS	DBT	14.56	Mar, 2014
2	Civil and CS	BARC	24.35	2013-14

Significant outcomes in one of the Civil BARC project are mentioned as follows:

- Development of Nonlinear FE program for dynamic analysis of soil-pile system
- Development of Matlab code for Free-field ground motion characterization

Expected outcome of DBT Project

- The research outcomes of the proposed project will develop an advanced vertical sub-surface constructed wetland unit which can be used for achieving higher nutrient removal from dairy wastewater. The advance CW unit will be equipped with optimal filter material and re-circulation rate for achieving maximum removal of pollutants from dairy wastewater.
- In addition, up-graded design of vertical sub-surface CW unit will also help in reducing green house gas (nitrogen) emission from CW units and provide an effective mechanism for transforming it into biofertilizer. This biofertilizer can be applied to agricultural fields for increasing agricultural productivity and controlling soil and ground water pollution. Thus the outcome of proposed project would bring multiple benefits to the environment and strengthen the concept of sustainable development.

3.2.6 Details of completed Research Projects

(a) Funded by National/international agencies:

Sl. No	Funding agency	No of projects	Sanctioned amount (Rs. lakh)
1	AICTE	01	14.00
2	ISRO	01	13.52
3	DRDO	02	15.75
4	USBD	01	3.00
5	Institution of Engg.	02	2.00
6	DST(CV RAMAN)	02	3.20
	TOTAL	09	51.47

(b) Inter-institutional collaborative projects:

Sr.	Department	National collaboration	International collaboration
-----	------------	------------------------	-----------------------------

No	Name		
1	Biotech	Department of BioChemical Sciences (DBCS), Defence Institute of Physiology and Allied Sciences (DRDO)	Patrick Van Dijck Lab, VIB Department of Molecular Microbiology KU Leuven Kasteel park Arenberg 31 3001 LEUVEN
2	Civil	IWRS, IIT Roorkee (Grant received 55,000/- for conducting various activities related to water resources management).	

c. University funded projects

Sr. No	Name of PI	Name of Project	Funding Amount in Rs. Lakhs
1.	Prof Dr. Kamal Ghanshala	Baseline survey to assess Science & IT awareness in Uttarakhand	35.7
2.	Dr. P Thakur	Solar Energy Light Project	55.0
3.	Dr. D R Gangodkar	Establishing private cloud computing facility for offering infrastructure and storage as service	3.00
4.	Dr. D R Gangodkar	Developing infrastructure for storage and analysis of big data	2.00
5.	Akhilesh Sharma	Alumni Website development	2.0
6.	Akhilesh Sharma	Mobile application for Women safety	2.0
7.	Dr. Devesh P Singh & Garvit Duggal	Android based software projects	2.0
8.	Mr Bordolai and Sameer Goyal	Admission Counseling software development	2.0
9.	Mr Kamlesh Purohit Mr Ramesh Rawat	MIS based software for Library management	2.0

10	Mechame Racers team from Department of Mechanical and Automobile Engineering	EcoCart/ Gocart Racing Car	1.5
11	Team VONK team from Department of Mechanical and Automobile Engineering	EcoCart/ Gocart Racing Car	3.0

3.3 Research Facilities

3.3.1 What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?

Improvements in infrastructure by the university are carried out at the following levels to facilitate research:

At Central Level:

- 24x7 access to high-end computing facility with necessary hardware, OS, and software support caters to the needs of technology support required by all streams
- Dedicated leased line of 55 Mbps bandwidth (only for research purpose) by Tata Communication is fully commissioned.
- State-of-an-art built-up area of approx 37,500 Sq. Feet is fully dedicated for research projects and labs.
- Research-scholar rooms with 24x7 dedicated high bandwidth web connectivity.
- Subscription of E –journals /books like Elsevier, IEEE, ASME, ASCE, EBSCO etc.
- Incentives for faculty for sponsored research project, journal publications, Conference registration fee, TA etc.

At Department Level:

- Capital for R&D infrastructure development e.g. Procurement of emerging area specific equipments/ softwares etc.
- Upgradation of facilities in Library/ Labs

Some of the upgraded Labs are mentioned below:

- Animal cell culture laboratory
- Plant tissue culture laboratory
- Advanced communication systems & RF Propagation Laboratory
- VLSI system design(Cadence back end tool, VLSI front end)
- Xilinx, FPGA boards to test the real time systems, Semi automated PCB machine
- Advanced power electronics and renewable energy laboratory
- FMS-flexible manufacturing systems laboratory
- High performance and cloud computing laboratory

Strategies:

- Provision for funding of any new idea in research thrust area.
- Faculty/students are encouraged to submit projects to funding agencies.
- The existing facilities are upgraded to meet requirements of emerging new areas.
- Freedom for principal investigators to purchase the equipments specified in their funded research projects as per the specifications and use the same for the research work.
- The researchers are provided incentives for quality research publications.

3.3.2 Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, provide details of the facility.

- Yes, the University has a digital Resource Centre having a rich collection of online resources in terms of e-journals like IEEE, ASME, ACEE, EBSCO, which is a leading online site providing access to 4453 journals/ magazine globally. For students pursuing management courses, access to specialized book portals etc is provided.
- To maintain research ethics the university applies anti Plagiarism software for originality checking.
- In addition, Dean (Research) and Dean (Projects) facilitate in acquiring information.

3.3.3 Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?

Yes, the university has a University Science Instrumentation Centre (USIC) which is created recently to provide access to all the researchers, research associates, and students of the university. The fund allotted to USIC is 1.00 Crore for the year 2015-16.

3.3.4 Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/international)?

Yes, residential facilities (with computing and Internet facilities) are provided.

3.3.5 Does the university have a specialized research centre/workstation on-campus and off-campus to address the special challenges of research programmes?

Yes, the university has a specialized research centre with high-end computing facilities and necessary software to address the special challenges of research programmes.

3.3.6 Does the university have centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.

Yes, a number of national and international organizations of repute have recognised the centers of the University.

The Department of Science and Technology, Govt. of India has recognized the University as scientific and industrial research organization and provided funding of Rs. 294.20 crores for development of **Technology Business Incubation Centre** which is first of its kind in Uttarakhand. These facilities are made available to researchers from other institutions/laboratories and departments.

The Plant tissue culture and Animal Cell culture centre of the Department of biotechnology is a state recognized centre. The postgraduate researchers from outside institutions conduct their dissertation work for short-term duration in these centres.

3.4 Research Publications and Awards

3.4.1 Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.

Yes, the University publishes following journal with details as under:

Title: Journal of Graphic Era University (An International Journal of Science and Technology)

ISSN Number: 0975-1416

Editorial Board (Re-constituted in the year 2015)

Chief Editor: Prof. L.M.S. Palni

- Dr. R C Joshi, Chancellor, GEU, Dehradun
- Dr. Harpreet Singh, Wayne State University, Detroit, USA
- Dr. Yogeshwar Sahai, Faculty Emeritus, Materials Science Engineering, The Ohio State University Columbus, OH 43210
- Dr. D C Srivastva, IIT Roorkee, Roorkee
- Dr. Kinshuk, Professor - School of Computing and Information Systems, Associate Dean - Faculty of Science and Technology, NSERC Industrial Research Chair (Adaptivity and Personalization) - School of Computing and Information Systems, Athabasca University, Canada
- Prof. Ravi N Chibbar, Canada Research Chair, Plant Sciences Department, University of Saskatchewan, Saskatoon, Canada
- Prof. Steve J Neill, Dept of Plant Biology, University of Bristol, United Kingdom
- Dr. V K Tewari, Vice Chancellor, GEU, Dehradun
- Dr. Durgesh Pant, Director, USARC, Uttarakhand, Dehradun
- Dr. Deepak Bhatnagar, Ex TIFAC
- Dr. Vinay Goyal, IISC Bangalore
- Dr. Sanjay Jasola, Vice Chancellor, GEHU, Dehradun
- Dr. A K Awasthi, Pro- Vice Chancellor, GEU, Dehradun
- Prof P K Mohanty, Canada
- Prof David Yank, STUT, Taiwan

- Prof. K.M. Paknikar, Director, Agharkar Research Institute (DST), Pune, Maharashtra
- Dr. Kartikeyan, Professor, IIT Roorkee
- Dr. Pravin Patil, Dean (R & D)

The summary of the Editorial Policy is given below:

This journal publishes original articles, which is aimed at a broad spectrum of the Engineering, Sciences and Management studies community. In general, the journal does not publish articles that have been published elsewhere in whole or in part.

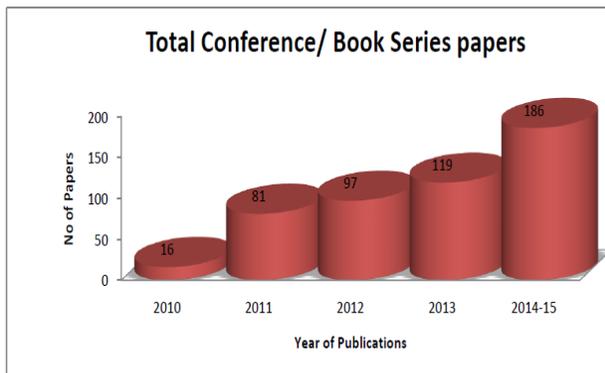
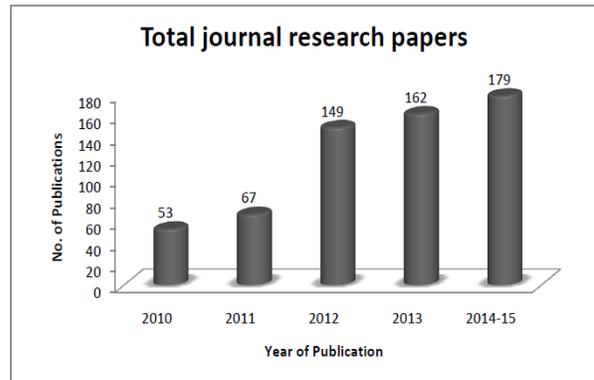
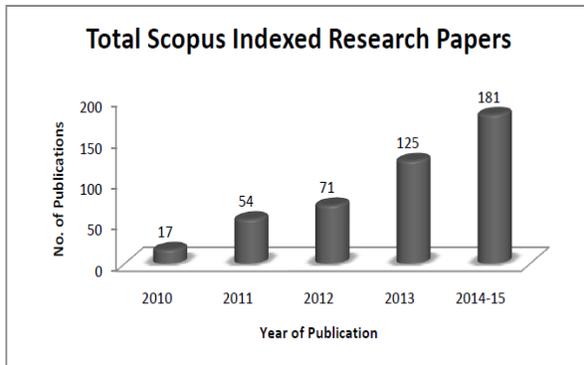
The purpose of *this journal* is to disseminate timely and informative articles that represent the current state of the art in Engineering, Sciences and Management studies and to keep its readers posted on above-mentioned related matters.

Authorship must be limited to those who have contributed substantially to the work. The corresponding author must have obtained permission from all authors for the submission of each version of the paper and for any change in authorship. All work should be free of fabrication, falsification, and plagiarism

3.4.2 Give details of publications by the faculty:

- **Number of papers published in peer reviewed journals (national/international)**

S.N.	Description	No of Papers published
1.	Scopus Indexed Journal	218
2	SCOPUS indexed Conferences/book Chapters	230
3	Other Indexed journals	392
4	Other indexed Conference Proceedings	203
	International/ National Books/ Book chapters	96
	Total	1139
5	Patents Filed	13
6	Citation index	Scopus : 456 Google Scholar: 711
7	SNIP	Range :0.03 to 4.5
8	SJR	Range :0.1 to 3.5
9	Impact Factor	Range 0.1 to 7.885
10	h- index	Journal : 8 (Scopus)



3.4.3 Give details of Faculty serving on the editorial boards of national and international journals

S. No	Name(s) of Faculty (Department)	Journals serving in as Reviewer/ Editorial Board member
1.	Dr. P. Thakur (EEE)	EPC&S, Taylor and Francis (Reviewer) IEEE Transaction on Power Delivery (Reviewer), IET-GTD, Springer (Reviewer), ASEJ, Elsevier (Reviewer)
2.	Dr. Deepak Joshi (EEE)	Reviewer of Journal of Medical Engineering and Technology (T&F) and Medical Engineering and Physics (Elsevier)
3.	Dr. Praveen Patil (Mechanical Engg.)	Reviewer of IEEE and Elsevier Journals in Vibration
4.	Dr. Sanjeev Kumar (Civil Engg.)	Research Journal of Engineering Sciences (Editorial Board), Research Journal of Earth Sciences, Research Journal of Recent Sciences, Research Journal of Agriculture and Forestry Sciences, International Research Journal of Environmental Sciences, International Journal of Engineering Research and Technology (Reviewer)
5.	Dr. Pavan Kumar	Earthquake Engineering and Engineering Vibration

	Emani (Civil)	(EEEV), Springer- Reviewer
6.	Dr. R. P. Tripathi (Mathematics)	International Journal of Engineering Science and Humanities
7.	Dr. Mangey Ram (Mathematics)	Journal of Safety Engineering, USA.(Guest Editor) Mathematics in Engineering, Science and Aerospace, USA. (Guest Editor) Journal of Engineering Science & Technology, MALAYSIA. (Guest Editor) Journal of Reliability and Statistical Studies, INDIA. (Guest Editor) Engineering and Automation Problems, RUSSIA. (Member) International Journal of Soft Computing and Engineering”, INDIA. (Member) International Journal of Innovative Science and Modern Engineering”, INDIA. (Member) American Journal of Applied Mathematics and Statistics”, Science and Education Publishing, USA. (Member) International Journal of Mathematics And Its Applications”, INDIA. (Member) Applications and Applied Mathematics: An International Journal (AAM), USA. (Member)
8.	Dr. Anand Chauhan	International Journal of Operations Research and Optimization (AACSO)- Co-Editor
9.	Prof Sachin Ghai (MBA)	‘Book Promoting Socio-economic Development through Business Integration’ published by IGI Global- Editorial Advisory Board Member
10.	Dr. Pankaj Jha (MBA)	Journal of Social Science and Technical Research, ISSN: 2348-0599, A Peer Reviewed bi-annual Journal
11.	Dr.Puneet Goyal	Reviewer of IEEE Transactions on Image Processing, Journal of Electronic Imaging
12.	Dr. D.R.Gangodkar	Reviewer of IEEE Intelligent vehicle Symposium 2015, Korea
13.	Dr. Bhasker Pant	Reviewer of IEEE Transactions on Evolutionary Computation
14.	Dr. Raj Kumar Kapooria (Mechanical Engg.)	Peer-Reviewer for three International Journals on Energy technology
15.	Dr. Punit Gupta (Mechanical Engg.)	Reviewer for IEEE Journal on Neural Networks
16.	Mr. Sushil C. Dimri, (MCA)	CSI, International Journal of Computer and Information Technology (IJCIT), “Pragyan” Journal of Information technology (ISSN : 0974-5513), International Journal of Mathematica (IJM)- Reviewer

17.	Dr. Nishant Rai (Editor), Dr. Ashish Thapliyal, Dr. Navin Kumar, Dr. Pankaj Gautam (Bio-Technology)	Biotechnology International Journal (Editorial Board)
-----	---	---

**Faculty serving as members of steering committees of international conferences recognized by reputed organizations / societies
International Level**

Name of Faculty	Name of Conference	Date	Committee name
Dr. P. Thakur	IEEE Sponsored International Conference, 4th Student's Conference on Engineering and Systems (SCES2015) at MNNIT, Alahabad	November 6-8, 2015	Technical Program Committee
	2nd International Conference on Mathematical Techniques in Engineering Applications (ICMTEA, 2016) at GEU, Dehradun	April 29 - 30, 2016	Organizing Committee
	IEEE sponsored, International Conference on Power, Control and Embedded Systems (ICPCES – 2010) at MNNIT, Alahabad	Nov 29 - Dec 1, 2010	Organizing Committee

National Level

Name of Faculty	Name of Conference	Date	Committee name
Dr. P. Thakur	National Conference on Technological Revolution in Electrical Engineering (TREE – 2014) at G.B.P.E.C, Pauri	May 22-23, 2014	Keynote Speaker
	National Conference on Technological Revolution in Electrical Engineering (TREE – 2014) at G.B.P.E.C, Pauri	May 22-23, 2014	Session Chair
	UCOST Sponsored National Conference, 2013 at GEU, Dehradun	October 27-28, 2012	Technical Committee
Dr. D. Gangodkar R.	IEEE Intelligent Vehicle Symposium (IV2015), Seoul, Korea,	June 28 to July 1, 2015.	Member Review committee
	IEEE Next Generation Computing Technologies (NGCT-2015), Dehradun, India,	September 4-5, 2015,	Member Technical Program committee
Dr. R Gowri	Member of IEEE Technical Program	2014-2015	Member

3.4.4 Provide details of Research awards received by the faculty and Students

Department	Awards/ Recognitions
Maths	<ul style="list-style-type: none"> • Young Scientist award to Dr. Mangey Ram from UCOST, Uttarakhand,2011 • Young Scientist award to Ms. Ritu Chandana from UCOST, Uttarakhand, 2011
Faculty Awards	
Civil Engg	
Faculty Awards	<ul style="list-style-type: none"> • Dr. P.K. Emani received the Young Scientist Award from DST, 2012 • Mr. Nitin Mishra received Kathpalia Award 2013, for best M.Tech at IIT Roorkee. • Dr. P. K. Emani received ISET B.K. Maheshwari Award for Best Ph.D. Thesis in Soil Structure Interaction in India - 2013.
EEE	
Faculty Awards	<ul style="list-style-type: none"> • Dr. Pradeep Kumar Juneja, Professor (EEE) 2012 - received New Idea Fund (NIF) scholarship for project entitled “Design and development of high current pulser with sharp rise and fall time and varying pulse width for electrochemical processes in semiconductor devices” for duration of one year at Central Electronics Engineering Research Institute (CEERI) Pilani, Rajasthan. • Dr. Deepak Joshi, Assistant Professor (EEE) 2013 - Winner of invention prize of USD 2000 from Intellectual Ventures Asia.
CS Faculty Awards	<ul style="list-style-type: none"> • Prof (Dr.) Kamal Ghanshala <ul style="list-style-type: none"> ○ Conferred Best Paper Presentation award at the International Conference on Intelligent Systems, Data Mining and Information Technology (ICIDIT), April 2014, at Bangkok, Thailand ○ Awarded Certificate for Excellent Paper at the 3rd International Conference on Computer Communication and Management (ICCCM) 2013,at Copenhagen, Denmark, May 19-20, 2013 • Dr. Puneet Goyal – Awarded 2nd prize in Poster Competition at IIIT Delhi Annual Research Showcase 2014. Some of the Jury members there were : Dr. Kaushik Saha (Director,R&D, Samsung), Lipika Day (Principal Scientist, R&D, TCS), Dr. Turbo Majumder (Faculty, IIT Delhi). • Dr. Puneet Goyal received the Research of the Year award at International Innovation, Sustainability, and Entrepreneurship Summit 2014’ held at IIT-Delhi, for his research work in security. This summit is an initiative of Foundation for Innovation & Technology Transfer (FITT)-IIT Delhi, IIT Delhi Alumni Association and Knowledge Resource Development & Welfare Group, India. • Dr. Puneet Goyal – served as Jury Member – IITD Open House 2014 and 2015 for IITD Alumni awards Evaluated several UG and PG projects.

	<ul style="list-style-type: none"> • Dr. Puneet Goyal received “Best Poster Presentation” award in IEEE Intl. Conference on Medical Imaging, m-Health and Emerging Communication Systems (MedCom – 2014) held at Greater Noida, India during November, 07 – 08, 2014 • Dr. A. S. Shukla awarded Vivekananda Award 2013 for Social Service by Uttarakhand Government. Also awarded for Highest Blood Donation (Individual) 31 times by Redcross Society and Uttarakhand Aids Control Society (2011-2015) • Dr. E. S. Pilli received Best Paper Award in the International Symposium on “Cloud and Services Computing” during Dec. 16 -19, 2012 at NITK Surathkal.
ME	
Faculty Awards	<ul style="list-style-type: none"> • Dr. Pravin Patil received the Young Scientist Award from DST , 2013 • Mr. Arvind Mishra has set new Guinness World Record of Longest Marathon Lecture in March 2014. • Mr. Arvind Mishra has set new Guinness World Record of Longest Marathon Reading Loud in May 2015
Biotech	
Faculty Awards	<ul style="list-style-type: none"> • Young Scientist award to Dr. Naveen Kumar from UCOST, Uttarakhand,2015 • Doctoral fellows- Ms. Payal Gupta, DST Inspire Fellow • Prof. LMS Palni was awarded Science Communicator Award in 22nd National Childrens’ Science Congress (2014) and Science and Technology Excellence Award in 9th Uttarakhand State Science & Technology Congress (2015)
MBA	
Faculty Awards	Dr. Happy Paul received Best Paper Presentation Award at 5th International Conference of Management and Behavioral Sciences (2012) organized by Society of Management and Behavioral Sciences (SMBS), Jodhpur. He also received Best Paper Award at International Conference on Management in the New World Order (ICMNWO-2012) organized by IIM Ranchi. Besides he received Best Doctoral Paper Award at International Marketing Conference (MARCON-2012) organized by IIM Calcutta
EEE	
Student Awards	Praval Joshi (M. Tech Full-time, Control System batch 2012- 14) has been awarded with cash prize of Rs. 1500/- for second position in paper presentation event in Tech-Expo 2014 organised by NRDC New Delhi at GEU, Dehradun. Sagar Rawat got 2 nd position in Robo Competition, in Cognizance’14 held at IIT Roorkee.
Civil Engg Deptt.	
Student Awards	Kalyani Kumar was the winner of IDEAZ (Paper Presentation) of COGNIZANCE 2013 by WRD&M, IIT Roorkee. Apoorva Shrivastava and Abhishek Pokhriyal got third prize of IDEAZ (Paper

	resentation) of COGNIZANCE 2015 at IIT Roorkee.
ME (Student Awards)	Somjit Mandal , student of second year B Tech in ME has been awarded Young Scientist award for Best Oral Presentation under the discipline Engineering Science and Technology, 9 th Uttarakhand State science and Technology Congress 2014-15, 26-28 February, 2015 at Uttarakhand State Council for Science & Technology, Vigyan Dham, Dehradun.
CS (Student Awards)	<ul style="list-style-type: none"> • Abhilash Semwal (B.Tech) awarded cash prize of Rs. 5 lacs by Hon'ble Chief Minister, Uttarakhand for his breakthrough innovation - Portable handheld explosive detector. He also won the award at IIT Kharagpur for his innovation. His project also selected in top 10 in Make in India. • A 3rd year students' team (S. M. Ali, V. Pande and S. Kumar) won the 3rd prize in National Finals of Microsoft Imagine Cup 2014 under World Citizenship category, receiving prizes worth more than Rs. 1 Lacs (60000+ teams from India had participated in this contest). • Ankit and Amit Rawat (B.Tech) won the Infosys Aspirations 20-20 Chandigarh DC competition 2013 beating 300+ teams coming from 41 different institutes of North India. • Megha Saraswat (B.Tech) received Special Jury Award during Regional finals of prestigious IET India Scholarship Regional Finals 2014. She came within top 0.8% amongst around 4000 nationwide applicants. • Several GEU students had received 100+ online course certifications from world reputed Universities (like Univ. of London, Stanford, Princeton, MIT, Duke University, IEEE, Hong Kong Univ. of Science & Technology) via Coursera, edX, NPTEL, etc. • GEU rated as one of the top performing institution in India by IBM in The Great Mind Challenge (IBM-TGMC) in 2009, 2011 and 2013. • Tanya Kukreja (B.Tech-CSE) participated in 2014 Summer Workshop on Design & Innovation at IIT Delhi, receiving stipend of Rs 10000 per month. (There were only 25 students selected from all across the country). • Out of total 15 students selected from all over India in BARC in Computer Science in 2015, five of them were GEU CSE B.Tech batch students.
EC (Student Awards)	Shubham Chauhan, B.Tech 3 rd year, got All India Rank 1 in Multirover competition held in IIT Kanpur, 2015.

National and international recognition received by the faculty from reputed bodies and agencies

- Dr. Deepak Joshi (EEE) received Winner of invention prize of USD 2000 from Intellectual Ventures Asia in 2009. Dr. Pawan K. Emani (CE) received the Young

Scientist Award from DST in 2012.

- Dr. Pravin Patil (ME) received the Young Scientist Award from DST in 2013
- Graphic Era faculty, Mr. Arvind Mishra has set new Guinness World Record of Longest Marathon Lecture in March 2014.
- Dr. P. K. Emani got ISET B.K. Maheshwari Award for Best Ph.D. Thesis in Soil Structure Interaction in India for the year 2014.
- Graphic Era faculty, Mr. Arvind Mishra has set new Guinness World Record of Longest Marathon Reading Loud in May 2015.

3.4.5 Indicate the average number of successful M.Phil and Ph.D scholars guided per faculty during the last four years. Does the university participate in *Shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access?

University has produced 16 PhDs so far. In addition, 6 PhD theses are under evaluation process. Presently 150 PhD Scholars are working on their theses in various research areas across Engineering, Science and Management domains.

Yes, The University participates in *Shodhganga*
(<http://shodhganga.inflibnet.ac.in/handle/10603/5130>)

3.4.6 What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.

The official policy of the university to check malpractices and plagiarism is that

1. Every employee shall conduct himself/herself with honesty and integrity and shall not indulge in any activity, and shall not adopt any unfair means in his/her academic / research activities, publication of research papers in journals, reports/ monographs, project reports, etc., and shall not indulge in any activity which may be considered to be even remotely connected with unfair means or plagiarism.
2. Every employee is expected to uphold the sanctity and integrity of academic/research/administrative system and the credibility of the University. Any report/information in regard to unfair means and plagiarism shall be considered as a violation of Code of Conduct and disciplinary action shall be initiated against the employee concerned as per rules
3. Any such report/ information on unfair means and/or plagiarism shall be promptly taken cognizance of by the University and such matters shall be dealt with appropriately in such manner as to uphold the highest traditions of the academic and research integrity and the credibility of the University.

Further, the University accepts no PG/PhD dissertation/thesis if it is not certified by the supervisor for its originality. If any malpractice is identified including plagiarism, the dissertation/thesis is sent back to the contributor and appropriate disciplinary procedures are instituted.

The university continually monitors the progress of research of students through Student Research Committee and checks for malpractices. In addition, the University has the Plagiarism software Turnitin to check originality of the research work. Further, this process has been widely publicized to act as a deterrent for any Plagiarism/ malpractices etc.

One case of Plagiarism/ malpractices has come to light so far and is under investigation.

3.4.7 Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavours?

Yes, the University promotes multi/inter disciplinary research. The majority of the projects undertaken by the faculty are interdisciplinary in nature. There are formal and informal collaborating research activities among the departments of the university.

Currently four interdepartmental / interdisciplinary research projects have been undertaken and the number of departments involved are:

- Civil and Computer Science & Engg,
- Biotechnology and Information Technology
- Computer Science & Engg and Electronics & Communication Engineering
- Biotechnology and Environmental Science

3.4.8 Has the university instituted any research awards? If yes, list the awards.

Yes, since 2010, the university has instituted the following research awards,

- **Innovative Research award for students – 5 cash prizes of Rs 50,000/- each.**

For 2014-15

Sr. No	Name	Award Price in Rs.
1	Abhilash Semwal	50000/-
2	Vaibhav Pandey	50000/
3	Abhinav Rawat	50000/
4	Anurag Singh	50000/
5	Vishesh Parashav for highest package of 25 Lacs	50000/

For 2015-16

Sr. No	Name	Award Price in Rs.
1	Subodh Kumar	50000/
2	Bhrgav Barvah	50000/
3	Naman Goyal	50000/

4	Abhshek Ranjan	50000/
5	Abhishev Parashav	50000/

• **Research awards for faculty (2013-15) – Rs. 21.28 Lakhs**

Sr. No.	Faculty Name	Deptt	Total Award in Rs.
1	Dr. Ashish Thapliyal	Biotech	94816
2	Dr. Anju Rani	Biotech	62346
3	Dr. Nishant Rai	Biotech	52866
4	Dr. Manu Pant	Biotech	47666
5	Dr. Naveen Kumar	Biotech	37033
6	Dr. Pankaj Gautam	Biotech	21766
7	Dr. Kumud Pant	Biotech	17033
8	Lal Ankita	Biotech	6666
9	Dr. Syed Mohsin Waheed	Biotech	2666
10	Dr. Promila sharma	Biotech	1333
11	Dr. L K Palni	Biotech	20000
12	Dr. Pavan K. Emani	CE	122074
13	Dr. Sanjeev Kumar	CE	7333
14	Mr. K K Gupta	CE	5333
15	Mr. Nitin Mishra	CE	3333
16	Dr. A Nayak	Che	14000
17	Dr. Brij Bhushan	Che	10000
18	Dr. Saini C K	Che	4000
19	Dr. Sharma R G	Che	4000
20	Dr. Bhawana	Che	2000
21	Dr. Sharma Neetu	Che	2000
22	Dr. Jain Kranti	Civil	8000
23	Dr. Ankush Mittal	CS	123487
24	Dr. Puneet Goyal	CS	164200
25	Dr. Bhaskar Pant	CS	17033
26	Dr. D Gangodkar	CS	10413
27	Devesh Pratap Singh	CS	8000

28	Mr. Sumit Pundir	CS	7400
29	Vikas Tripathi	CS	1333
30	Dr. Nitin Khanna	EC	151430
31	Dr. B S Jassal	EC	118163
32	Dr. R Gowri	EC	58263
33	Mrs. Poornima Mittal	EC	42000
34	Dr. Brijesh Kumar	EC	38000
35	Md Irfanul Hasan	EC	12000
36	Mrs. Chandwani Gitanjali	EC	2000
37	Anurag Vidyarthi	EC	1333
38	Dr. Deepak Joshi	EEE	35000
39	Dr. Thakur P	EEE	29000
40	Afzal Sikander	EEE	28000
41	Dr. Pradeep K Juneja	EEE	6000
42	Dr. P K Sharma	EVS	79680
43	Dr. Rajesh Kumar	IC	30000
44	Sunil Semwal	ICE	13000
45	Mr. Manocha P	ICE	2000
46	Dr. Mangey Ram	Maths	110000
47	Dr. R P Tripathi	Maths	48000
48	Tamsir M	Maths	40000
49	Dr. Seema Saini	Maths	20000
50	Dr. Mukesh Kumar	Maths	20000
51	Dr. Rajendra Sharma	Maths	14000
52	Neeraj Dhiman	Maths	11333
53	Dr Anuraj Singh	Maths	8000
54	Dr. Anand Chauhan	Maths	6000
55	Dr. Ritu Chandna	Maths	2000
56	Dr. Pankaj Jha	MBA	16000
57	Uday Khanaa	MBA	4000
58	Sanjeev Kumar	MBA	4000
59	Dr. S.C. Dimri	MCA	2000
60	Mr. D.C. Dobhal	MCA	2000
61	Dr. Pravin Patil	ME	174000

62	Dr. Pramod Bhingole	ME	12000
63	Rajesh Verma	ME	8000
64	Mr. G S Kalra	ME	6000
65	Dr. A K Awasthi	PE	27000
66	Dr. Awaneesh Sharma	Phy	18000
67	Dr. Vijay Kumar	Phy	14000
68	Dr. Kiran Sharma	Phy	13333
69	Dr. F S Gill	Phy	13333
70	Dr. Deepak Kumar	Phy	12000
	Total		2128998

3.4.9 What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?

The university recognises research contributions made by its faculty and rewards their research paper/projects of repute or research leading to filing patent. (As per list in section 3.4.8)

3.5 Consultancy

3.5.1 What is the official policy of the University for Structured Consultancy? List a few important consultancies undertaken by the university during the last four years.

The official policy of the University for Structured Consultancy is that, it encourages its faculty to undertake Consultancy Projects from outside agency, with a view to extends the benefits of expertise developed by its faculty, to the industrial and related areas. The University considers it as its duty to contribute towards the development of the country. The rules and norms for such undertaking Projects at this University are available on website.

- **Major Consultancy**

Sr. No	Name of the consultancy project	Funding agency	Grants received in Rs. Lakhs
1	Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works	M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Kamal, Haryana.	309.25
2	Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,	Nainital, Uttarakhand. (a UNDP Project)	2.10
3	Running Operation & Maintenance of Effluent treatment plant (ETP)	M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar, Tonk Road,	27.90

		Jaipur, Rajasthan for a period of 3 years.	
4	Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of uttarakhand	Hydel Projects in different locations of uttarakhand	75.00
5	Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	23.94
		Total	438.19

Minor Consultancy					
S. No.	Consultancy Assignments/ Training program	Department	Project Tenure	Amount(in Rs.)	Faculty Incharge
1.	Provision of expertise service on Testing of Material Strength for Ashmeet Associates Engineers and Contractors (at three projects sites in UP and Uttarakhand)	Civil Engg.	Nov 2014-Oct 2015	2.00 lakh	Dr Pawan Kr Enami Prof Alim Rawsan
2.	Training for Fabrication and pipe design for Uttaranchal Construction Company (practical teaching and on the site training program)	Mech Engg.	Nov 2014-Oct 2015	1.00 lakh	Prof Gurmeet Kalra Prof Prem Singh
3.	Provision of expertise service on Testing of Material Strength and Soil Testing for Alankrta Constructions (at two projects sites in Dehradun, Uttarakhand 1. Abhimanyu Cricket Academy , Jouri Gram, DDN 2. Construction ok King's avenue Apartments at Teg Bahadur Road DDN)	Civil Engg.	Oct.2014-Sept 2015	2.00 lakh	Prof KK Gupta Prof Sanjeev Kumar Prof Prabhat Kumar

4.	Training programme for sales and promotion team for Business Development AMOGEO ITES	Management	Jan 2015- Dec 2015	1.5 lakh	Prof Sandeep Chaudhary Prof Sachin Ghai
5.	Training for Software Development and testing for AMOGEO ITES	CS/IT	Nov 2014- Oct 2015	2.0 Lakh	Dr Sushil Dimri Dr Devesh Pratap
6.	Market sensitization for publications of Savera Educational and Book Suppliers Meerut	Management	Nov 2014- Oct 2015	1.00 lakh	Dr M P Singh Prof Sachin Ghai
7.	Training programme for marketing and sales team for market outreach for Savera Educational and Book Suppliers Meerut	Management	Oct 2014- Sept 2015	1.00 lakh	Dr M P Singh Dr Happy Paul
8.	Skill Enhancement program for Pipe design and modelling for Prakash Pipe Industry, Bijnor , UP	CE/ME	Dec 2014- Nov 2015	2.00 lakh	Dr Pravin Patil Dr KK Gupta
9.	Academic / New Courses function Bharatam Institute, Selaqui, Dehradun	Biotech	2013-14	17,005	Dr. Ashish Thapliyal
10.	Academic and Research Gautam Buddha University, Noida	Biotech	2015	20,000/-	Dr. Nishant Rai
11.	Acad. and Res. Amity University, Noida	Biotech	2015	8,000/-	Dr. N Rai
12.	Academic and Research Maharishi	Biotech	2015	4,000/-	Dr. Nishant Rai

	Markandeshwar Univ., Mullana, Ambala				
13.	Short term training(STS) in plant tissue culture and transformation studies(June-July2014)	Biotech	2014	96500/-	Dr. Manu Pant and Ms. Ankita Lal
14.	Hands on Training on Gene Cloning and Related Techniques (Scheduled July 03 to July 08, 2015)	Biotech	2015	20,000/-	Dr. Navin Kumar and Dr. Nishant Rai
15.	Short term training(STS)in Bioinformatics(June-July2014) TotalStudents:15(all from GEU)	Biotech	2014	46500/-	Dr. Tribhuwan Chandra and Mrs. Kumud Pant

3.5.2 Does the university have a university-industry cell? If yes, what is its scope and range of activities?

Yes, the university has a University-Industry cell under the banner of the Training and Placement Cell (TPC) at New Delhi and Pune. These cells act as an interface between the University and industry. TPC also takes the feedback from industry to make modifications in learning processes. Scope and the range of activities of TPC are listed below:

- Short term Internship for students
- Expert lectures from industry on recent technology
- Faculty Development Programs
- Research, Consultancy and Extension, TBI, STEP
- Introduction of new courses and Curriculum development

3.5.3 What is the mode of publicizing the expertise of the University for Consultancy Services? Which are the departments from whom consultancy has been sought?

Website is the main source/interface through which information is disseminated. In addition, we regularly have visitors from industry with whom we hold discussions regarding possibilities of collaboration and joint work.

Individual faculty from various disciplines, specifically Civil, Biotechnology, Environmental Sciences, Mechanical and Automobile Engg., Management Studies, Computer Science and Engineering are involved in providing consultancy services.

3.5.4 How does the university utilize the expertise of its faculty with regard to consultancy services?

The University utilizes the professional and technical expertise and experience of faculty to establish applied academic relationships with industry. The University aims to develop as a center of excellence for providing high-tech consultancy through standard testing labs of material, water, environment and geo-technical aspects of Himalayan region.

3.5.5 List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.

Broad areas of consultancy are in Engineering: modeling and simulation, training, software development, testing of materials, soil testing, environment and ecological solutions, marketing and training etc. For revenue, details please refer to 3.5.1 for details.

3.6 Extension Activities and Institutional Social Responsibility (ISR)

3.6.1 How does the University sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.

Graphic Era University has been involved in community activities ever since its inception. It motivates and inspires to sensitize faculty and students by organizing the following institutional social activities regularly.

- Independence day, Republic day celebration
- Blood donation camps (The University has donated more than 8000 units of blood in last 4 years for which it received a state-level award worth Rs. 1 Lakh each in the year 2011, 2012, and 2013 from Uttarakhand Aids Control Society and IMA)
- Aids Day, Earth Day, Environment Day, Youth Day, Women Day
- Polio camps in hilly areas
- Awareness Drives (like World Aids Day, Rashtriya Ekta Divas, Disability Day, Tree Plantation drive, etc)
- Scholarship for under privileged
- Disaster relief campaigns for Uttarkashi Disaster (2012), Kedarnath Disaster (2013), J&K Floods (2014)

- Cleanliness Drives (Swachh Bharat Abhiyaan)
- Self Finance Community Radio programmes of the University
- Nukkad Plays
- Economical development of the locality
- Yoga Day



Yoga Day





Blood donation camps

3.6.2 How does the University promote University-neighbourhood network and student engagement, contributing to the holistic development of students and sustained community development?

By organizing cultural activities of social relevance on regular during each semester, in which the participation of neighboring communities is encouraged such as Ram Lila, Kavi Sammelan, Sai Sandhya, Independence day, Republic day, Cleanliness Drives (Swachh Bharat Abhiyaan), Community Radio programmes, Nukkad Plays, Economical development of the locality, Yoga Day etc.



Independence Day



Republic Day

3.6.3 How does the University promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International programmes?

Incentives in terms of cash awards, certificates of appreciation, etc are given to students during various occasions like Independence Day, Republic Day, etc. Special training sessions by Army Personnel to NCC candidates, separate NCC wing for girls, etc have inspired many students to participate in such activities.

3.6.4 Give details of social surveys, research or extension work, if any, undertaken by the University to ensure social justice and empower the underprivileged and the most vulnerable sections of society?

Students of the University conduct regular visits to Orphanages, slums, villages, etc to donate clothes, food and other essential commodities. Recently, GEU students conducted many awareness drives for helping War Widows, Girl student education, etc.

3.6.5 Does the University have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?

Yes, through Curriculum, which includes courses like healthy living, Human Values and Professional Ethics, Environmental and Hazard Management, General Proficiency, etc, GEU strives to inculcate good citizenship in students.

The Graphic Era Educational Society funds the various social service activities, while the Public Relations Office (PRO) keeps track of all such activities. University has systems in place that provides a forum/ platform to initiate, recognize, encourage and support social welfare and community activities. The following are such forums

- Indian Youth Society of Eco friendly and Renewable Technology (IYSERT) is GEU initiative for organising exhibitions, awareness drives, about eco-friendly technologies by individuals, NGOs or other organisations
- University has many student clubs through which the various community welfare and social welfare activities are coordinated, funded and awarded
 - NCC ; NSS ;SAE Club ;Software club
 - Speaker's Club ;Eco Club ;Quiz Club; Scrabble Club
 - Dance Club; Photography Club; Music Club
 - Mountaineering and Trekking Club; Wildlife Club ;Web designing Club
 - GEU Film Society ; Philately Club

Students are given special incentives for participating in social activities in the form of cash prizes.



Mountaineering and Trekking

3.6.6 Bearing in mind the objectives and expected outcomes of the extension activities organized by the University, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.

- Students get **motivated** to contribute to the society in a positive manner.
- They are able to relate to how their performance and non-performance can affect the lives of people in their neighborhood. This is found to give **emotional strength** in their academic pursuits.
- This emotional motivation **replaces the unhealthy and selfish competition** among the students and the students involved in such activities showed a marked improvement in their **team spirit** and were found to **accept and cooperate enthusiastically with able leadership** and become one subsequently.
- The students also learnt the importance of **completing a pursuit** to a meaningful end, and thus, also **time management and work as team**.

3.6.7 How does the University ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the University which have encouraged community participation in its activities.

- In the spirit of 'Charity-starts-at-home' the University organizes many activities especially for the families and friends of the faculty, staff and students.
- Morally elevating cultural presentations of social relevance like Spic Macay performances, Ram Lila, Kavi Sammelan, Sai Sandhya, etc are regularly conducted during every semester, during which the participation of neighborhood communities is encouraged
- The university has actively participated in Uttarkashi disaster kedarnath apda and our team is the first one to reach sangam chatty village and other region of kedarnath.
- The university organizes skill development programs for youth of various regions of uttarakhand.



Ram Lila



Kavi Sammelan



Uttarkashi disaster campaign



Kedarnath apda Campaign

3.6.8 Give details of awards received by the institution for extension activities and/contributions to social/community development during the last four years.

- NSS awards, NCC awards
 - Mrinalini Pandey won NCC Best Cadet from Uttarakhand and got recommended for Republic Day Camp
 - Highest Blood Donner Award in uttarakhand for 2011, 2012 and 2013 of Rs. 1 lakh each.
 - Prof (Dr.) A S Shukla has received Vivekananda Award for social service in 2013 by Uttarakhand Govt.
 - Prof (Dr.) A S Shukla has received Blood Donner Award by Red Cross on June 2015 for 31 time donation.
- Prof (Dr.) Kamal Ghanshala has received Uttarakhand Ratan Award for outstanding contribution to quality technical and higher education.
- Prof (Dr.) Kamal Ghanshala has received Dr. B C Roy Award for social services related to health cause in 2010.
- International Youth Exchange programmes
 - Rakesh Biswas of B. Tech (Bio-tech) received a financial Grant of Rs. 23, 89, 000/- by Youth Time International Movement at Rhodes Youth Forum- 2013, Prague, Czech Republic for IYSERT- a GEU student's initiative for Eco-friendly and renewable energy society.



3.7 Collaboration

3.7.1 How has the University’s collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has, the University benefitted academically and financially because of collaborations?

The University’s collaboration with other agencies has impacted the visibility, identity and diversity of activities on campus in terms of the following:

- Campus placements by collaborating industries
- Collaborative Research with national/ international recognized research labs like DEAL/IRDE/BARC/USAC/USERC etc.
- Exchange of ideas, expertise, skills and information with Industry and other research organizations
- Organizations of Workshops /Seminars/Training Programmes for our students as well as employee of industries.
- Student internship and exchange programmes in MNC & Foreign university

3.7.2 Mention specific examples of how these linkages promote Curriculum development, Internship, On-the-job training, Faculty exchange and development, Research, Consultancy, Extension, Student placement, Any other (please specify)

The examples of linkages promote are listed as follows:

Collaboration	Benefit
IBM, Microsoft	Curriculum development and enrichment
Birmingham University, UK	Faculty Exchange, Joint Research projects, student internship, organising joint conferences
Ambuja Cements, Microtek Cements	Student Internship, Using of testing facility, Expert Lectures
California State university, San Bernardino, California, USA	Faculty and student exchange program
University of Worcester, UK	Faculty exchange
Sheffield Halam University	Faculty exchange
Polytech, Nantes	Faculty and student exchange
BRNS	FE Computational Lab
Hochschule Fulda, University of Applied Sciences, Germany	Joint presentations by students, faculty exchange, collaborative research, exchange of academic information.
Ministry of higher education and scientific	Student exchange and faculty exchange

research, Iraq	
Universite De Haute-Alsace, France	Cooperation in scientific research, student research, faculty exchange
AIESEC	Student Exchange Program
Simplex	Industry interaction, student placement
Infosys, Wipro, EMC ² , TCS, Accenture, Oracle	Placement

3.7.3 Has the University signed any MoUs with institutions of national/international importance/other universities/ industries/corporate houses etc.? If yes, how have they enhanced the research and development activities of the University?

The University has entered in to memorandum of understanding (MoU) with two prestigious Govt. of India research organizations

- Deal/DRDO
- IRDE/ DRDO

GEU has MoU with following international universities

- California State University, San Bernardino, California (CSUSB), USA
- Birmingham City University, West Midlands, United Kingdom (UK)
- Polytech Nantes, the Graduate School of Engineering of the University of Nantes, France
- University of Worcester, UK
- Sheffield Hallam, University UK
- UFA State Petroleum Technological University, Russia
- UFA State Aviation Technological University, Russia
- Universite De Haute-Alsace, France
- Hochschule Fulda, University of Applied Sciences, Germany

GEU has also collaborative tie-ups with the following organizations

- BARC ;
- ISRO
- IBM, Microsoft, Accenture, wipro, Infosys, EMC² etc
- Nippon Electricals Ltd., Innovent Engineering Ltd.
- Ambuja Cements, Microtek Cements, Simplex constructions Pvt. Ltd
- Doon Rubber Pvt Ltd, Prakash Pipe Factory etc.

Benefits gained by industry interactions

- Curriculum development and introduction of new courses
- Internship, student exchange and student placements
- Faculty Exchange and professional development
- Research, Consultancy and Extension
- Publication
- Twinning programmes

3.7.4 Have the University-industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?

The University has initiated, developed and maintained the industry-interaction in the departments and establishment / creation of highly specialized laboratories / facilities is in process. Some interactions were pro-actively initiated, while many are due to the policy of preferential recruitment of professionals from industry. All the interactions through collaborations mentioned in 3.7.3 have contributed positively to development of academic rigor in the University. Details are also elaborated in 3.7.2.

4.1 Physical Facilities

4.1.1 How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?

The University houses state-of-the-art academic and allied infrastructure including living space, activity arena, facilities and amenities on the campus. The Planning and Works Committee of University is responsible for planning and development of physical infrastructure. The infrastructure requirements are raised from departments and faculties across the campus through head of Departments and other functional heads and forwarded to the Committee. The members of the Committee consider proposals such as construction of new facilities, buildings, expansion and renovation of existing structures as per requirements of expansion plans.. The recommendations of the Committee meetings are presented to the Board of Management for necessary approval and action. Planning and works committee considers the proposal only after it ensures that the existing physical infrastructure is optimally utilised.

4.1.2 Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives

Yes. It is a part of University development policy to create and enhance infrastructure facilities for promoting state of the art teaching learning and living environment on the campus. Depending on the students intake/ initiation of new courses/ promotion of research and development activities and various other extension programmes, the university develops and provides the infrastructure. To promote teaching-learning and research environment using modern tools and aids, steps are taken to augment the build-up area, laboratory and class room furniture and fixtures, books and journals, e-learning resources and ICT equipment. Some recent initiatives by the university include:

- Technology Business Incubator (TBI)
- Central Instrumentation Facility(CIF)
- Center for Foreign languages (French and Chinese)
- State-of-the-art 1600 seater central air conditioned Auditorium under construction
- New Central Library of 50000 square feet with seating capacity of 500 students under construction

- New Student Facility centre including Gymnasium, Cafeteria and food court about to be commissioned

4.1.3 How does the university create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?

- The university provides high end computing facilities for research across all disciplines of study. The university has a Computer Centre with 1707 high end computers and 12 Servers. The entire campus is Wi-Fi enabled.
- Faculty members having research projects are provided with need based additional space, also to accommodate project staff and equipment.
- The university procures tools and equipment for research laboratories using university research funds and grants available from other external funding bodies to cater the research needs of the students and faculty members.
- The university encourages faculty members to apply for external grants, major and minor research projects from different funding agencies like DST, DBT, UCOST, DRDO, BARC etc.
- At present the university central library has a total collection of 107,761 books. The Library subscribes 59 journals of different disciplines and 37 general magazines. The faculty members also avail online facility of the university library for teaching and research. The university central library has acquired more than 4453e-resources in various disciplines
- The university also provides space and furniture to various departments for generating departmental library and reading room facility.

4.1.4 Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?

Yes, the above mentioned facilities are available.

4.1.5 How does the university ensure that the infrastructure facilities are disabled-friendly?

The university has installed lifts and user friendly ramps, for the benefit of persons with special needs.

4.1.6. How does the university cater to the requirements of residential students? Give details.

The university offers decent residential facilities for boys and girls. The University has five Boys Hostels with a capacity of 763 and four Girls hostel with a capacity of 681 seats.

Hostel details

S. N.	Name	Capacity	Occupancy
1	Chandra Shekhar Azad Boys Hostel	156	156
2	Sardar Patel Boys Hostel	77	77
3	S C Bose Boys Hostel	330	330
4	Maharana Pratap Boys Hostel	130	130
5	APJ Kalam Boys Hostel	70	70
6	Laxmi Bai Girls Hostel	143	143
7	Sarojini Girls Hostel	222	222
8	Priyadarshini Girls Hostel	240	240
9	Sai Girls Hostel	76	76
	Total	1444	1444

4.1.7. Does the university offer medical facilities for its students and teaching and non- teaching staff living campus?

Yes. The university has a dispensary with a qualified MBBS medical officer, and three medical assistants (compounders) on the University campus for providing 24x7 medical assistance and services. University has four adequately equipped ambulances for quick access to city hospitals in emergency. The university has hospital tie-up with Shri Mahant Indresh hospital and St. Paul's Hospital, Dehradun to cater into emergency services.

4.1.8. What special facilities are available on campus to promote students interest in sports and cultural events/activities?

A. Sports

- The university has playfields within its campus for Athletics events, Football, Cricket, Volleyball, Basketball, Badminton court etc.

- Every year the university conducts Inter-Department and Inter-University Tournaments for Football, Cricket, Volleyball, Basket Ball, Table Tennis, Badminton, Carom, Chess and Yoga Camp .
- The university has teams for above mentioned games who participate in different competitions at various levels.
- The university provides special training facilities for the university team for each game including athletics, requisite equipment, and also has facility of Gymnasium with all exercise and physical training instruments along with qualified trainer.
- The university has a Sports Officer and a committee who are responsible for overall planning, supervision and execution of all sports related activities.

B. Cultural events/ activities

- The university organizes its bi- annual cultural and techno-managerial festival “GRAFEST” with great fan fair and enthusiasm. This event brings to the campus artists and celebrity of international repute. Kailash Kher, Daler Mehdi, Mika Singh, Kunal Ganjawala, Arijeet Singh, Vishal and Shekhar are a few to name. Folk artists and musicians from Garhwal and Kumaon have performed in Cultural festivals of University. Inter-department and Inter-University Competitions in cultural events like Music, Dance, Debate, Quiz, management and technical events are also organized periodically . Ram Leela is one such annual event that calls for participation from every section of the University community.
- Another National level annual event organised by university is Akhil Bhartiya Kavi Sammelan. Famous literary faces like Dr Rahat Indori, Dr Ashok Chakradhar, Dr Santosh Anand, Dr Gopal Das Neeraj, Dr Kumar Biswas have rendered their cerations in the campus. The university has instituted Annual Kavya Gaurav Samman of Rs 1.00 lac cofeered in every Kavi Sammelan
- Based on these competitions a University Cultural Team is selected every year to participate in State and National Level Competitions at different places.
- The university provides special trainings to cultural team members and supports with requisite(musical instruments , sound systems, peripherals etc.).
- The university has National Service Scheme (NSS) and National Cadet Corps(NCC)cell with a large number of student volunteers and many

programme officers who conduct several societal and need-based programmes in the university and also outside by adopting villages and slums.

- The programmes usually undertaken by NSS units are plantation of trees, blood donation camps, participation in National Integration camp, health check- up camps, yoga and meditation camp, awareness rallies etc.
- Students also learn from activities that are centric to their course of study by participating in activity clubs such as: Automobile Club, Software Club, Speaker’s Club, Eco Club, Quiz Club, Scrabble Club, Dance Club, Photography Club, Music Club, Mountaineering and Trekking Club, Wildlife Club, Web Designing Club, GEU Film Society, The Philately Club.

4.2 Library as a learning resource

4.2.1 Does the library have an advisory committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?

Yes, the library has an Advisory Committee which comprises of: Vice Chancellor (Chairman), Members: Pro-Vice Chancellor, Finance officer all Deans, HODs, Professor Incharge Library and librarian as Secretary. The committee has initiated and carried out several activities such as-

- INFLIBNET **Shodhganga, ShodhGangotri:**
- Turnitin-anti plagiarism software
- Online full-text electronic resources, e-books
- Wi-Fi Accessibility

1.2.2 Provide details of the following

S. N.	Name of Library	Area sq. feet	Seating capacity	Working hours	Overall Plan	Floor Plan and Display

1	Santosh Anand Central Library	8879	150	8.00am-10.00pm On week days.	Reading Halls, Cyber Center, Stack Area, separate Reference and Periodicals Sections, Male & female wash rooms	Clear and prominent display of floor plan and adequate sign boards are placed at appropriate places.
2	CS/IT Library	4769.47	60	9:00 AM TO 07:00 PM		
3	MCA Library	2247.33	45	9:00 am to 7:00 pm		
4	MBA Library	3227.46	70	9:00 am to 7:00 pm		

Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)

- Individual reading carrels – Every floor
- Lounge area for browsing – Stacks
- IT Zone for accessing e-resources – Internet facility

Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection. **Annexure –B**

4.2.3 Give details of the library holding: Print (books, back volumes and thesis)

S N	Name of Library	Print (books and Thesis)	Average number of books added during the last three years (01/08/20	Non Print (Microfiche, AV)	Electronic (E-Books, E-journals)	Special collections (Reference books)
-----	-----------------	--------------------------	--	----------------------------	----------------------------------	---------------------------------------

			12 to 16/07/20 15)			
1	Central Library	74532 (books)	15791	450 (CD/DVD)	IEE-145 ASCE-34 ASME-26	6234
2	CS/IT Library	13 Ph.D. Thesis		150 (DVD)	EBSCO-1802 ACM-1349	
3	MCA Library	23729	1781	300 (CD/DVD)	Science Direct-1097 e-books	2262
4	MBA Library	9500	403	70 (CD/DVD)	Mcgraw Hill 523	1484

4.2.4 What tools does the library deploy to provide access to the collection?

- Online Public Access Catalogue (OPAC) is used to have online public access.
- Electronics resource management package for e-journals

The University has following subscription for online full-text electronic resources, e-books.

- IEEE-All society periodical (ASPP)
- ASCE E-Journals Package (34 e-journals, back files access since 1983)
- ASME E-journals Package (26 e-journals, back files access since 2000)
- EBSCO-Business source elite (1802e-journals)
- ACM DIGITAL LIBRARY
- McGraw-Hill's Access Engineering (523 e-books)
- Turnitin-Anti Plagiarism web tool (100 users)
- Scopus and Science Direct database subscription.

- **Federated searching tools to search articles in multiple databases:** Turnitin-anti plagiarism software Solution is available to search articles in multiple databases.
- **Library website:** Yes
- **In-house/remote access to e-publications:** In house access to e-publications is available through individual IP address.

4.2.5 To what extent is ICT deployed in the library? Give details with regard to Library automation.

The Library is fully automated using ERP Software.

Automated acquisition module, technical processing module for new purchase (Data entry, bar code generation) and circulation module for issue and return of books to the readers are processed with SIM. Library automation work management and back up management are administered through centrally controlled server room.

Total number of computers for general access : 40

Internet band width speed : (i) 1Gbps leased line from BSNL
(ii) 55Mbps leased line from Tata Comm.

Institutional repository: Library has following repositories for the users:

- Article repository: Published research papers/articles of the faculty members
- Book Repository: Published books of the faculty members.

Content management system for e –learning: Available

Participation in resource sharing networks/consortia (like INFLIBNET): Yes

Shodhganga INFLIBNET center

<http://shodhganga.inflibnet.ac.in/handle/10603/5130>

ShodhGangotri: Repository of Indian Research in Progress details (Synopses/Research Proposals for PhD programme)
shodhgangotri.inflibnet.ac.in/

4.2.6 Provide details (per month) with regard to

S.N.	Name of library	Average no. Of Walk-ins	Average number of books issued/ returned	Ratio of library books to students enrolled	Average number of books added during the last four years	Average number of login to OPAC	Average number of login to e-resources	Average number of e-resources downloaded /printed.	Number of IT (Information Technology) literary trainings organized
1	Central Library	786	3269	27:1	2980 7	58	1500	3700	2
2	MCA	141	1191	25:1	4182	50			
3	MBA	84	706	45:1	1076	55			
4	CS/IT	128	1387	27:1	6268	60			

4.2.7 Give details of specialized services provided by the library with regard to

Manuscripts : Nil

Reference : A total number of 9,980 reference books, 510 old volume (Year 2008-2012) journals are made available.

Reprography : Reprographic facilities are available.

Students and faculty Inter-library loan service : Yes

Information deploy and notification (Information Deployment and Notification) : The information related to important current issues is deployed on the notice board of the library.

OPAC : OPAC is used to have online public access.

Internet Access: Yes.

Downloads : Downloading and reprography facility are available for students and Staff members.

Printouts: Printers are provided in the library for printing

Reading list/Bibliography compilation: The library has maintained digital catalogues containing details of resource materials. As per Devy Decimal Classification of International Standards, the same has been arranged by author, title and subject.

In-house/remote access to e-resources: In-house access to following e-resources are available: IEEE, ACM Digital library, ASME, ASCE, EBSCO.

User orientation: The library arranges user orientation programmes at the beginning of every academic year for new students. This is conducted in two phases:

- General information about the library, titles and volumes and layout, various facilities in different section of the library, opening hours, holding rules and regulations, special features and services, use of software & e-resources
- Guided tour of the various sections of the library.

Assistance in searching database: There is a provision of dedicated digital library Kiosks for display of information . Also the library staff assists all users in search for the desired information. It provides orientation on topics like e-resources access, citation analysis, journal impact factor and assistance regarding publications.

INFLIBNET/IUC facilities: Yes. **Shodhganga Inflibnet Centre**
<http://shodhganga.inflibnet.ac.in/handle/10603/5130>

4.2.8 Provide details of annual library budget and the amount spent for purchasing new books and journals.

Year	Annual Budget (in lakhs Rs)	Actual utilization /expenditure in Library(in lakhs Rs)
2010-11	125.00	127.65
2011-12	100.00	106.77
2012-13	125.00	119.02
2013-14	175.00	190.76
2014-15	200.00	221.59

4.2.9 What initiatives has the university taken to make the library a happening place on campus?

- Exhibition of books, journals and other reading materials.
- Wi-Fi Accessibility to all
- Online public access.
- INFLIBNET Shodhganga, ShodhGangotri.
- Library website
- Turnitin-anti plagiarism software
- Online full-text electronic resources, e-books
- Library automation
- Students are encouraged to use the library facilities for completion of projects and assignments.
- Arrangements for digital library kiosks

4.2.10 What are strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?

The feedback from is available at the library counter. A suggestion box is placed at the entrance of the library for collection of these forms. These suggestions are examined bi-monthly by the Librarian and library committee and the proposals are considered by Library Advisory Committee for necessary approval.

4.2.11 List the efforts made towards the infrastructural development of the library in the last four years.

- Additional LAN /Wi-Fi to provide connectivity in various sections of the library.
- Construction of new library building.
- Installation of CCTV
- Addition in computing facilities in libraries

4.3 IT Infrastructure

4.3.1 Does the Graphic Era University have a comprehensive IT policy with regard to

- **IT Service Management** : **Yes**
- **Information Security** : **Yes**
- **Network Security** : **Yes**
- **Risk Management** : **Yes**
- **Software Asset Management:** **Yes**
- **Open Source Resources** : **Yes**
- **Green Computing** : **Yes**

4.3.2 Give Details of the University's Computing Facilities i.e. Hardware and Software:

Number of Systems/Equipment

S. N.	Name of Equipment	Qty	Details
1	Computers	2002	11 Nos. Servers HP/IBM 1197 Nos.- Core 2 Duo with 2 GB RAM
			435 Nos. - Core i5 with 4 GB RAM
			75 Nos. - Quad Core/4 GB Ram 75 Nos.- IBM P4 12 Nos- Xeon HP Work station 197 Nos. Wintron P4
2	LCD Projectors	64	Sony/Dell

3	Printers	213	LaserJet/DMP
4	Plotter	01	Plotter printer HP A0
5	N/W Switches	158	DAX/Cisco/D-Link
6	Laptops	100	HP/ Dell/ IBM
7	On Line UPS	49	APC/ MGE/ Emerson/Eaton
8	H/W firewall	01	Cyberoam1500i
9	OMR Scanner with build in barcode facility	03	Scan Tron
10	Netbook	50	Acer/Asus
11	Digital Library Kiosks	05	

Computer Students Ratio:

U.G Level : 1:4

P.G Level : 1:2

Ph.D. : 1:1

Dedicated Computing Facilities:

- University has established its private cloud computing facility. Infra and services are being provided for research purpose.
- There is a Big Data lab for storage and analysis of semi-structured and unstructured data.
- 12 Centralized Servers are available e.g. Matlab Server, Orcad Server, Windows Server, Unix Server for all Students and faculty for online access for 24X7 .
- Classrooms and All Computer Labs are equipped with LCD projectors for Quality Teaching Experience.
- A High speed LAN Network on OFC has been established for Internet Connectivity on 24X7 basis, as per details given below:

Internet Bandwidth

- | | | |
|-----|---------------------------|---|
| (A) | Internet Service Provider | : BSNL |
| | Internet type | : Broadband on OFC |
| | Internet Speed | : 1 Gbps, 24 Hrs. connectivity. |
| (B) | Internet Service Provider | : Tata Communications |
| | Internet type | : Dedicated Leased Line on OFC |
| | Internet Speed | : 55 Mbps , 24 Hrs. connectivity |

- **LAN Facility:** All Computers in different Offices, Labs and Library are Connected with a LAN Network on a backbone of Fiber Optics.
- **Proprietary Software:** University has Campus agreement with several software companies like Microsoft, Symantec, Bently etc. Details are available as per Annexure C.
- **Nodes/Computers with Internet Facility:** Around 600 nodes on internet at one time on a LAN/WLAN Network.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

Regular up-gradation of IT infrastructure is carried out. Based on advance requirement from students and researchers, new facilities are provided.

IT infrastructure upgradation plan of university includes:

- Establishment of High performance computing facility for students and researchers to carry out research.
- **Super computer workstation with the computing capacity of 5TFLOPs for carrying out research on computationally expensive applications is in the process of installation .**
- Establishment of interdisciplinary instrumentation to facilitate and encourage inter-disciplinary research.
- Exploring industrial linkages to establish Big Data and Cloud computing lab.

For upgradation, concerned departments submit a proposal to the Vice-Chancellor's Office. Proposals are approved after scrutiny by the committee under the chairmanship of Vice-Chancellor. For the approved proposals, purchase and deployment is carried out by the Computer Purchase Committee

and the concerned department respectively. University has a dedicated team to establish and manage networking, hardware and software deployment.

4.3.4 Give details on access to online Teaching and Learning resources and other knowledge and information data base/ packages provided to the staff and students for quality teaching, learning and research

- A learning Management System (MOODLE) is available in the University and access is given to students and faculty members for their learning/teaching/ research work.
- University periodically organizes ICT based Programmes for faculty members with the NITTTR, Chandigarh for improvement in teaching process.
- E-resources/e-books are available.
- Online test for student placement drives.
- Online live lectures.
- Web – Conference / Workshop / Company Interaction.
- Web Development.
- Notification, assignment work is send to students via mail.

4.3.5 What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new/ future challenges :

New technologies deployed by the university in enhancing student learning are:

- E-learning through Learning Management System (Moodle).
- Wi-Fi enabled campus
- Audio visual based lectures providing enhanced AV facility including Projectors, multiple screens, interactive board and mikes.
- INFLIBNET
- Registrations for courses before the semester are done through internet.
- Students performance in the examination and academic related work is available on University Website.
- Faculty periodically updates the attendance of the students in SIM.

4.3.6 What are the IT facilities available to individual teachers for effective teaching and quality research for effective teaching and quality research faculties utilize following facilities:

- Desktops/Laptops/Net Book with High Speed internet Connection (LAN, Wi-Fi, Dongles)
- Printing/scanning Facility
- Access to e-resources(e-journals, e-books etc)
- Turnitin-Anti Plagiarism web tool
- Software based learning and research (MATLAB, CADENCE,ORCAD etc)
- LMS for student teacher interaction
- Kindle reader

4.3.7 Give details of ICT-enabled classrooms/ learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?

The University has ICT-enabled classrooms to improve the quality of teaching and learning with following facilities

- Audio visual based lectures providing enhanced AV facility including Projectors, multiple screens, interactive white board and mikes.
- Networked Computers
- Video Conference system in conference rooms and auditoriums with central air conditioning, ultra-modern sound system, video projection facility, hi - tech lighting.

4.3.8 How are the faculty assisted in preparing the computer aided teaching learning materials? What are facilities available in the university for such initiatives?

- Faculties are provided with desktop/laptop/netbooks and fulltime Internet connectivity and printing facility.
- Access to open source information.
- Free access to subscribed e-resources.
- The facilities are used for managing the teaching materials and for the conduct of online test. Initiatives taken by the university:
- Conduction of regular FDP
- LMS training program
- Mobile based application
- Cloud computing

- MATLAB training
- CADENCE training

4.3.9 How are the computers and their accessories maintained?

A Team of Qualified Hardware and Network Engineers are on duty from 7AM to 8 PM for resolving problems. The server room is also open on Sunday and holidays for providing help to the students living in hostels and using Wi-Fi.

- All Computers and accessories are maintained by a Preventive maintenance Schedule as per Annexure -D.

4.3.10 Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed?

Yes. University has NKN Connectivity and used in Computer Labs and Research Labs. Access to UGC Infonet e-journal consortium is availed through National Knowledge Network connectivity

4.3.11 Does the university avail the web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?

Yes. Faculty and Students are allowed to individually avail education enhancing resources through Internet. The publication ethics and anti-plagiarism are taken due consideration by the users.

4.3.12 Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university

Annual budget is allocated for purchase, updation, deployment and maintenance of Lab Equipments, plant machinery, Computers and peripherals the details of last four financial years is given as under

Year	Allocation in lab equipment, plant machinery, Computers and peripherals (in lakhs)	Actual utilization /expenditure in computers and peripherals (in lakhs)
2010-11	135.00	140.76
2011-12	50.00	56.91
2012-13	90.00	100.43
2014-15	275.00	281.97

4.3.13 What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment

The University has initiated programmes with the support of video conferencing and online teaching. The University is also planning to accommodate social friendly programmes with the participation by the students in finding out solutions for problems of their livelihood. Faculties are encouraged to upload the teaching learning related contents on public domain.

4.4 Maintenance of Campus Facilities

4.4.1 Does the university have an estate office/designated officer for overseeing the maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

Yes. The University has appointed civil and site engineer for overseeing the construction and maintenance of buildings, class-rooms and laboratories. The following specific initiatives are taken by the engineer

- Expansion of academic blocks of the existing campus.
- Construction of hostels and guest houses at various campuses.
- Regular monitoring is done for the maintenance of classrooms, laboratories, libraries, lawns, gardens, play grounds, cafeteria etc.
- Proper cleanliness is maintained throughout the campus.
- Solar lamps are used in the campus to enlighten the lawns and gardens; this motivates the student to use green energy and is a small step towards the conservation of energy.

4.4.2 How are the infrastructure facilities, services and equipment maintained? Give details.

- The administrative office of GEU is responsible for overall maintenance of infrastructure facilities, services and equipment. The common places such as Conference halls, Open auditorium, libraries, Play grounds etc are maintained under instruction designated officers of the university.
- Each department is responsible for the maintenance and upkeep of classrooms, conference halls, labs, equipment etc. through building in-charges and lab in-charges in coordination with administration department and maintenance team including civil engineers, vendors and suppliers of GEU.

- Similarly the living area like hostels, dining halls etc. are maintained by dedicated workforce. Repair is done under the supervision of respective authorities like civil engineers.
- Computer centre, equipment like aqua-guard, water-coolers etc are maintained under AMCs.

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the university has a system for student support and mentoring. University has a separate counsellors for the same. Class coordinator is the nodal officer and the Head of the Department & DSW are there to guide and assist in academic and personal problems.

5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?

From time to time various guest lectures are conducted from industry and academia. The students are sent for various industrial visits, and made to attend workshops, seminars, exhibitions, etc regularly.

The students also attend various webinars / programs delivered by Infosys, Wipro, and IITTR Chandigarh etc. A number of students have enrolled for a number of online courses offered free of cost by different Universities abroad or NPTEL project of Govt of India.

The Faculty also work as Mentors/Supervisors for Innovative Programmes/Courses, Projects and Research work. Besides, group of students in certain courses are assigned under a faculty mentor, who guides them and tracks their academic performance. Normally there is a three tier system of mentorship at department with class-coordinator, subject-faculty and HOD interacting with students and helping them depending on the nature of guidance sought.

5.1.3 Does the university have any personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.

Yes,

The University has personal enhancement and development schemes such as career counselling, soft skill programs, training & placement support to students. The University also conducts special classes for GATE, CAT, GMAT, GRE and other competitive Examinations. The Professional Communication & Personality Development Department of the university groom the students on language, soft-skills, personality development, career and life skills, etc across semesters, for career facilitation & development. Besides, guest lectures and student interactions are conducted by external faculty, recruiters, entrepreneurs, professionals and other resource persons for career identification, selection, expectation mapping, and to apprise students with industry and job-market requirements, trends, and offer necessary guidance. Healthy living and fitness, yoga and stress management sessions are also conducted across programs.

University also gives priority in admission to students' progression from undergraduate program to post graduate program.

5.1.4 Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes

The University provides assistance to students for obtaining educational loan from banks and other financial institutions. The University issues bonafide certificates, fee structure details and other necessary information for same, and also reply to the queries raised by the banks.

- PNB Branch is inside the campus.

The University has tie up with PNB, Canara Bank, SBI, IOB etc. for assisting the students in getting education loans.

5.1.5 Does the university publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?

Yes,

The University provides detailed information about infrastructure, various courses offered, career prospects, the intake, eligibility criteria, fee structure, placement details, residential and recreational facilities, and faculty details, etc in the prospectus.

The University also provides a handbook which includes rules and regulations regarding code of conduct for students and general guidelines.

The same is also publicized through university website and community radio - **Radio Zindagi – 90.8 FM.**

5.1.6 Specify the type and number of university scholarships / free ships given to the students during the last four years. Was financial aid given to them on time? Give details (in a tabular Form) for the following categories: UG / PG / M.Phil / Ph.D. / Diploma/others (please specify).

University provides scholarship on the basis of merit in every program offered by university. Scholarship distributed in last four years is mentioned below

2010-11 INR 3.60 crores

2011-12 INR 4.90 crores

2012-13 INR 5.25 crores

2013-14 INR 5.47 crores

2014-15 INR 6.15 crores

5.1.7 What percentage of students receive financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?

All SC/ST/OBC students get financial assistance from the concerned State Government through Social Welfare Department. J&K students receive financial assistance as per the provision of AICTE, Government of India

5.1.8 Does the university have an International Student Cell to attract foreign students and cater to their needs?

Yes,

The University has an International Student Cell under the guidance of Dean-International Affairs.

5.1.9 Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?

Yes, as mentioned in 5.1.4

5.1.10 what types of support services are available for

*** Overseas students**

Separate hostel accommodation, special tutorials, English language classes in some cases and food arrangements for International students.

*** Physically challenged / differently-abled students**

For physically challenged students university provides 3% reservation in each program, Lift and Ramp facility for physically challenged students is also available. Besides, accommodation to such students is given on ground floor.

*** SC/ST, OBC and economically weaker sections**

University helps SC/ST/OBC Students to get scholarship from concerned State Governments.

*** Students participating in various competitions/conferences in India and abroad**

The Students participate in various competitions, conferences in India and abroad. University promotes these kinds of activities, and grants are provided for registration and travel to such students on case to case basis.

* **Health Centre, Health Insurance etc.**

Health centre is operational 24x7 under the supervision of a resident doctor and three nursing assistants. The University has a fleet of **4 Ambulances** which are available in the campus round the clock. Various health care camps are organised by NSS wing of the University. Every student has health insurance cover. University has MOU with **St Paul Hospital and Mehant Inderesh Hospital** Dehradun for providing medical facilities to the students and staff.

Health Insurance of every student is also provided by Star Health and Insurance Pvt. Ltd.

* **Skill development (spoken English, computer literacy, etc.)**

Component of English language, Soft-skills, Career Skills and Computer skills is present in all courses/programs wherein regular classes are conducted, and the same is a part of evaluation criteria in Scheme of evaluation. Besides, special/additional classes for spoken English, French and Computers are offered apart from regular curriculum.

* **Performance enhancement for slow learners**

Extra classes are organised for weak students in the evening to minimise cases of failure and dropouts.

* **Exposure of students to other institutions of higher learning/ corporate/business houses, etc.**

The Students visit institutions of higher learning for attending workshops/conferences, making paper presentations, participating in events & competitions, etc. Students also go on Summer Internships and industrial visits to institutions and organizations like ONGC, NIC, Wadia Institute, Tata, BHEL etc to name a few.

* **Publication of student magazines**

Yes, the student magazine of Graphic Era is **Graphic Express** is published in every semester, where students showcase their articles and display their creativity and talent.

5.1.11 Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defence Services, NET/SET and any other competitive examinations? If yes, what is the outcome?

Yes

The University provides preparatory classes for GATE examination. University also facilitates students to enter the defence services under University Entry Scheme.. University also provides guidance and support for preparation for CAT/GMAT/GRE and other competitive exams for PSUs etc.

University conducts a comprehensive assessment examination AMCAT for students, at no additional cost.

5.1.12 Mention the policies of the university for enhancing student participation in sports and extracurricular activities through strategies / schemes such as

*** Additional academic support and academic flexibility in examinations**

The students are encouraged by granting attendance for participating in sports, NCC, NSS and other events, and extra classes or guidance is given by concerned faculty members to compensate for loss of classes. Besides, weightage is given to such students under General Proficiency.

*** Special dietary requirements, sports uniform and materials * any other (please specify)**

University promotes participation of students in sports and extracurricular activities in both intra or inter university competitions organised by our university and other institutions.

The University supports financially by providing Registration_fee, reimbursing travelling expenses, providing uniform and also takes care of Dietary Requirements.

5.1.13 Does the university have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare them for interview, and develop entrepreneurship skills?

The University has a Placement Cell for the students. Placement cell liaisons and invites various companies for student interactions and campus recruitments. University conducts special PDP classes to prepare students for same. Besides, the University Curriculum includes credit based courses on “career skills”.

5.1.14 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).

Companies regularly visit for the Recruitments and campus selection. The placement

activities are also assisted through Delhi Placement Cell.

Major recruiters were: Infosys, Wipro Technologies, Accenture, IBM, HCL Technologies, Aon Hewitt, Cognizant technologies, Genpact, TCS, CSC, Oracle, Syntel, Naukri.com, Ashoka Leyland, 99 acres, ITC, Axis Bank, to name a few.

S.no	Year	Total no. of companies visited	Total students placed / offers made
1	2014-15	95	924
2	2013-14	123	833
3	2012-13	71	760
4	2011-12	112	952

5.1.15 Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?

Yes

- The University has a registered Alumni Association with Delhi chapter, Pune chapter, and Bangalore chapter. Every year alumni meet is organised at various locations like **Delhi, Pune, Banglore, Bhimtal and Dehradun**.
- Alumni students are sent newsletters for updating them with the activities & developments at the university.
- Alumni are invited for Guest lecturers, feedback on existing curriculum and inputs for development of new curriculum.
- The alumni association, tries to nurture the relationship with students for mutual interests, and to utilize their expertise and knowledge and offer guest lecture, training & placement support to existing students.

5.1.16 Does the university have a student grievance Redressal cell? Give details of the nature of grievances reported. How were they redressed?

Yes

The University has an IT enabled student Grievance Redressal cell. The Grievances are registered and allotted with unique-ID. It is forwarded to concerned departments for redressal and immediate action. The Status is updated on daily basis.

5.1.17 Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing cell and mechanism to deal with issues related to sexual harassment? Give details.

Yes, A Gender Sensitization Committee is there for conducting Gender Audit and Gender Sensitization Programmes. Such programs have been done under the Banner of NSS:

- Two special committees such as Women Grievance Redressal Cell and Women Task Force are constituted in the university to take care of such activities; complaints are forwarded to the committees and action is taken after investigation of the case.
- Separate hostels, common rooms, rest rooms, toilets, computer lab in hostels, library in girl's hostel and provision store / daily needs shop in the hostel, and gymnasium.
- The Students are nominated as Gender Champions which includes representation from Boys and Girls.

5.1.18 Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?

Yes, The University institutes an Anti Ragging Committee every year. No such instance of ragging has been reported in the University during the last four years. Every senior student is asked to submit an affidavit stating non indulgence in any such activity.

5.1.19 How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?

- Regular parent teacher interaction is done for obtaining feedback and apprising the parents about their ward's performance. SMS services are also used to apprise the parents about their wards.
- Regular alumni meets are organised so that regular feedback can be taken from alumni and their suggestions are incorporated for the benefit of students.
- Industry Academia Interface is also conducted to transact with the corporate, and this sets the trigger point for improvements in the curriculum. The suggestions are incorporated in the (design and development of) curriculum, and same is forwarded for review and approval of Board of Studies.

5.1.20 How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.

- University has appointed lady sports Instructor to guide, train and encourage women students to participate in various sports competitions.
- University has a separate NCC and NSS girl's wing.
- Girl students are encouraged and also sent to participate in various activities at various levels outside the university.

- Girls are given equal opportunities to participate as Boys

5.2 Student Progression

5.2.1 What is the student strength of the university for the current academic year? Analyse the Programme-wise data and provide the trends for the last four years.

The Student strength of current Academic year (2015-2016)– **5381**

Academic Year (2014-2015)– **5187**

Academic Year (2013-2014)– **5928**

Academic Year (2012-2013)– **6709**

- There have been intermittent downturns / shortfalls in admissions in certain courses, primarily as a macro level trend, however, the admissions this year have again been on the rise.
- After July 2012, there was a downfall observed in technical education which continued till 2014 because of global recession in the field of IT and ITES. An upward trend of admission in CS and IT domain is observed in 2015 because of recovery of ITES industries in USA and Europe.

5.2.2 Student Progression

Student Progression	
UG to PG*	65
PG to M.Phil.*	NA
PG to Ph.D.	03
Ph.D. to Post-Doctoral	01
Employed	
<ul style="list-style-type: none"> • Campus selection • Other than campus recruitment 	

5.2.3 What is the programme-wise completion rate during the time span stipulated by the university?

94%

5.2.4 What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defence, Civil Services, etc.?

Year	UGC-NET	GATE	CAT	Defence	Banks	Civil Services	State Services	Central Services
2012-13	05	23	02	08	02	Nil	01	01
2013-14	04	57	03	10	01	Nil	07	05
2014-15	03	89	02	06	01	Nil	08	01
2015-16*	03	79	03	05	13	01	Nil	Nil

* till date

5.2.5 Provide category-wise details regarding the number of Ph.D./ D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years.

- **Ph.D theses Completed** – 16
- Ph.D theses submitted Viva Voce to be held in Sept 2015 – **02**
- Ph.D theses under submission and evaluation Process - **04**

5.3 Student Participation and Activities

5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the programme calendar and provide details of students' participation.

Football, Cricket, Table Tennis, Badminton, Basketball, Volley Ball, Taekwondo, Singing, Dance, Group Dance, Nukkad Natak, Skits/Plays, Kavi-Sammelan, Celebrity Nights etc.

Student Sports Calender and Participation details

S.No.	Dates	Sports Event	Student Participation
1	1 st Week August 1 st week May	Table Tennis Singles, Doubles and team events	182 Boys & 18 Girls
2	3 rd Week August 1 st week February	Badminton Singles, Doubles and team events	192 Boys & 60 Girls

3	4 th Week August	Carom & Chess Singles and team events	200 Boys & 40 Girls
4	1 st Week October 1 st Week April	Football	40 teams
5	2 nd Week October 1 st Week April	Basket Ball and Volleyball	30 Teams 8 Teams
6	1 st week November 1 st week March	Athletics Meet	600 Boys 200 Girls
7	3 rd week October 2 nd Week February	Cricket	40 teams Boys & Girls
<u>8</u>	2 nd week of April 2 nd week of October	Grafest – Managerial, Technical and Cultural events	More than 1000 boys & girls participated in different activities

- Every Semester Cultural Fest is organised as **GRAFEST**
- **Akhil Bhartiya Kavi Sammelan** is organised every year on April 15th and one legendary/outstanding poet in Hindi/Hindustani is felicitated with “**Graphic Era Kavya Gaurav Samman**” which includes a Cash Prize of INR 1 lakh. The Kavya Gaurav Samman has been conferred to poets / lyricists and personalities like *Shree Gopal Das Neeraj, Dr. Ashok Chakradhar, Shri Surendra Sharma, Dr Hari Om Panwar, Dr Shailesh Lodha, Dr Santoshanand (Geetkar), Pt. Bishweshwar Sharma, Dr Praveen Shukla, Shree Munnwar Rana, Dr Nawaj Devbandi etc.*
- **Celebrity Night** is organised every year for students, in which celebrities like *Sh. KrishnaKumar Kunnat (KK), Sh. Pankaj Udhas, Sh. Kailash Kher, Sh. Daler Mehandi, Mika Singh, Arijeet Singh, Honey Singh, Raju Srivastava, Sudesh Lehari, Suresh Albela, etc* have performed at the University.

5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years.

The achievements of students are immense, and only few selected achievements are listed below.

Event	Team/ Individual	University	State	Zonal	National	International
Solo Dance 2012, 2013, 2014, 2015	Lokendra Pal D K Joshi	1 st prize Accolade Pantnagar Univ 1 st prize	1 st prize	1 st prize	Runner-up India Got Talent at Colors TV Channel 2015 3rd Round Chak dhoom dhoom TV Show2015	NIL
Group Dance 2012, 2013, 2014, 2015	Zeal Group and Rhythm Slaves	1st prize In DoonUniv, COER, UPES GBPU, PantNagar,	1 st prize In ZION 11	1 st prize At Urjaa, Rhaps ody, Amity Univ.	1 st prize at THOMSO IIT Rorkee	Nil
Solo Singing	Amit Raturi	2 nd Youth Fest DOON University	2 nd Youth Fest DOON Univer sity	2 nd Youth Fest DOON Univer sity		
Photography	Bhavesh Pandey	2 nd Youth Fest DOON University	2 nd Youth Fest DOON Univer sity	2 nd Youth Fest DOON Univer sity		
Mimicry	Shivam Sharma	2 nd Youth Fest DOON University	2 nd Youth Fest DOON Univer sity	2 nd Youth Fest DOON Univer sity		

			ity	sity		
Non Percussior	Bhanu Pratap Vaibhav Rawat	2 nd Youth Fest DOON University	2 nd Youth Fest DOON Univers ity	2 nd Youth Fest DOON Univer sity		
Group Song	Deepti Semwal & group	2 nd Youth Fest DOON University	2 nd Youth Fest DOON Univers ity	2 nd Youth Fest DOON Univer sity		
Graphic Era Cultural Team		Overall Winners – Uttarakhand Technical University <u>2011</u>				
Graphic Era cultural team		Overall Winners - Rajiv Gandhi Inter University Youth Festival at Doon University <u>2012</u>				
Modelling	Aprajita Verma	t	Miss Uttarak hand 2013	Miss North India 2015		

5.3.3 Does the university conduct special drives / campaigns for students to promote heritage consciousness?

Yes,

- The University conducts ‘**Akhil Bhartiya Kavi Sammelan**’ every year to promote **Hindi** and poetic sense among the students. Indian culture is promoted in University Campus through Cultural events like classical dance, classical singing, etc and Regional (Garhwali and Kumaoini) culture is promoted by inviting famous local Singers like **Sh. Narendra Singh Negi, Ms. Sangeeta Dhaundiya, Sh. Hira Singh Rana (Kumaoni folk), Sh. Pritam Bhartwan (Kumaoni Religious folklore – JAGAR), etc.**

- Cultural Programmes through **SPIC MACAY** are regularly organised in the University Campus to promote Indian cultural heritage.
- University also organizes Ramleela, every year, where staff and students participate. This is to promote values and Indian culture.

5.3.4 How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the last four academic sessions.

University encourages students to publish college magazine – ‘Graphic Express’ and Research papers in Indexed Journals. University has different literary clubs, where student committees are working under supervision of teachers for such activities. Students work on wall magazines during conduct of various events like GRAFEST. University also provides financial assistance and support in the form reimbursement of printing charges and other expenses.

5.3.5 Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.

Yes

- There is a Student Achievers Council comprising of three academic toppers from each course and recommendations of the committee are given due consideration by the Management.
- Also three are class representatives who take feedback from the students about their grievances and remedial measures are taken by the management.

5.3.6 Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.

Yes,

The students are representing in departmental advisory committee, where they give their suggestion for academic and non academic activities.

Besides, there is a CR Council (Class Representatives Council) that comprises of CRs from different classes across programs, and periodic meetings are conducted.

A student initiative – IYSERT is another active student body engaged in small projects and activities on the campus related to environment, cleanliness and waste-management.

There is student representation in various other bodies under Student extension program, like: NCC, NSS

CRITERIA-VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 *State the vision and the mission of the university.*

Vision and Mission statements of Graphic Era University:

Vision:

The University visualizes itself as an internationally recognized, enquiry-driven, ethically engaged diverse community, whose members work collaboratively, for positive transformation in the world, through courageous leadership, in teaching, research, and social action.

Mission:

The mission of the University is to promote learning in the true spirit. The University offers the knowledge and skills needed to succeed as professionals, and the values and sensitivity needed to become responsible citizens of the world. The University will distinguish itself as a diverse, socially responsible learning community of high quality scholarship and academic rigor sustained by an effort that does justice.

6.1.2 **Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?**

Yes.

6.1.3 **How is the leadership involved in ensuring the organization's management system development, implementation and continuous improvement?**

Management is actively involved in developing Quality Systems and programmes. Specific emphasis is laid in the areas of Curriculum design, Academic Delivery, Process Monitoring, Student Discipline, improvement initiatives and Research & Development. Senior academic heads / faculty members provide full support to the management in implementing the policy decision made by the management. The university has a well defined Organizational structure to ensure management system development, administration/implementation and continuous improvement. All the academic and administrative heads have their defined roles and parameters for ensuring quality delivery in terms of academic and non-academic performance.

In interacting with its stakeholders?

- Members of Statutory Bodies, – suggestions and decisions made by these bodies are implemented from time to time.
- Students – provides feedback on academic processes and facilities. The views expressed by the students are given due consideration for improvement.
- Parents – are invited by the management on regular basis and suggestions made by them are also given due consideration.
- Faculty – meetings are conducted with faculty members and valuable suggestions are received on continuous basis and improvement measures are taken.
- Alumni – Alumni meets are conducted on regular basis by different chapters of Alumni Association, in the country and the valuable suggestions are considered for reviewing & modifying / re-formulating existing policies.
- Industry feedback – The experts from industry are invited from time to time. They interact with students and also guide them for their placement and career advancement.
- Research & Development experts – Renowned experts from industry are invited to conduct seminars / workshops for the benefit of students and their valuable feedback is given due consideration.

In reinforcing a culture of excellence?

The University believes in trust, transparency and ethical operations. The core values which university believes are

- Respect
- Innovation
- Performance orientation
- Excellence
- Team building
- Continuous learning & Improvement

In identifying organizational needs and striving to fulfill them?

The internal governance system consists of the audit of academic and non-academics parameters through Internal or External experts/panels, ensuring the path to excellence, and meeting statutory compliances. Besides, other factors covered include taking care of risk management, rationalizing operational cost, imparting quality education to the students and reinforcing performance oriented work culture among staff and faculty.

6.1.4 Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.

No.

6.1.5 Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?

Yes, the university ensures that all positions in its various statutory bodies are filled and meetings are conducted regularly. The minutes of meetings are provided to all the statutory body members for their information and comments.

6.1.6 Does the university promote a culture of participative management? If yes, indicate the levels of participative management.

Yes, the university has a well defined and integrated governance structure. The different statutory bodies/authorities frame the policies which are implemented as per regulations of the university.

Board of Management: The Board of Management is the highest governing body in the university enabling it to promptly take and implement strategic level decisions.

Planning and Monitoring Board: The Planning and Monitoring Board is the principal planning body of the university. It is responsible for the monitoring of the development programme and providing relevant advice.

Academic Council: The Academic Council is the principal academic body of the university which has control over academic affairs, it is responsible for the maintenance of standards of teaching/training, research, approval of ordinances, curriculum, evaluation criteria, examinations and other academic functions.

Finance Committee: Finance Committee considers the annual accounts and financial estimates of the university, annual budget and revised estimates, fixes the limits of total recurring and non-recurring expenditure and submits the same to Board of Management for final approval.

6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to them to become autonomous.

Not Applicable

6.1.8 Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?

Not Applicable

6.1.9 How does the university groom leadership at various levels? Give details.

The performance of faculty and staff member at entry and junior level is continually monitored and identified for promotion to middle level and middle level to senior level in the organization. The University arranges for in-house and outbound training for such identified members. The training programmes include capacity building, skill enhancement and academic & research orientation programme. These training programmes enhance the overall competency and academic delivery capabilities. Such groomed personnels are included in the appraisal and promotion scheme of the University. The top management convenes meeting of higher authorities to provide directions for compliance.

6.1.10 Has the university evolved a knowledge management strategy? If yes, give details.

Yes, the University has evolved a sound knowledge management strategy. The following are main focus areas: -

- Developing a collaborative culture for knowledge sharing and collective project based work.
- Enrichment of existing knowledge through discussion and communities methods.
- Fostering participation of members through academics and research, and integration of different programmes.
- Development of interdisciplinary programmes.

6.1.11 How is the following values reflected in the functioning of the university?

1. Contributing to national development

The University contributes to the National Development in following ways:

- Educating and empowering youth to become sensible and socially responsible citizen.
- Generation of trained and skilled manpower equipped with high end technical skills and expertise for this ecologically fragile hilly area.
- Innovations in Research and development and linking the research with social concerns.
- Developing academic programs catering to emerging areas such as cloud computing, big data analytics , bio-informatics and drug designing etc.

- Entrepreneurship development and sensitization for enterprise establishment
- Patents & Copyrights
- Continual Education / Training and Development
- Research Projects, Consultancy and training for industry and production houses.

Social Responsibility: The University has involved the students and the employees in various voluntary programmes as under.

- NCC – The university has separate boy and girl wings for NCC, who are trained by the senior instructors from Indian Army. The NCC cadets have provided help in maintaining discipline and in carrying out relief operations in disaster hit Kedarnath and Uttarkashi regions during Uttarakhand Catastrophe.
- NSS – the volunteers of NSS have organized workshops & campaigns to spread awareness regarding social and environmental concerns..
- Blood donation camps – The University regularly organizes blood donation camps and has received first prize thrice along with a cash prize of Rs. One Lac by Uttarakhand State Aids Control Society (USACS), Government of Uttarakhand. The University has the credit of making highest donations in Uttarakhand from 2008-till date.
- Cleanliness drives organized by university students
- Polio eradication awareness campaign and sensitization
- Financial support to the students belonging to weaker sections of society
- Adoption of village in Central Garhwal Himalaya for IT education and e-enability
- Free education to the dependents of martyrs and war widows.

Fostering global competencies among students:

The academic programs offered at the university meets international levels and thus the teaching and learning processes adopted at the university are at par. The students are trained to meet global competition in academics and job market. The students of the university participate in various global level programmes and competitions. A few of university students have won international awards and recognitions.

The following are other aspects where the global competencies are being developed among students.

- Personality Development initiatives and soft skill improvement. The students are also trained for GRE, GMAT, TOEFL.
- International visits and International/Global Immersion Programs and student exchange program with foreign universities.
- Industry training and guest lectures by international experts (distinguished Professor Series) International internships and students exchange
- Providing cross culture training in Global Village through AIESEC

Inculcating a sound value system among students promoting use of technology

The university curriculum includes academic course on Ethics and human values. Also the University conducts a number of sensitization and awareness programmes on Drug Abuse, Traffic Rules / Road Safety, etc. Besides, Personality Enhancement, Career & Life Skills, Health and Hygiene, Gender Sensitization, and other such programmes are conducted to sensitize students & inculcate a sound value system among them. Besides, a component of General proficiency is included in curriculum to foster discipline among students. Thus the university emphasize on ethics and human values.

Quest for excellence

The students are encouraged to set new benchmarks in what they do. A culture of participation in national and international level events is fostered among the students which develops the quest for excellence in them. Also the university adopts internationally accepted best teaching learning practices that infuses the excellence environment in the campus.

6.2 Strategy Development and Deployment

6.2.1 Does the university have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?

Yes, the following aspects are considered in the development of policies and strategies.

▪ Vision and Mission

Vision and Mission as stated under 6.1.1. To pursue high standards in teaching, research, consultancy, continuing education and to continuously improve our processes through self-evaluation by the participative efforts of management, faculty, staff, students and parents.

▪ Teaching and Learning

The university aims at Collaborating & Benchmarking with international universities for achieving academic excellence. It regularly updates the curriculum as per need of the market and industries. The university provides world class physical and intellectual capital to meet the academic delivery requirements, training for skill development and employability. A very conducive living and learning environment is created for students and researchers.

▪ **Research and development**

Innovative research projects sponsored by various government bodies like DST, UCOST, FICCI, BARC, USAC, USERC, DEAI, DRDO are being carried out in the university. The university also promotes innovative research leading to new product development and filing of Patents.

▪ **Community Engagement**

The university organizes community and social engagement programs like cleanliness campaigns, community services through NSS, training of rural poor and unemployed to enhance their employability, awareness campaigns on subjects like drug abuse, alcoholism, female foeticide etc. Also the university provides reservation for students in admission process as per University Admission policy and Uttarakhand State reservation policy for Gen/SC/ST,OBC categories and for Women/PH/AF/FF sub categories, and reservation for KM as well.

▪ **Human Resource planning and development**

- Maintaining proper faculty-student ratio across all courses and sufficient non-teaching staff to stress on capacity building & capability development.
- Maintaining performance oriented culture. Targeting more international faculty members.
- Offering various facilities to the employees. Providing required training to the employees as per their job requirement
- Obtaining proper feedback from students regarding faculty & delivery, to take corrective / remedial measures.

▪ **Industry Interaction**

It is a continuous and regular feature. The university has training and placement department to take care of training for industry, industrial visit, guest lectures & interaction of industry experts with students.

- **Internationalization**

Tie-ups with a number of International Universities institutions of repute has been a regular picture in university. Inclusion of international students to add diversity to the existing pool of students.

6.2.2 Describe the university's internal organizational structure and decision making processes and their effectiveness.

The university internal organization structure is as under

- Board of Management is the chief advisory and policy making body of the university which has overall executive authority including academic and non-academic activities.
- The directives of the Board of Management are implemented by all other concerning bodies like Planning and Monitoring Board, Academic Council, Finance Committee, etc.
- The decision making process includes directives of the higher bodies, execution by the concerned authority including decentralization of powers. The decision is implemented at the level of defined authority and it has its effectiveness.

6.2.3 Does the university have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

Quality assurance at all levels is plasticized in the university. Quality traditions for academics (both teaching and research) are derived from global best practices. Quality policies for administration / support are derived with the help of consultants, experts from industry, and administrators from other Institutions like the IITs. Administration related policies are reviewed regularly for updating. The University has a quality policy that it adopts and it also has the quality objectives to provide global education to its students and managers. We are an ISO Certified institution, and the performance audit is conducted by ISO annually.

6.2.4 Does the university encourage its academic departments to function independently and autonomously and how does it ensure accountability?

Yes, the University has its academic departments to function independently and autonomously as per rules, with the main emphasis on improving teaching learning process.

6.2.5 During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?

Yes, there is one case of Mr. Viplav Sharma v/s Government of India pending in the Hon. Supreme Court of India. However, there is no instance of any direct court case filed by or against the University.

6.2.5 How does the university ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?

Yes, the university has a grievance redressal cell for attending the grievances of students from time to time. There are following Committees to deal with the grievances of employees.

- ❖ Grievance Redressal Committee (General)
- ❖ Women Grievance Task Force
- ❖ Women's Grievance Redressal Committee

The university takes appropriate corrective measures to handle & redress all the grievances. The complaints are received by the chairperson/convener of the committee and a proper inquiry is conducted before final recommendation and then remedial measures are taken by the administration.

6.2.6 Does the university have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?

Yes, the university has a mechanism for analyzing student feedback on institutional performance. On the basis of the feedback obtained from the student alumni on the prescribed format. University takes the appropriate and corrective and preventive actions.

6.2.7 Does the university conduct performance audit of the various departments?

Yes, Performance Audit of various departments is conducted by the university from time to time. External audit is conducted by ISO on annual basis. The inputs and advice given by auditors is utilized for taking suitable/appropriate actions in the programme.

6.2.8 What mechanisms have been evolved by the university to identify the developmental needs of its affiliated institutions?

N/A.

6.2.9 Does the university have a vibrant College Development Council (CDC) / Board of College and University Development (BCUD)? If yes, detail its

structure, functions and achievements.

N/A

6.3 Faculty Empowerment Strategies

6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff?

The university encourages/facilitates the faculty members and non-teaching staff for their professional development as under:-

- The faculty members are permitted to attend Faculty Development Programmes, seminars, conferences.
- The employees are provided opportunity to enhance their academic qualification including M.Tech.and Ph.D. programmes.
- The faculty members are encouraged for research and development activities. Faculty members are felicitated for their research work. They are provided all help for undertaking projects and for publications of research papers, books and journals.
- The faculty members are encouraged by providing them financial assistance and leaves for attending Quality Improvement Programs, as sponsored candidates.
- Non-teaching staffs are also given opportunity for professional development.

6.3.2 What is the outcome of the review of various appraisal methods used by the university? List the important decisions.

The University identifies the need for objective appraisal system and recognizes all efforts put in by the faculty in different areas. To meet this, the university introduced an appraisal system for evaluating the faculty performance in three major areas- (1) Teaching, Learning and Evaluation Related Activities (2) Co-curricular and Extra-curricular activities (3) Research.

Self appraisal report is obtained from the faculty members and incentives / increments are given after review of the same by competent authority. Similarly, appraisal is done for technical and non-teaching staff.

As a result the faculty is encouraged to work in all important and necessary areas. Besides, the faculty members with good track-record, rich experience, domain expertise, high qualification, research exposure and national / international repute have been identified and selected for contributing in different areas/fields.

6.3.3 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details

The following are the welfare schemes available for teaching and non-teaching staff of the university: -

Scheme – Beneficiaries:

- EPF – approx 50%
- Loan and advance facility to employees – approx 10%
- Residential / Accommodation facility – approx 10%
- Clinical / dispensary facility – 100 percent
- Medical leave, compensatory leave, maternity leave, paternity leave, marriage leave, study leave – 100 percent as per eligibility criteria.
- Financial support for research activities and acquiring higher qualification – 100 percent as per eligibility criteria.
- Fee concession to the wards of the employees.
- Insurance facility to the employees.

6.3.4 What are the measures taken by the University for attracting and retaining eminent faculty?

The following measures are being taken by the university to retain eminent faculty.

- Excellent Salary
- Accommodation
- Motivating work environment
- Out of turn promotions
- Research grants and awards
- Financial support for attending seminars, workshops etc.
- Financial support for research publications

6.3.5 Has the university conducted a gender audit during the last four years? If yes, mention a few salient findings.

Yes, As per gender audit, the main findings are as under:- The university

encourages female candidates in recruitment and admissions. Efforts are being made to maintain 30% female staff in all the departments.

6.3.6 Does the university conduct any gender sensitization programmes for the faculty?

Yes, Gender Champions are being appointed among the students as per guidelines of UGC. Gender sensitization and awareness programmes are conducted on regular basis. Workshops are also organized from time to time.

6.3.7 What is the impact of the University's Academic Staff College Programmes in enhancing the competencies of the university faculty?

The university does not have any academic staff college. However, full time faculty members are sponsored to present papers and attend conferences/workshops. They are also nominated for Faculty Development Programs. The faculty members are permitted to attend refresher and orientation courses as approved by the UGC from other institutions. As a result, the University faculty has gained a lot of industry and international exposure and expertise in domain specific areas. Such exposure keeps faculty members abreast with the latest advances in technology/subject, and enables them to exchange knowledge with their peers and learn mutually from each other.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?

There is a Finance & Accounts department in the university headed by Finance Officer. It prepares the annual budget after getting demand from various departments and its scrutiny. The budget is recommended by the finance committee and approval by the board of management is sought before implementation.

6.4.2 Does the university have a mechanism for internal and external audit? Give details.

The Finance Officer conducts internal audit and the Chartered Accountant performs external audits.

6.4.3 Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?

Yes, the institution's accounts are audited regularly. There have been no major audit objections.

6.4.4 Provide the audited income and expenditure statement of academic and administrative activities of the last four years.

The audited income and expenditure statements of the last four years are attached.

6.4.5 Is there any provision for the university to create a corpus fund? If yes, give details.

Yes, the university has a corpus fund of Rs.5 Crores (FDR Number-BTE004847, Dated-08/02/2008) which was deposited in 2008 for establishment of Graphic Era Deemed University.

6.4.6 Narrate the efforts taken by the University for Resource Mobilization.

The University is making continuous efforts to raise funds/resources through funded/sponsored research & consultancy projects from government organizations such as DRDO, DOS, BARC, AICTE, DST, UCOST, USAC, USERC etc, and private organizations and businesses.

6.5 Internal Quality Assurance System

6.5.1 Does the university conduct an academic audit of its departments? If yes, give details.

Yes, the academic audit is conducted by ISO annually. No major or minor NCs have been reported so far.

6.5.2 Based on the recommendations of the academic audit, what specific measures have been taken by the university to improve teaching, learning and evaluation?

On the basis of the recommendations by the expert panel, the following changes have been introduced by the University: -

- Interactive teaching learning process.
- Streamlining the examination pattern including Continual Assessment and standardizing the same..
- Introduction of Career Skills in every program.
- Introduction of General Proficiency component for encouraging student participation and strengthening the discipline.
- Improvements in the students feedback system
- Preparation of Periodic course completion report
- Framing the time table on the basis of Credits

- Conduct of Examinations after completion of requisite no of working days and the classes/ lab conducted on the basis of credits.
- Introduction of plagiarism software to check the authenticity of dissertation and project reports
- Live projects for the students

6.5.3 Is there a central body within the university to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

No. However, Academic Advisory Committee, consisting of all Deans of Schools, takes care of teaching learning process, review of structure, methodology operations etc. This committee looks after the following:

- Ensuring compliance to Academic Policy& Standards , and developing Standard Operating Procedures.
- Coordinate periodic academic programme review and work towards the development of curriculum and improvement in instruction design & methodology.
- Identifying gaps, doing training need analysis, managing process of capability development and developing specific training and intervention plans.
- Identifying the individual programme requirements, setting/establishing programme goals/objectives, aligning delivery process with educational outcomes of courses & programmes.
- Suggestions received from the various Bodies are passed on to respective departments so that the same is incorporated during course design & development, and approved in the BOS.

6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?

The IQAC at University has been constituted as per the guidelines prescribed by NAAC. The university IQAC comprise of the Vice-Chancellor as Chairman and other members as prescribed in the guidelines.

This committee is contributing significantly in institutionalizing and strengthening quality assurance strategies and processes.

6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the University for Implementation?

The first recommendations of IQAC consisting of few decisions were presented in the last meeting of academic council for consideration. The suggestive measures will be implemented subsequently.

6.5.6 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.

Vice- Chancellor of Graphic Era Hill University is the external expert member of IQAC. His expert suggestions are being followed.

6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?

Not yet

6.5.8 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centers etc.?

A yearly feedback is taken on all administrative functions of various departments across the University which are reported to the authorities along with suggested measures for improvement. If needed, external experts are also invited to review and advise the management.

Criteria VII Innovation and Best Practices

7.1 Environment Consciousness

7.1.1 Does the Institute conduct a Green Audit of its campus?

The process for Green Audit has been initiated by the University. A lot of practices are in place to make the campus environment friendly.

7.1.2 What are the initiatives taken by the University to make the campus eco-friendly?

- **Energy Conservation:** The University is committed towards energy conservation. It has therefore taken a number of measures which help conserve energy.
 - **Minimising congestion, fuel consumption, burden on personal transport:** The University has 32 buses with pick up and drop facility for all the students so that use of personal vehicles is minimized.
 - **Use of CFL:** Admin blocks, lecture rooms and hostels are lit up with CFLs.
- **Lecture rooms with good ventilation and natural light:**

There is adequate cross ventilation and permeation of natural light, which helps lower the use of electricity.
- **Use of Renewable Energy:**

The University has installed solar energy through university funded project of Rs 55 lacs. 50 solar panel units (700 watts capacity) in the campus that generate electricity for street lights. University hostels and faculty residences have been provided with solar water heaters (9 units, 49,000 ltr. capacity) for provision of hot water.
- **Water harvesting:**

The University has plans to construct rain water harvesting structures in the campus for using the rain water in washrooms and for other purposes.
- **Check Dam construction**

The University has in place a drainage system in the campus. It receives fair volume of water during rainy season. Now it is planned to provide small check dams across this drainage passage for use of stored water in washrooms and for horticultural purpose.

- **Efforts for Carbon neutrality**

Measures are in place to reduce carbon emission and keep the campus pollution free. Circulars are sent through email for minimizing the use of paper and the University is moving gradually towards paperless system. Fleet of university buses help minimize the use of individual vehicles and thereby help in reducing pollution through emissions. Parking facility is provided in the designated areas, near the entrances, so that vehicles do not ply through the campus.

Planting of trees and shrubs along with well maintained lawns and gardens also contribute towards carbon neutrality. Guest lecturers for sensitizing students and spreading awareness about energy conservation & environment protection, are conducted from time to time. Besides, Greenathons and Cycle marathons have also been organized in the past. Solar lights and solar water heaters contribute towards carbon neutrality. Open fire and burning of paper and garden waste is prohibited in the campus. The biological (garden) waste is collected and converted into useful bio-fertilizer through the Vermicomposting unit. The campus is a tobacco free campus, and tobacco items are neither sold nor allowed in the entire campus.

- **Plantations**

The green ambience of the university campus is largely due to regular & massive plantation drives. There are about 25 different types of trees in the campus. The University has plenty of green spaces. This not only enhances the beauty & ambience of the campus, but it also helps reduce pollution, making its environment more conducive. Besides, NSS volunteers of the University regularly carry-out tree plantations in and around the campus.

- **Hazardous waste management**

University does not generate any major hazardous waste form. However, wastes such as chemicals, biological cultures, etc. coming out of the laboratories are collected and disposed as per guidelines of CPCB.

- **E-Waste management**

MOU is being signed to recycle E-waste generated in the campus through E-contractors. We are in the process of donating used computers to nearby schools.

- **Any other (Please specify)**

University campus is polythene and smoke-free and dustbins are placed in all buildings and pathways for collection of solid waste. Proper collection and

transportation arrangements are in place for safe disposal of solid waste. University has set up a Vermi-composting unit on campus. All degradable solid waste (paper, horticultural and kitchen waste from hostels, etc.) is taken to Vermi-composting unit for producing bio-fertilizer which is then used in the university gardens across campus. This ensures recycling of solid waste by converting it to useful biofertilizer. Currently, approx. 250 tonnes of bio-fertilizer is produced annually through the composting unit. Arrangement is being made for paper waste to be recycled and utilized for making products. Along with this bio-pesticide production using animal urine, onion and garlic leaves is also in practice in the University dairy premises. This bio-pesticide is applied for treatment of campus lawns and gardens. The department of Environmental Science has received a grant of Rs. 14.56 Lakhs from DBT for dairy waste water purification and reuse, using Constructed Wetland Technology.

The University is making efforts to spread environmental awareness and promote environmental research among students. “Eco-clubs” are run by students and are constantly motivated by the management and staff to implement research ideas for developing working prototype models in the area of Environment science. The University supports such clubs by providing financial and technical help through the “International Youth Society of Eco-friendly & Renewable Technology” (IYSERT) group, founded by a University student. Students have participated in various international youth conferences, festivals and have received financial grant of Rs. 23.89 lacs for a project entitled “Social and quality improvement in India” at “Rhodes Youth Forum” held in Greece, in 2012. Presently, IYSERT is working on eco-friendly projects such as Eco-battery, Eco-candles, LED lamps, hanging gardens made from used bottles, solar wind mobile charger and generation of electricity using gym machines.

The University celebrates World Environment day (5th June), World Biodiversity day (22nd May), Himalayan day (9th September) and Earth day (22nd April), etc. every year and special tree plantation activity is conducted by the NSS volunteers, students and staff members on these occasions.

7.2. Innovations introduced during the last four years which have created a positive impact on the functioning of the university.

The University has been a pioneer in offering professional and job oriented courses in this region of the country.

The University has adopted many innovative practices, following accreditation in 2008, to promote quality technical education. Internal Quality Assurance Cell has been activated on the pattern recommended by the UGC.

In the spirit of continuous improvement, the University has been relentlessly focusing on developing state-of-the-art infrastructure facilities, bringing innovations in teaching & learning practices, using latest IT enabled services, etc. Some of the innovative practices being followed are listed below:

- **Innovation for quality assurance in academic system and delivery:** Graphic Era University has developed innovative practices and various mechanisms for ensuring the quality in academic and administrative systems and processes. The University has state-of-the-art infrastructure, along with latest technology enabled digital classrooms with interactive whiteboards / smartboards. Besides, remote lecturing facility through video conferencing using digital pads is also available. Besides, we have subscription to the Amazon's Digital library kiosk, where students can have access to large number of books on kindle, free of cost.
- **Innovative teaching and learning practices:** In addition to the use of technology, the faculty members use the inverted classroom approach to affect better / enhanced learning among students. Content management systems and Learning management systems are also used by faculty members across departments. Certain faculty members have their independent course websites and use OERs for delivery of their subjects. Experiential & blended learning techniques are also used to facilitate practical learning and application among students.
- **Induction of quality faculty:** To maintain the quality of academic delivery, research and latest innovative practices, well qualified and experienced faculty with understanding of latest technologies and practices is preferred during hiring. The HR department assigns scores for assessment of various parameters like domain knowledge, research & consultancy experience, achievements, etc while screening the applications for faculty positions. Besides, marks scored at different levels, Ph.D, GATE/NET, Publications, Conferences and experience, etc are given due importance. As a result a number of faculties are with PhD degree from IITs, NITs and other renowned national and foreign universities, and are fostering the culture for research and innovation at the University.
- **Periodic Revision of curriculum:** The University modifies the existing courses, and new courses are introduced in tune with the changing demand of

the market, industry and societal needs & trends. Periodic Industry Academia Interface is conducted to understand industry expectations, and the recommendations are escalated in the BOS. Besides, we follow industry endorsed curriculum prescribed by companies like Infosys, Wipro etc. Innovative programs like Cloud Computing, Big Data Analytics have been introduced. The curriculum is revised periodically through departmental Board of Studies and subsequently approved by Academic Council. The University has put in efforts to restructure all postgraduate programmes to make them more specialized, relevant and job oriented.

- **Constant Up gradation of skills of faculty members:** A number of faculty members have been sponsored under QIP program for taking up M.Tech and PhD at various institutes (IIT's and NIT's). Various departments also run FDP's from time to time. University also encourages its students and faculty members to participate in conferences, development programmes.
- **Scholarships for students:** University offers various scholarships to its meritorious students to encourage them to study & consistently perform. The University believes in motivational measures like this to foster the feeling of passion and hard-work among students.
- **Student Welfare Fund.** As a benevolent step, under this scheme, University offers financial support to needy students; besides, full tuition fee waiver is provided in case of demise of student or earning parent/family member. Besides, funding for innovative projects and research is given to students to encourage creativity and research.
- **Information and Communication Technology (ICT) facilities:** Administrative offices, all Departments, research laboratories and individual faculty members have access to internet facilities. Most letters, notices, circulars and orders are sent through the mail; hard copies are kept to a minimum. In addition, researcher's carryout survey of literature, communication with scientific community and the publication of research work using electronic medium. The provision of internet facility and mailing of notices and circulars through e-mail has significantly cut down the use of paper in offices and laboratories. The University Web Centre also supports this purpose. Seminar halls are equipped with LCD projectors and other audio visual aids for proper conduct of conferences and talks. Most lecture theatres are also equipped with audio and visual aids. The University curricula include regular seminars by students, wherein the students prepare and deliver PowerPoint presentations. University is the only **nodal centre of NITTTR Chandigarh** in northern India for its ICT programmes.

- **Modern Library:** The University library, named after a well-known Hindi poet ShriSantoshananad, is well stocked with around 5300 titles, 72000 volumes of books, a book bank, National Journal and International online Journals as IEEE, ACM, ASME, ASCE, IEEE Proceedings, McGraw Hille-books. Library is computerized with its OPAC system, bar-coding, identity cards, etc, and uses **Libsuite** software. There is a separate block in the Library for the staff and students to access internet. Library is also equipped with e-books, e-journals, e-newspapers, other e-learning resources, computing facility, software's and other equipments. Segregated sections exist in library for various courses.
- **Innovation to strengthen the university research base:** University has a separate section“Research and Consultancy Board (RCB)”,to boost research and infrastructure development in thrust areas.
- **Innovations that have made impact on student life in the University**

All the students have been provided campus wide **Wi-Fi** service to enable them to remain connected & updated with the best and latest, and avail benefit of e-learning resources provided on the inter-intranet.

University offers '**Study Abroad Programme**' that enables students to experience the international study culture under a different educational system abroad. However, the University makes sure that their students are safe and comfortable. Graphic Era University students have undertaken internships in Mauritius, Turkey, Morocco through AIESEC, an International Student's Organization.

Examination System/Evaluation and Flexibility. The University has implemented computerized answer script recognition system. All the answer scripts bear a barcode. OCR is used to read the barcode and particulars of students so as to ensure full confidentiality and speed up the work. In-built flexibility in our academic system gives opportunity to students to improve performance through make-up exams. They can also avail the opportunity of appearing in back-paper exam if they are unable to clear any course due to unavoidable circumstances.

Hostel facilities for Students. Separate hostels are provided for girls and boys both inside campus and nearby. Students are provided with adequate facilities to make them feel at home; environment in hostels enables them to imbibe a different & quality lifestyle, and get involved in various activities like Yoga, Meditation, Sports, Music, etc., suiting individual taste and preference. The hostels can comfortably accommodate approx.1500 students.

University hostels are stand-alone in terms of following integrated in-house facilities and conveniences:

- Hostels are located amid Green & Refreshing surroundings.
- A separate computer center is established in the Girls Hostel to facilitate late hour working.
- First aid facilities and visit of doctors on call.
- Well furnished rooms, well connected with internet and telephone.
- 24 hour security with armed guards during the night.
- Provision of Physical Training Exercises, Gym facility and Yoga in the morning.
- Well-equipped mess which provides nourishing and tasteful food hygienically prepared.
- **Cafeteria** There are many refreshment corners in the campus for students offering snacks and refreshments. In addition, the University cafeteria offers vegetarian meals, refreshments and snacks. University also houses an AC restaurant offering multi cuisines.
- **Guest House:** A guest house comprising of 12 AC and Non-AC rooms is available within the campus for guardians on availability basis and on payment of nominal charges.
- **Transport:** University maintains a fleet of 32 buses. University offers pickup and drop facilities to all students across the city at the minimal charges of Rs 142 per month, per student.
- **Sports:** Facilities for both outdoor and indoor sports exist, cricket, football, volley ball, and throw ball, basketball, badminton, table tennis and athletics. The University has separate high tech gym for boys and girls. The University team has participated and won several state level and inter collegiate tournaments.
- **Computerized attendance system (SIM):** Attendance of students is duly recorded and maintained by faculty in SIM; Cases of students with attendance below 70% are regularly reported to their parents/guardians.
- **Alumni Cell/ Alumni chapters:** The alumni association at the University keeps in regular contact with its alumni through various programme (reunions, events, workshops, meetings, publications, correspondence and through various online networking sites). This enables individuals to remain in touch through the University alumni portal.
- 24X7 dispensary supported with 4 ambulances is available in campus.

- **Industrial Linkages:** Students get ample opportunities to interact with Guest speakers from industry and institutions such as IIT, NIT during participation in open interactive sessions with the experts. Various workshops, conferences, seminars, webinars, etc., are conducted to help students enrich their knowledge / learning. University has academic alliances and partnerships with best of the industries like Oracle, Microsoft through MSDN, EMC, IBM and Novell, etc. There are also other specific tie-ups adding to the industry preparedness of CS and IT students, such as the credited elective HSFP (Head Start Foundation Program) with direct support from Accenture and another credited elective BI (Business Intelligence) with direct support from Infosys.
- **Clubs:** The University also offers a wide range of facilities for co-curricular and extracurricular activities. These facilities provide platforms for peer group interaction through various clubs such as Automobile Club, Software Club, Speaker’s Club, Eco Club, Quiz Club, Scrabble Club, Dance Club, Photography Club, Music Club, Mountaineering And Trekking Club, Wildlife Club, Web Designing Club, the University Film Society, and the Philately Club, etc.
- **National Service Scheme (NSS)** The NSS Unit of the University organizes regular and special events & camps related to plantation, environment awareness, cleanliness (swachhataabhiyans), blood donation & literacy. We have been the highest blood donor’s over the years. In addition, students, staff, faculties, volunteers are involved in various youth-related seminars, workshops and training programmes. NSS Unit also deputed volunteers to various Inter State Camps, National Integration Camps, etc. It is worth noting that the University students and faculties were the first ones to reach and provide relief during Kedarnath tragedy. Till date a total of 271 B and 137 C certificates have been awarded to NSS cadets of this University.
- **NCC:** The establishment of National Cadet Corps (NCC) in 2011 has helped in moulding and shaping students into cadets and later on into Gentlemen Cadets. The motto of NCC being “Unity and Discipline” is very well inculcated in cadets’ life. It is a part of 29UK BN Dehradun and comes under Uttarakhand Directorate. A cadet has to undergo training for a period of 3 years to pass out from NCC. They are trained mentally and physically for selfless service to the nation. The cadets take part in the parade on 26th January and 15th August in the University. NCC cadets attend camps like Combined Annual Training Camp (CATC), Sports Camp, National Integration Camp (NIC) and Mountaineering Camp. Last year our cadets won the National Integration Camp which was held in Guntur, Andhra Pradesh where they represented Uttarakhand Directorate. Our cadets have also

been selected for the University Entry Scheme (UES) into Indian Army. The cadets also excel in academics. Till date 105 and 74 C certificates have been awarded to girls and boys cadets, respectively. Similarly till date 179 and 114 B certificates have been awarded to girls and boys cadets , respectively

- **Proctorial Board:** Rules and regulations are framed by the University to foster cordial atmosphere on the campus. The Proctorial Board headed by the Chief Proctor (disciplinary authority of the Institute) and assisted by two assistant proctors helps students, faculty members and non-teaching staff in difficulty and oversee that discipline is enforced and rules are followed properly.

It is involved in: (i) Organizing students' counselling and liasoning with students, parents/guardians, and (ii) Dealing with matters related to students discipline and council.

Student Welfare Board: The 'Dean of student's welfare' (DSW) heads the SWB that looks after the preservation/protection of student rights and supervises the welfare activities of the students of each department. DSW promotes different students' activities for better corporate life. DSW tries to nurtures students' mental, physical, cultural growth through activities that help improve their overall personality development and to groom them to be worthy Indian citizens to compete in the globalized world.

- **Anti-Ragging committee:** The committee looks after and coordinates anti-ragging activities in the department. In the hostels also a special anti-ragging committee is in place comprising of Joint Director, care taker and students (both junior and senior) as members. The committee conducts surprise visits during the night as well and ensures that the hostels are free from ragging
- **Student Grievance Cell:** It addresses the grievance at level of individual; this is to promote and maintain a conducive and unprejudiced environment, if a student faces infringement of rights. University has developed a student's grievance software (**Graphic Era University Online Student & Girls Grievance Ver. 1.2**) which has been web enabled for recording student grievances.
- **Cultural Festivals** are organized twice a year; University has also been organizing Ram-leela and Kavi-Samelan, etc to promote Indian cultural values.
- **Placement Cell:** In the changing global environment, securing a suitable job is of utmost importance for the students. Thus, to facilitate this aspiration of the students University has a full-fledged Training and Placement department – with placement coordinator, each department has also deputed one faculty for this. The placement cell organizes career counselling talks for students seeking jobs through test/interview.
- **The Corporate Resource Cell:** It is a special initiative of the University to provide a comprehensive array of services and support for students that will assist

them in their life-long career development and placement. The department acts as a central hub for overall development of the students for final placement, and is a storehouse of information and resources. It is an intermediary body between the corporate world and the students for guidance in making informed career choices and opportunities. It is located at B-6/11 Safdarjung Enclave, New Delhi.

- **SC/ST Cell:** is established as per guidelines of Government of India with the objective to improve the conditions of scheduled castes and scheduled tribes candidates and to help them bring at par with the general stream without any prejudice. It also sees that guidelines issued by the Government of India and Government of Uttarakhand with regard to the reservation of seats in admissions, financial support and social justice, are fully complied.
- **Employee & Women Grievance Redressal Cell** has a chairperson with two other members. It examines all representations submitted for redressal of grievances related to female students, teaching and non teaching staff. There is also in place a women grievance task force.

7.3 Best Practice

7.3.1 Give details of any two best practices which have contributed to better academic And administrative functioning of the university

❖ Title of the Practice: RESEARCH, CONSULTANCY& EXTENSION

❖ Objectives of the Practice

- To promote research & development (R&D) in diverse areas and to integrate research with teaching.
- To identify niche areas in research, and facilitate smooth implementation of research projects, and to encourage interdisciplinary research
- To strengthen infrastructure for research and development.
- To reach-out and collaborate with Universities /Organizations both national and international.

❖ The Context

Graphic Era Institute of Technology was founded in 1998 with undergraduate programs in core engineering and allied sciences. On August 14, 2008 Graphic Era Institute of Technology received the Deemed University status under section 3 of UGC act and Ministry of Human Resource Development, Government of India. The university presently offers various undergraduate and postgraduate courses across disciplines like Engineering and Technology,

Bio-Technology, Management, Allied Sciences, Humanities and Social Sciences, and Hospitality. The University is actively engaged in Research and Development (R&D) activities and helps in supplying trained & highly skilled technical manpower. The University emphasizes on integrating teaching and research, and developing its linkages with the outside world of academia and industry, for the larger interest of the students.

- **The Practice**

The Research and Consultancy (RCB), a single-window nodal centre, caters to various research and consultancy needs. Research and Consultancy Board headed by the Vice Chancellor has been constituted to oversee the policies and process of academic research activities of the University and to map out potential strategies and identify new areas.

Formal collaborative arrangements with National and International academic and R&D Institutions like National Research Development Corporation (NRDC), an Enterprise of DSIR, Ministry of Science & Technology, Defence Electronics & Applications Laboratory (DEAL) and Instruments Research & Developments Establishment (IRDE) have been made for the ease of work.

Departmental Research Committees along with Student research Committees are in place to oversee the progress and process of research.

- **Infrastructure for research and development:**

- 24x7-access to high end computing facility with necessary hardware, OS, and software support.
- Internet with 1 GB bandwidth by BSNL under the NMEICT scheme of MHRD is operational, and in addition to this 55Mbps bandwidth is dedicated for research work operational by Tata communication ltd.
- 24x7 access to two research labs with 24x7 dedicated high bandwidth web connectivity.
- Digital subscription to various e-journals (Springer, Elsevier, IEEE, ASME, ASCE, etc.).
- The University has augmented research infrastructure by upgrading various laboratories/facilities e.g., High Performance and Cloud Computing Augmentation of Computer Centre has been upgraded with internet access from 10 Mbps to 1Gbps. Advanced software like **Orcad, Matlab, Cadence VLSI v.16.6, Ansys16.2 (research version) and Exata** are in place.
- A **state-of-the-art studio facility** for research in media activities and mass communication has been commissioned.

- A research centre has been established for studies on power electronics and drives in the department of EEE with equipment facilities like matrix converter, FPGA based DC drives, BLDC drives, cyclo-converter, and vector controlled drives, v/f control of i/m drives.
- MoU's with many foreign & Indian universities and National Institutes have been signed to boost collaborative research. A number of external experts from country and abroad have been given status of honorary visiting professors in various departments.
- Reports generation and document development support.
- Central Instrumentation facility is being established.
- Dedicated research related data base and information support along with translation facilities –that are periodically augmented.
- IPR search and support services cell – our faculty will be trained in batches from this academic year by Uttarakhand Council of Science and Technology, UCOST Dehradun.
- Plagiarism Software – Turnitin.
- IP & Patent Cell: In order to promote filing of patents, the University constituted a Patents Cell. The patents cell maintains a directory of patents filed by the faculty members, students etc., and provides necessary information, facilitates prospective innovators with financial help and paperwork for filing patents.
- Financial support is provided to the faculty and students to participate in conferences, symposia, seminars and workshops etc. as well.
- Upon the receipt of grant from the concerned agency, funds are made available immediately for the concerned projects.
- Seed money is also provided from University funds for initiating researchers work.
- Simplification of procedures related to purchase and procurement of equipment.
- Timely audits are done as per the procedures laid down by the University.
- Financial grant of Rs. 650lacs was provided for research in 2013-2014, and 675 lacs in 2014-2015.
- Tests are conducted for the selection of Ph.D scholars are selected on the basis entrance test conducted by the university, and the selected candidates undergo six months course work. Stipend ranging from Rs 10,000 to Rs.

22500/- is paid for PhD. Further, University also pays a stipend of Rs. 8000/- to GATE qualified M.Tech students.

❖ Evidence of Success

- University has been successful in attracting talent like eminent faculties from IITs, NITs and other reputed Universities in India and abroad.
- DST, Govt. of India has approved the establishment of Technology Business Incubation Centre (TBI) with a financial support of Rs. 294.6lacs.
- To promote “Entrepreneurship” among students, Science & Technology Entrepreneurs Park (STEP) has been established with the approval of UCOST funded project.
- 22externally funded projects have been procured with sanctioned amount of Rs. More than 5crores, from various research organizations of repute such as DST, BARC, DBT, ISRO, DRDO, etc.
- 1100+ research publications have been made in peer reviewed journals/conferences.
- 14 scholars have been awarded with PhD degree and 5 scholars have currently submitted their thesis and approx150 research scholars are presently undertaking research in emerging areas such as Cyber forensics, Biotechnology, Big Data analytics, Bio-mechanics, Health care informatics etc.
- An interdisciplinary research between Civil Engineering and Computer Science & Engineering departments has been established that works on seismic behaviour of large pile groups in liquefiable soils using parallel processing methods. A part of the research is also funded by BARC, Mumbai to the tune of Rs. 24 lacs.
- University organized a felicitation ceremony for all meritorious researchers and achievers. Cash prizes worth Rs. 25 lacs were awarded among the achievers of excellence on May 29, 2015.
- University funded project of more than 1.5 crores

❖ Problems Encountered and Resources Required

- While initiating R&D activities, a need of governing body was felt to review the ongoing R&D activities and to deliberate on the requirements and the future R&D plans. Therefore, Research and Consultancy Board was constituted which meets regularly and keeps track of ongoing and future R&D activities.

- To overcome the problem associated with the monitoring of the progress of individual researchers and to assure quality of research, two important committees were formed (a) Departmental Research Committee (b) Student Research Committees
- A need was felt to provide seed money from University funds to initiate projects and to establish proof of concept. Therefore, after scrutiny of proposals, need based funds are disbursed.
- The University also provides financial support to the PIs of external projects in case of any unforeseen delay from the funding agency.

❖ **Title of the Practice: ADOPTING ENVIRONMENT FRIENDLY PRACTICES IN CAMPUS**

❖ **Objectives**

- To promote use of eco-friendly, renewable energy sources for meeting energy requirement in the campus, hostels and faculty residences.
- To spread awareness among students and staff for protecting the environment.
- To recycle solid waste generated in the campus, hostels and faculty residences through eco-friendly practices.
- To maintain green cover in the campus.
- To encourage research in the area of eco-friendly environmental technology.

❖ **The Context:** The University is located in the outskirts of the peaceful city of Dehradun, equipped with excellent infrastructure, and greenery in and around the campus premise. It is situated near the cantonment board, in the lap of Rajaji National Park. Currently approximately 5253 students are enrolled with the University in various courses. The University has nine hostels and provides residential facility to outside students. The University is committed towards enhancing environmental awareness, protection and has therefore, adopted a number of eco-friendly practices.

❖ **The Practice**

- **Establishment of a separate Department of Environmental Science:** The University has established environment science department which is engaged in teaching environmental science courses to all UG students and in conducting research in the areas of eco-friendly environmental technologies.

- **Installation of solar panels and solar water heaters:** As mentioned in section 7.1.2, solar panels and solar water heaters are installed in the University campus in hostels and staff residences for providing hot water to all.
- **Establishment of Solid waste management system:** The waste generated from office and hostel premises of the University is collected in separate dustbins. Recyclable waste such as paper, cloths and fallen leaves of trees is collected separately and sent to vermi-compost unit for production of bio-fertilizers. E-waste generated from offices is also planned to be recycled back through E-contractors.
- **Maintaining green cover in the University campus:** The University has maintained ample green cover in its campus by regular plantations in its premises. 25 different species of trees have been planted in the campus for enhancing the greenery.
- **Spreading Environmental awareness among students and employees:** The University spreads environmental awareness among students and staff members by celebrating Environment Day and Biodiversity Day, etc. It also initiated “Swachh University Abhiyan” under “Swachh Bharat Abhiyan” of the Government of India to encourage and maintain cleanliness in and around campus. Students and employees are motivated to undertake plantations. Various eco-clubs and initiatives like IYSERT are run by the students for promotion of eco-friendly practices.
- Subsidized transport facility for all students.
- **Pollution, Polythene and Plastic-free campus:** Smoking and open fire is not allowed in the University campus. Movement of vehicles is restricted inside the campus. Parking facility for vehicles is provided at the entry points near the gates of the campus. Use of polythene is strictly prohibited in the campus.

❖ **Evidence of success**

- **Establishment of Vermi-compost unit:** One Vermi-compost unit has been established for production of bio-fertilizer from recyclable organic waste originating from the University campus, hostels and staff residences. Approximately 250tonnes of bio-fertilizer is produced every year through this facility and is utilized within the campus.

- **Use of solar panels for campus lighting:** Fifty solar panels have been installed in the university campus and hostels for reducing consumption of electricity.
- **Solar Water heaters:** University hostels and faculty residences have been equipped with solar water heaters (9 units, 49,000 ltr.) for providing hot water to students and staff residing in campus.
- **Green cover in the campus:** The University campuses have attained nice green ambiance; Different species of trees have been planted inside the University campus.
- **Financial Grant on research project on Eco-friendly technology:** Department of Environment Science has received a grant of 14.56 lacs from DBT in 2014 for a research project on waste water purification. IYSERT, an organisation of the University students, has received international grant of Rs 23.89 lacs for a project on “Social and Quality Improvement in India at ‘Rhodes Youth forum’ Greece, in 2012.

Reduction in dependence on personal & public transport, traffic congestion,, use of CFLs and Solar panels, and other efforts for carbon neutrality have contributed in preserving & maintaining the green environment of the university campus.

❖ **Problems Encountered and Resources Required**

- In the absence of sufficient general awareness regarding environmental concerns it was somewhat difficult to implement eco-friendly measures in the campus. The University authorities, therefore, felt the need of imparting environmental awareness among its students and staff. In view of this, emphasis on such issues was placed through regular lectures; in addition guest lecturers, events like nukkad-nataks, greenathons, cyclethons, and awareness campaigns were also organized on current environmental concerns.
- For promoting research on eco-friendly technologies, the University also started providing partial financial support.
- To further strengthen the eco-friendly activities in the campus and to enhance the interest of students in such activities, the University has a policy of providing financial and technical support to the students for carrying out eco-friendly research projects. As a consequence Eco-clubs and IYSERT have been formed by the student community.

SELF STUDY REPORT (PART -II)

Submitted to
**NATIONAL ASSESSMENT & ACCREDITATION COUNCIL
(NAAC)**



by



GraphicEra
UNIVERSITY

Deemed University under section 3 of UGC Act, 1956

566/6, Bell road, Clement, town, Dehradun -248002.
(September 18, 2015)

Self Study Report

Part:II

(Evaluation Report of Departments)

Table of Content

S. No.	Department	Page No.
1	Electronics & Communication Engineering	1
2	Computer Science and Engineering	21
3	Biotechnology	52
4	Mechanical and Automobile Engineering	73
5	Civil Engineering	99
6	Petroleum Engineering	117
7	Electrical Engineering	128
8	Management Studies	142
9	Hotel Management	166
10	Allied sciences	179

Evaluative Report of the Department

1. Name of the Department : **Electronics & Communication Engineering**
2. Year of establishment : 2001
3. Is the Department part of a School/Faculty of the university?
: **Yes, School of Engineering and Technology**
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

UG	B.Tech. in Electronics and Communication Engineering
PG	M.Tech in Communication Systems
	M.Tech in VLSI Design and System
	M.Tech Instrumentation & Control Engineering
Ph.D.	ECE

5. Interdisciplinary programmes and departments involved: **Currently there is no interdisciplinary programme.** However, the faculties of Electronics department get associated with department of Computer Science for the subjects related to Data Communication, Communication Network such as MANET, Wireless Sensor Network in projects/desertations.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.: Technical collaborations are done with DRDO Labs (DEAL and IRDE), for guest lecturers / project design and measurements, as they are recognized research centre of the university. Department conducts edusat program, “Certification Course on Remote sensing” in association with IIRS, Dehradun.
7. Details of programmes discontinued, if any, with reasons: NONE
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System :

Semester based CBCS system

9. Participation of the department in the courses offered by other departments:

Department offers courses to other departments like:

Micro Processor and Micro Controllers:	Dept of Computer Science Engg
Digital Signal Processing:	Department of Electrical Engg
Electromagnetic Field Theory:	Department of Electrical Engg
Data Communication and Network:	Department of Electrical Engg
Electronic Devices and Circuits etc:	Department of Electrical Engg
Biomedical Engineering:	Department of Electrical Engg
Biosensors:	Department of Biotechnology
Instruments & Control:	Department of Electrical Engg
Non linear control system(PG):	Department of Electrical Engg
Power system dynamics and control(PG)	Department of Electrical Engg

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned (as per norms)	Filled	Actual (including CAS & MPS)
Professor	7	4	4
Associate Professor	13	9	9
Asst. Professor	31	23	18
Others	0	0	0

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S. No.	Name	Qualification	Designation	Specialization	Experience (In Years till date)	Number of Ph.D student guided for the last 4 years
1	Dr. B. S. Jassal	Ph.D.	Professor	Satellite Communication	46	01(completed) +06 (ongoing)
2	Dr. R. Gowri	Ph.D.	Professor	Microwaves	17	01 (completed) +03 (ongoing)

3	Dr. Anamika Bhatia Jain**	Ph.D.	Professor	Soft Computing	16	03 (ongoing)
4	Dr. M L Dewal	Ph.D.	Professor	Robotics	41	-
5	Dr. Rishi Prakash	Ph.D.	Associate Professor	Microwave Remote Sensing	03	02 (ongoing)
6	Dr. Brijesh Kumar	Ph.D.	Associate Professor	VLSI	14	03(ongoing)
7	Shalini Singh	M.Tech., Ph.D. (persuing)	Associate Professor	Mobile AdHoc Networks	11.9	-
8	Md. Irfan Ul Hasan	M.Tech. Ph.D. Pursuing	Associate Professor	Signal Propagation Over Fading Channels	10.5	-
9	Poornima	Ph.D. Pursuing	Associate Professor	Organic Electronic Devices	10.4	-
10	Peyush Pande	M.Tech.	Associate Professor	VLSI System Design	12	-
11	Mr.Saurabh Rawat**	PGDM,	Associate Professor	Communication Systems	18	-
12	Mr.Bhaskar Nautiyal**	M.Tech	Associate Professor	Control Systems	17	-
13	Dr. saurabh Bisht	M.Tech,Ph.D	Associate professor	Microwave	12	-
14	Anzar Ahmad	M.Tech. Ph.D. Persuing	Assistant Professor	Mobile AdHoc Networks	15	-
15	Puneet Manocha	M Tech Ph. D pursuing	Assistant Professor	Bio-MEMS, Biomedical, Image Processing,	15	-
16	Gitanjali Chandwani Manocha	M.Tech. Ph.D. Persuing	Assistant Professor	Telecommunication Networks	10.6	-
17	Navita Rawat**	M.Tech.	Assistant Professor	Optical Fiber Communication	11	-

18	Sanjeev Gaba**	M Tech Ph. D pursuing	Assistant professor	Robust Control, Adaptive control	12	-
19	Ashuthosh Pranav Tripathi	M.Tech	Assistant Professor	VLSI design	5	-
20	Amulya Kumar Roul	M.Tech.	Assistant Professor	Telecommunication Technology	5.1	-
21	Sumit Tripathi	M.Tech.	Assistant Professor	Digital Image Processing	6.4	-
22	Sribidhya Mohanty	M.Tech.	Assistant Professor	Microwave and Microprocessor	8	-
23	Dr.Anurag Vidyarthi	Ph.D	Asst. Prof	Microwaves	4.5	-
24	Dinesh Chandra Pandey	Ph.D. Pursuing	Assistant Professor	Artificial Intelligence	08	-
25	Suyashi Raiwani	M.Tech	Asst. Prof	Microwaves	5	-
26	Mr.S.C yadav	M.Tech, Ph. D pursuing	Assistant Professor	VLSI design	11	-
27	Kaushal Kumar	M.Tech.	Assistant Professor	Communication Systems	3.5	-
28	Neha Goswami	M.Tech.	Assistant Professor	Communication Systems	1 year	-
29	Shakshi Upadyay	M.Tech	Asst Prof	Electronics Instrumentation	7	-
30	Abhinav Sharma	M.Tech	Asst Prof	Electronics Instrumentation	6	-
31	Sharat Chandra Bhardwaj	M.Tech	Asst Prof	Communication Systems	5	-

**** Faculty members are involved in handling B.Tech (Ist Year)**

Following faculty Members (on study leave) for pursuing Post DOC/ Ph. D under QIP.

Sl.No	Name of the faculty	Qualification	Designation	Specialization	Experience	Remarks
1	Dr.A K Arya	Ph.D	Asst Prof	Microwaves	2	Study leave for PDF
2	Pranav Kr Srivastava	M.Tech	Asst Prof	RFDT	4	Study leave for Ph.D
3	Upender Mohan Bhat	M.Tech	Asst Prof	Communication	5.5	Study leave for Ph.D
4	Munendra Singh	M.Tech	Asst Prof	Control Systems	2	Study leave for Ph.D
5	OmPrakash Verma	M.Tech	Asst Prof	Control Systems	1	Study leave for Ph.D

12. List of Senior visiting Fellows, adjunct faculty, emeritus professors :

- (1) Prof. MV Kartikeyan (IIT Roorkee),
- (2) Dr. S. Pal (Dept of Space)
- (3) Dr.Nazimuddin (Rohde Schwartz Ltd)
- (4) Dr. S. C. Gupta, Former HOD Electronics IIT Roorkee
- (5) Dr. B. J. Singh

13. Percentage of classes taken by temporary faculty – programme-wise information: Zero

14. Programme-wise Student Teacher Ratio: **UG :15 : 1; PG : 12:1**

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Category	Sanctioned	Filled	Actual
Technical staff	15	15	10*
Administrative staff	2	2	2

- **Note: Following staff members have been sponsored to pursue their M.Tech from IIT under QIP.**

Sl.No	Name of the Staff	Institution
1.	Kumar Govind	IIT Delhi
2.	Nimika Agarwal	IIT Delhi
3.	Ashish Bhardwaj	IIT Roorkee.
4.	Harshit Rathore	IIT Roorkee.
5.	Disha Saxena	IIT Roorkee.

16. Research thrust areas as recognized by major funding agencies:

- ❖ RF Communication (DRDO, ISRO),
- ❖ Digital Image Processing (BARC),
- ❖ Control System (DRDO)

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

- a) No. of faculties with ongoing projects from National funding agencies: 03
- b) No. of faculties with ongoing projects from Inter National funding agencies: None
- c) Total Grants Received: 51.00 lakhs

Ongoing Project Details

Sl.No	Name of the faculty	Project Title	Funding Agency	Grant received
1	Dr.BS Jassal & Dr.R.Gowri	Investigation of channel equalization and diversity combining scheme for up surging digital troposcatter communication system	DRDO	18.97 Lakh
2.	Dr.BS Jassal & Dr.R.Gowri	Rain Fade Mitigation for Ka Band Communication Satellites	ISRO	11.98 Lakh
3.	Dr.Nitin Khanna	Printed Document security using intrinsic characteristics of imaging devices	Bhabha Atomic Research Center, DAE, Mumbai.	18.51 Lakh
4.	Dr. D R Gangodkar,	Automated Surveillance system for traffic	Uttarakhand State Council of	01.54 Lakh

	Ankush Mittal & Nitin Khanna	volume estimation and redirection	Science & Technology	
--	---------------------------------	--------------------------------------	-------------------------	--

18. Inter-institutional collaborative projects and associated grants received:

- a) National collaboration – 02
- b) International collaboration – Currently none. However steps are being taken to initialize this collaboration with those Universities with whom MOU has been signed.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. – **08 projects with an outlay of 94.27 lakhs**

Sl.No	Funding Agency	No of Projects	Grants Received
1	AICTE	01	14.00 Lakh
2	DRDO	02	28.72 Lakh
3	ISRO	02	25.50 Lakh
4	BARC	01	18.51 Lakh
5	UCOST	01	01.54 Lakh
6	IRDE	01	06.00 Lakh

20. Research facility / centre with

- State recognition:
 - Center of RF Communication (Measurement setup at C-band Level with Signal generator & RF power meter) –Being utilized by other institutions in the state.
 - **Cadence Front-end and Back annotation tool** available for getting expertise in VLSI. Being utilized by other institutions in the state.
- National recognition : NONE
- International recognition: NONE

21. Special research laboratories sponsored by / created by industry or corporate bodies:

Not as yet, however steps are being taken to establish Center of Excellence in association with Texas Instruments. Efforts are on to establish such centres at various levels as well.

22. Publications:

- Number of papers published in peer reviewed journals (national/international):

National Journal : 7 International Journal : 103

National Conferences : 44 International Conferences : 63

- Monographs : No

- BooksChapters : 02

Edited Books : 00

Books with ISBN with details of publishers:

- 03(published): Lambert Academic Publishing, ISBN No.: 978-3659234248

Laxmi Publication, 2009, ISBN No.: 978-81-318-0710-1

Pragati Prakashan Meerut, 2007, SKU: 978-81-8398-761-5

- 01(under publication): Taylor & Francis

- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.) : 25

- Citation Index – range/average : 1-30

- SNIP – : 0.2 to 1.3

- SJR : 0.12 to 0.68

- Impact Factor – range/average : 1.2 to 3.7

- h-index : 2 to 9

23. Details of patents and income generated : 4 submitted

24. Areas of consultancy: Microwave component design. Dr. BS Jassal and Dr. R. Gowri provide the technical guidance consultancy in the design of microwave components to MRDC Ltd, Delhi and Vidyut Yantra Udyog Ltd, Modinagar.

Income generated: Nil at present

25. Faculty selected nationally / internationally to visit other laboratories/institutions/industries in India and abroad:

- Dr. R. Gowri and Dr. B.S. Jassal: **as a member of review committee of projects in DEAL and IRDE**

- Dr. Rajesh Kumar: as DRDO promotion board member and UK PSC selection committee member

- Dr.Rishi Prakash, Dr. R.Gowri –Invited Speakers in DEAL for the workshop conducted on Microwaves, Antennas.

- Dr.Anamika Bhatia & Dr. R.Gowri- Invited Speaker on World Telecommunication Day in IETE center, Dehradun covering the topic of Importance of Telecommunication.

26. Faculty serving in

a) National Committee –

- Dr.BS Jassal (Project reviewing member in DRDO labs (DEAL & IRDE), Staff Selection & Promotion board of DRDO.
- Dr.R.Gowri (Project reviewing member in DRDO lab (DEAL)& Selection board member in Uttarakhand Service Commission (Forest Officer(signals)), Technical Program Committee In various International IEEE Conferences, Member of IEEE (UP section) executive Council.

b) International committees Nil

c) Editorial Boards: Dr. Rishi Prakash, Dr. Anurag Vidyarathi, Dr. Brijesh Kumar, Mr. Sunil Semwal.

d) Any other (please specify) Advisory Committee member and Technical Program Committee member in various IEEE/Springer sponsored conferences, short term courses etc.

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs):

- Periodic conduction of FDP
- Faculties are encouraged to attend workshop, seminar in the related field (VLSI, RF and Communication)

28. Student projects

- Percentage of students who have done in-house projects including inter-departmental projects: 85%
- Percentage of students doing projects in collaboration with other universities/industry/institute: 15%

29. Awards/recognitions received at the national and international level by

- Faculty: Member in DRDO selection board of Scientist Recruitment.
- Doctoral / post doctoral fellows: Best Presentation Award won by Chandini Sharma.
- Students:
 - Himanshu Bahuguna and Prateek Goel of ECE 6th semester students presented a poster on the topic “Utilization of Radar Data to Identify Land Cover Features” in a contest organised by IEEE MTT-S held at IIT ROORKEE on 11th may 2013 and won third prize.
 - A research poster contest organized by NRDC, New Delhi and Graphic Era University, Dehradun in March 2014 awarded first prize to Pragati Ghildiyal, of M.Tech. 2nd year Graphic Era University for her work “Supervised Classification

of PALSAR Images.”

- Shubham Chauhan, B.Tech 3rd year, got All India Rank 1 in Multirover competition held in IIT Kanpur, 2015.
- Amit Belwal represents Indian ice Hockey team in 2014.
- Atul Joshi got ALL INDIA rank 1 in ISRO Examination.
- Atul Joshi got ALL India 34th rank in IES-2014.

30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

- **Seminar** on Software Defined Radio –Technically Sponsored by IETE, Aug,05, 2010.
- **National Conference** on Recent Trends in Microwave & Millimeter Wave Technologies – Sponsored by DST, UCOST, Agilent Technologies, MRDC and Technically Sponsored by IEEE-MTT (Delhi Section) (Oct 4-5, 2010).
- National Conference on “Future aspects of Artificial Intelligence in Industrial Automation” funded by DST, Govt. Of India in 2012.
- **Workshops** organised by the Dept fully funded by Host institution

S. No.	Name of the workshop	Date (From – To)	Resource Person	Highlights of events
1.	Training Program on MATLAB Software and its toolboxes (Mathworks Suite)	18.11.2013 to 20.11.2013	Mr. M. M. Zafar – Assistant Manager – Technical Support DesignTech Systems Ltd., New Delhi	<p>The resource person has given hand-on training on MATLAB Software (Ver. 8.2). He focused mainly on:</p> <ul style="list-style-type: none"> • Design of Signal Processing, Computer Vision and communication Systems with MATLAB and Simulink. • Running Simulink Models on Low-Cost Hardware Boards. • Modeling dynamic systems – First Principles and Data Driven • Multi-Domain Modeling based on Physical Components

				<ul style="list-style-type: none"> • Controller Design & Stability analysis • Data analytics & Statistics for algorithms, organizing, analyzing, and 11rganizat data • ODE & PDE using Matlab & Simulink. • Symbolic Mathematics for solving and manipulating symbolic math expressions • Handling Large Data Sets • Visualization in Matlab & Simulink.
2.	Training Program on Cadence Custom IC Design Tool Suite for University Bundle 1	30.10.2013	Mr. Srikar Talla – Chief Applications Engineer Entuple Technologies (I) Pvt. Ltd., New Delhi	<p>The resource person has given hand-on training on the topics of Custom IC Design. He focused mainly on:</p> <ul style="list-style-type: none"> • Schematic Capture • SPICE Simulations • Layout Design • Physical Verification like DRC, LVC and RCX and • Post Layout Simulation concepts.
3.	Cadence OrCAD Training Solutions – Mixed Mode Simulation (Pspice A/D) & PCB Designing Tools.	27.08.2013	Mr. Abhimanu Mahajan – Sr. Application Engineer GigaSoft India, New Delhi	<p>The resource person has given hand-on training on the following modules of OrCAD software (Ver. 16.6) to the participants:</p> <ul style="list-style-type: none"> • OrCAD Capture • OrCAD Capture CIS • Pspice A/D • Pspice Advance Analysis • PCB Designing • Signal Integrity Analysis

4.	INCESSANT	20 March , 2013	Shashwat Tyagi (ECEVI SEM Student) Sachin Badoni(ECE IV SEM Student)	<ul style="list-style-type: none"> • Quiz Based on aptitude • General Knowledge.
5.	EMBORIA	8March-18 March 22, 2013	Prem Singh, Ekent Sharma, Shivam (ECE VI sem student)	<ul style="list-style-type: none"> • Workshop on embedded system • Hands on experience to work on electronic component • Study of microcontroller and robot.
6.	ACUMEN-13	3 March 2013	Rohit Sharma (ECE VIII sem Student)	<p>A Quiz based on</p> <ul style="list-style-type: none"> • Aptitude and verbal /nonverbal reasoning • Logical reasoning, quantitative aptitude and general knowledge.
7.	Seminar on PLAGIARISM	14 Dec 2012	Prof. Rajarshi Mahapatra,	<ul style="list-style-type: none"> • Awareness and issues related to plagiarism were introduced to Faculty and Student. • All faculty and students test their research work through the software available for this purpose. • Ethics and methods to check it.
8	Faculty Development Program on MATLAB Essentials For Communication & Speech Processing	25.08.2012 & 26.08.2012	Dr Anamika Bhatia Jain Prof. Rajarshi Mahapatra, Deepak C Pandey	<ul style="list-style-type: none"> • Basic understanding of MATLAB • Introduction to toolboxes on communication, speech & image processing and Soft Computing.
9	ROBOMANIA	23 to 25 SEP	Hemant	Knowledge about

		2012	Singh Pokhariya	<ul style="list-style-type: none"> • Robot • Microcontroller • Line follower
10	Visual TCAD	11 Feb 2012	Mr, Amit Saini , Cadre Design System, New Delhi	<ul style="list-style-type: none"> • Experience on Visual TCAD software
11	ARM Processor	7 Nov, 2014	Cetpa Infotech, NOIDA	<ul style="list-style-type: none"> • Knowledge about ARM Processor
12	Microwave Remote Sensing	15 Sep, 2014	SS Sundaram CCR&D, DRDO	<ul style="list-style-type: none"> • Recent technologies in Microwave Remote Sensing for defense applications
13.	Optical Remote Sensing	15 Sep, 2014	Haribabu Srivastava, Director , DRDO lab, Delhi	<ul style="list-style-type: none"> • Recent technologies in Optical Remote Sensing for defense applications

31. Code of ethics for research followed by the departments:

- As per UGC guidelines

32. Student profile programme-wise:

Details are provided for the batch passed out in 2014.

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage		Total Pass percentage
		Male	Female	Male	Female	
B.Tech(ECE)	300	163	74	52.3	28.3	80.6
B.Tech.(EIE)	46	18	2	77.7	100	89.0
M.Tech (Communication Systems) –Full Time	75	09	09	50.0	50.0	100.0

M.Tech (VLSI Design)-FT	07	03	04	43.0	57.0	100.0
M.Tech (communication Systems)-Part-Time	07	04	03	28.6	43.0	71.6
M.Tech. (Instrumentation & Control)	25	7	5	100	100	100

33. Diversity of students (2014-15)

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Tech (communication Systems)	05	72	23	Nil
M.Tech (VLSI)	12	67	23	Nil
M.Tech. (Instrumentation & Control)	3	55	42	Nil
Ph.D*	Nil	Nil	Nil	Nil

***None could be selected through entrance exam/interview.**

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

- Civil Services/Engineering Services – 01
- Defence Services/ Public Sector -18
- NET –NOT APPLICABLE
- SLET-NOT APPLICABLE
- GATE ((>90 percentile scorers list below)
 - 2008-12 batch : 15
 - 2009-13 batch : 15
 - 2010-14 batch : 27
 - 2011-15 batch : 18

35. Student progression

Student progression	Percentage against enrolled	
UG to PG	On an average of 8-10% (including IN and OUT)	
PG to M.Phil.	N/A	
PG to Ph.D.	5%	
Ph.D. to Post-Doctoral	NIL	
Employed	Year	No. of student
Campus selection	2008	79
	2009	81
	2010	80
	2011	77
	2012	82
	2013	88
	2014	88
	2015	93 (On going)
Other than campus recruitment	15%	
Entrepreneurs	02	

36. Diversity of staff

Percentage of faculty who are graduates	
From the host institution	7.7%
from other universities within the State	21.0%
from universities from other States from	71.3%
universities outside the country	NIL

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period :-

- Ph.D: 02 (awarded) + 02 (submitted)
- M.Phil, D.Sc, D.Litt: Nil

38. Present details of departmental infrastructural facilities with regard to

- a) Library : **Yes managed centrally (250 Volumes)**
- b) Internet facilities for staff and students: **Yes (Campus fully Wi-Fi)**
 - i. 24 hours internet facilities are available for both staff and students
 - ii. Wi-Fi facilities are also available for faculty members.

- c) Total number of class rooms : **Seven**
- d) Class rooms with ICT facility : **Four**
- e) Students' laboratories : **Seven**
- f) Research laboratories : **One**

39. List of doctoral, post-doctoral students and Research Associates

a) From the host institution/university:

Doctoral – 18

b) From other institutions/universities:

Doctoral – 7

40. Number of post graduate students getting financial assistance from the university:

- **13 students.**

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Proposal is put up to BOS which constitute of some internal and external expert.
- Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

Yes, Periodically Feedback is received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.

b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective

subjects taught and HOD will analyses the overall department result and make necessary action as deemed fit.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?

Yes. Feedbacks from alumni through regular alumni meet and employers considered for the upgradation of curriculum meeting current/latest need of employers and other industries.

43. List the distinguished alumni of the department (maximum 10)

Sl. No.	Name	Year	Position
1	Himanshu Chauhan	2006	Assistant Engineer Power Transmission Corporation of Uttarakhand
2	Vijit Chauhan	2006	Squadron Leader Indian Air Force
3	Aditya Mitra	2009	Telecommunications India Ltd, Delhi.
4	Ajay Naithani	2008	Asst. Manager at Airport Authority of India
5	Vinod Dani	2008	Senior Engineer at Infosys(U.S)
6	Jaspal Virk	2006	Technical Project Manager, Arizon, USA.
7	Ashwani Singh	2005	Analyst Programmer, Bunnings, Perth Australia.
8	Atul Joshi	2010	Scientist in ISRO(Scored AIR '1' in ISRO and 34 in IES-2014)
9	Shruti Mittal	2011	R&D Engineer at Synopsys, USA
10	Nitish Gupta	2009	Research Engineer, C-DOT. (Awarded Best Signalling Engineer in 2015).

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- Same as Sl. No. 30.

45. List the teaching methods adopted by the faculty for different programmes.

- Lectures (regular classes): **Face to face mode**
- Seminars: Through self study and guided seminar
- Projects: By students in group /individual for better visualization of their course content in the form of mini project and final year project.
- Tutorials

- Industrial Visit
 - Guest Lectures
 - Hands on practical experience and specialised training courses.
 - Use of Learning Management System (Moodle) for student –teacher interaction.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Periodical reviews through tests, quiz, tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.
 - Experiences learnt through their performance in exams, results and employability goal us to take necessary actions.
47. Highlight the participation of students and faculty in extension activities.
- The Faculties of ECE department are highly involved in various professional activities through IEEE Uttar Pradesh Section in different streams of MTT, Antenna and Propagation Society and Remote sensing.
 - Women Faculty members are also associated with Women in Engineering Affinity Group of IEEE to encourage promotion of scientific and technological awareness among the girl students and also to enhance the women visibility in the profession.
 - Both the faculty and students of this department actively participate in workshop, seminar and various technical quizzes.
 - The areas in which our students excel outside the academic curricula include cultural performance, commitment to society, sports and quiz activities, dance and drama performance.
 - Students are also associated with different clubs of university such as music, chess, science, photography.
48. Give details of “beyond syllabus scholarly activities” of the department.
- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
 - Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
 - Organization of conferences/ workshop/ seminar on thrust areas which provides an opportunity to interact with eminent experts.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Yes, B. Tech (ECE) is accredited by NBA on 16th March, 2007.

ISO certified (9001-2008) department

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- A number of new research fields especially in major thrust areas like RF and Microwave communication, Digital Image Processing, Remote sensing, Propagation in RF, MANET, Soft Computing, Embedded Systems, VLSI Technology al Imaging, Robotics, Nano Technology, Microstrip Antennas, Organic thin films etc are added by the department.
- Advance software like MATLAB, SYSTAT, Caddence tool etc have been procured and necessary training program have been arranged.
- Another new Centre of Excellence in collaboration with TEXAS INSTRUMENTS is under development to make department highly inclined towards industrial development.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

➤ Strengths

- Research contribution through sponsored research agencies like DRDO, ISRO, AICTE, DST etc.
- Induction of faculty from well established educational institutions/industries.
- Updated modern laboratories (both in Software and Hardware fields).
- Good learning environment.
- Dedicated faculty.

➤ Weaknesses

- Non - conduction of National and International Conferences frequently
- Non availability of good number of research students
- Paucity of publications in standard journals by all faculty members.
- Paucity of consultancy projects
- Gap of Inter institutional collaborations at National & International level.

➤ Opportunities

- Increasing industry liaison through alumni network
- International collaboration
- Upgradation of the department with more facilities can be realized by UGC/AICTE and DST funding

- Transforming existing nucleated RF centre into centre of excellence in RF with National level recognition.
- To attract the persons from research institutions to give boost to the research environment.

➤ Challenges

- Placing the students in core field companies.
- Retention of good quality students for continual interdisciplinary research activity
- To attract consultancy projects through industry linkages.
- Collaborations with well known International institutes/industries.
- Retaining the students strength in competing with global attraction in IT industry

52. Future plans of the department.

- Our department aiming to collaborate with the renowned institutions within/ outside the country.
- Inter institutional collaboration for research funding projects/consultancy.
- Establishment of Centre of Excellence in VLSI in collaboration with Texas instruments, USA.
- Regular use of ICT technologies and various tool like e-learning, webinar etc.
- Transforming from faculty centric to students centric learning.

Evaluative Report of the Department

1. Name of the Department : **Department of Computer Science and Engineering**

2. Year of establishment : 2000

3. Is the Department part of a School/Faculty of the university?
: Yes, School of Engineering & Technology

4. Names of programmes offered
 - Under Graduate
 - B.Tech Computer Science and Engineering
 - B.Tech Computer Science and Engineering (with specialization in Big Data Analytics)
 - B.Tech Computer Science and Engineering (with specialization in Cloud Computing)
 - B.Tech Information Technology
 - BCA
 - Post Graduate
 - M.Tech Computer Science and Engineering – Full Time
 - M.Tech Computer Science and Engineering – Part Time
 - M.Tech Computer Network Engineering
 - MCA
 - M.Sc(IT)
 - Ph.D.
 - Computer Science and Engineering
 - Computer Applications

5. Interdisciplinary programmes and departments involved

Level	Course & Parent Department	Departments involved
PG	M.Tech(Geo-Informatics), Civil Engg	Department of Computer Science and Engg. And Department of Civil Engineering
	M.Tech CAD/CAM and Robotics, Mechanical Engineering	Department of Mechanical Engg. And Department of Computer Science and Engg.

6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 Open Courseware in collaboration with Spoken Tutorials of IIT Mumbai.
 Open Courseware offered by Coursera, edX, MIT OCW, MECR, NPTEL
 Virtual Lab with IIT Roorkee

7. Details of programmes discontinued, if any, with reasons
 Not Applicable

8. Examination System : Semester with Choice Based Credit System

9. Participation of the department in the courses offered by other departments

Course	Department
C (Theory and Lab)	All Engineering Departments in 1 st Year
C++(Theory and Lab)	EC Dept
Data Structures(Theory and Lab)	EC Dept
Fundamentals of Information Technology	Hotel Management, BCom (Hons)
Management Information Systems	Hotel Management, BBA, MBA
DBMS	BBA, MBA

10. Number of teaching posts sanctioned, filled and actual
 (Professors/AssociateProfessors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS and MPS)
Professor	11	10	10
Associate Professors	22	15	15
Assistant Professors	66	63	63

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

SN	Name	Qualification	Designation	Specialization	No of year Exp.	No of PhD student Guided (last 4 yrs)
1	Dr. R.C.Joshi	Ph.D.	Professor	BioInformatics, Wireless Sensor N/w	46	30 (Total No of PhDs guided)
2	Dr. Kamal Ghanshala	Ph.D.	Professor	Data Structures, Rural Informatics, Computer Aided Design	22	
3	Dr. Ankush Mittal	Ph.D.	Professor	Image and video processing, parallel and distributed computing	15	9 (Total No of PhDs guided)
4	Mr. Anil Kumar Baliga	M.Tech	Professor	Biomedical Engineering	29.4	
5	Dr. Durgaprasad Gangodkar	Ph.D.	Professor	Distributing and parallel computing, system software, Cryptography and Network security	14	5 (ongoing)
6	Dr. Sushil C. Dimri	Ph.D.	Professor	Network Resource Optimization, Computer Graphics, Analysis of Algorithms	18	1 (ongoing)
7	Dr. V. K. Srivastava	Ph.D.	Professor	Fluid Dynamics, MagnetoHydro Dynamics	46	10 (Total No of PhDs guided)
8	Dr. Rajesh Kumar	Ph.D	Professor	Robust Control, Soft computing	24	3 (ongoing)

9	Dr. S.P.Khare	D.Phil	Professor	Cryptography and Nw Security	34	
10	Dr.Puneet Goyal	Ph.D.	Professor	Image Processing, Security and Forensics, Algorithms, Digital Education	10	4 (ongoing)
11	Mr Pradeep Kumar Yadav	MS	Visiting Associate Professor	Data Mining	27	
12	Dr. Amal Shankar Shukla	Ph. D	Associate Professor	Mathematics, Software Engineering, Information System	25	
13	Mr. Naveen Garg	M.Tech	Associate Professor	Computer Networks	24	
14	Mr. Manish Mahajan	M.Tech	Associate Professor	Data Mining	17	
15	Ms Himani	MBA	Associate Professor	MIS	15	
16	Dr. Rajesh Kumar Pokhriyal	Ph. D	Associate Professor	Management Studies	14	
17	Mr. Upendra Aswal	M.Tech	Associate Professor	Data Structures	13	
18	Mr. Dibyahash Bordoloi	M.Tech	Associate Professor	Multimedia Searching, Trustworthy computing	12	
19	Mr. Manish Sharma	M.Tech	Associate Professor	Multi Agent System in AI	10	
20	Dr. Bhaskar Pant	Ph.D	Associate Professor	Data Mining, Soft Computing, Machine Learning, BioInformatics	8	1 + 6 (ongoing)

21	Dr. Santosh Kumar	Ph.D	Associate Professor	Wireless Communication Network, MANET, Software Engg.	8	6 (ongoing)
22	Dr. Devesh Pratap Singh	Ph.D	Associate Professor	Wireless Sensor Network, Theory of Computation	8	
23	Dr. Manoj Chand Lohani	Ph.D	Associate Professor	Database Management Systems	14	
24	Dr. Mangey Ram	Ph.D	Associate Professor	Operations Research	8	2
25	Dr. Giri Raj Gupta	Ph.D	Associate Professor	Discrete Mathematics	14	
26	Mr. Rajeev Gupta	M.Tech	Assistant Professor	Communication Systems	25	
27	Mr Gireesh Chandra	M.Sc. (IT)	Assistant Professor	C and C++	19	
28	Mrs. Priya Matta	M.Tech	Assistant Professor	Information Security, Distributed Computing	16	
29	Mr. Jai Shankar Bhatt	M. Phil/M. Tech	Assistant Professor	Computer Organization, Distributed Computing	15	
30	Mr. Vivek Saxena	M.Sc.	Assistant Professor	Networks	15	
31	Mr. Ramesh S. Rawat	M.Tech	Assistant Professor	Information Security, Multimedia Tech.	14	
32	Mr. Sanjiv Kumar	M.Tech	Assistant Professor	Java, Advance Java	13	
33	Mrs. Lata Nautiyal	M.Tech	Assistant Professor	Software Engineering	12	
34	Mrs. Varsha Mittal	M.Tech	Assistant Professor	DBMS, Big Data, Cloud Computing, DBMS	12	

35	Mrs. Neelam Singh	M.Phil/ M.Tech	Assistant Professor	Big Data, Data Mining, Java, C++	12	
36	Mr. Kamlesh C. Purohit	M.Phil/ M.Tech	Assistant Professor	Networking, Operating System, Network Security	11	
37	Dr. Vipin Ghildiyal	Ph.D	Assistant Professor	Commerce (Finance)	11	
38	Mr. Mahesh Manchanda	M.Tech	Assistant Professor	Open Source Web Development	11	
39	Mr. Sushil Chamoli	M.Tech	Assistant Professor	C++, Operating System, Java, Cloud Computing	10	
40	Mrs. Geetika Sharma	M.Tech	Assistant Professor	Operating System, C, DS	10	
41	Mr. Ashish Kumar Pal	MS	Assistant Professor	Dot Net, Software Engineering	10	
42	Mr. Harish Prasad Mamgain	M.Sc. (IT)	Assistant Professor	Computer Networks	10	
43	Mr. Himanshu Rai Goyal	M.Tech	Assistant Professor	Speech Processing	9	
44	Mr. Sumit Pundir	M.Tech	Assistant Professor	Computer Network and Security	9	
45	Ms. Neha Garg	M.Tech	Assistant Professor	Software engg.	9	
46	Mr. Vijay Chaudhary	M.Tech	Assistant Professor	Data mining	9	
47	Mr. Dinesh C. Dobhal	M.Tech	Assistant Professor	MANET, Operating System, Networking	9	
48	Mr. Ishtiyaaq Ahmad	M.Tech	Assistant Professor	Application Development	9	
49	Mr. Umesh Kumar Tiwari	M.Tech	Assistant Professor	Component Based Software Engineering	9	
50	Mr. Ankur Chaudhary	M.Tech	Assistant Professor	Speech Processing	8	

51	Mrs. Priyanka Negi	M.Tech	Assistant Professor	Web Technology, Dot Net	8	
52	Mr. Narayan Chaturvedi	M.Tech	Assistant Professor	Advance Computations	8	
53	Mr. Noor Mohd	M.Tech	Assistant Professor	MANET, Network security	8	
54	Mr. Ashwini Kumar Singh	M.Tech	Assistant Professor	Data Mining, Computer Network	7	
55	Ms. Sujata Thakur	M.Tech	Assistant Professor	Data Structures	7	
56	Mr. Santosh Kumar Sharma	M.Tech	Assistant Professor	Networking, Computer Graphics	7	
57	Mr.K.P.Sharma	M.Tech	Assistant Professor	Data Mining	7	
58	Ms. Shivani Bahuguna	M.Tech	Assistant Professor	Software Engineering, Web tech	6	
59	Mr. Vijay Singh	M.Tech	Assistant Professor	Data mining, recommender systems, social network analysis	6	
60	Mr. Vikas Rathi	M.Tech	Assistant Professor	Image Processing	6	
61	Mr. Hemant Singh Pokhriyal	M.Tech	Assistant Professor	Java & Mobile Application	6	
62	Ms. Swati Devliyal	M.Tech	Assistant Professor	Programming Languages	5	
63	Mr. Mridul Gupta	M.Tech	Assistant Professor	Communication Systems	5	
64	Mr. Manoj Kumar Thakur	M.Tech	Assistant Professor	Operating Systems	5	
65	Mrs. Shuchi Juyal	M.Tech	Assistant Professor	Programming Languages	5	
66	Mr. Abishek Sharma	MCA	Assistant Professor	Numerical Techniques	5	
67	Mr. Kireet Joshi	M.Tech	Assistant Professor	Operating Systems	4	
68	Ms Parul Madan	M.Tech	Assistant Professor	Data Structures	4	
69	Ms. Avita Katal	M.Tech	Assistant Professor	Sensor Networks	3	

70	Mr. Deepak Semwal	MCA, M.Phil.	Assistant Professor	Programming Languages	3	
71	Mr. Vikas Tripathi	M.Tech	Assistant Professor	Software Engineering	6	
72	Ms. Rashmi Chauhan	M.Tech	Assistant Professor	Sementic Web, Information Retrieval, Image Retrieval	2	
73	Ms. Shilpi Saxena	M.Tech	Assistant Professor	Computer Networks	2	
74	Mr. Ashish Garg	M.Tech	Assistant Professor	Network Security	-	
75	Mr. Hemant Singh *	M.Tech	Assistant Professor	C, C++, DBMS	5.3	
76	Ms. Vimla Rani *	M.Tech	Assistant Professor	C, C++	13	
77	Ms. Kiran Aswal *	M.Tech	Assistant Professor	C, C++	13	
78	Mr. Magan Khali	M.Sc. (CS)	Assistant Professor	C & C++	21	
79	Mr. Amit Dandriyal	M.Sc. (CS)	Assistant Professor	Web Development	8	
80	Mr. Anil Thapliyal	M.Sc. (IT)	Assistant Professor	Software Engineering	9	
81	Mr. Arun Kukreti	M.Sc. (CS)	Assistant Professor	C and C++	8	
82	Ms Deepti Negi	MCA	Assistant Professor	Java	7	
83	Mr. Akhilesh	MCA	Assistant Professor	Web Development	4	
84	Mr. Pareshwar Prasad	MCA	Assistant Professor	C and C++	4	
85	Mr. Harendra Singh Negi	MCA	Assistant Professor	AI	4	
86	Mr. Govind Kamboj	M.Tech	Assistant Professor	Database Management Systems	5	
87	Mr. Sanjeev Kukreti	M.Tech	Assistant Professor	Advance Java	15	
88	Mrs. Aanchal Gupta	MCA	Assistant Professor	Data Structures, C, C++	1 Yr	

*Faculty members associated with BTech 1st year courses

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

S.No	Name & Position
1	Prof. Suresh Chandra, Former Prof. & Head GB Pant University, Pantnagar
2	Prof. Dharmendra Kumar, Prof. Head & Dean Computer Science Engineering, Guru Jambheshwar Univesrity, Hisar, Haryana
3	Prof. M.M.S Rauthan, Prof. Head & Dean Computer Science, H.N.B. Garhwal Univesrity (Central University), Srinagar Garhwal
4.	Prof. P.K Mahanty, Dean Faculty of School, Computer Science, New Bronshwik University, Canada
5.	Prof. M.M Pant, Former Director of School of Computer Science, IGNOU, Maidan Garhi, New Delhi
6.	Prof. R.P Pant, Head of Department- Mathematics, DSB Campus, Kumaon University, Nainital, Uttarakhand
7.	Dr. Anurag Awasthy, Former Vice President, Bharti Telesoft, New Delhi
8.	Dr. Naveen Gandhi, Director Computer Center, Mata Vaishano Devi University, Jammu, J&K
9.	Prof. (Dr.) Shishir Kumar Srivastava, Head Compuetr Science & Engineering, J.P. University, Guna, Madhya Pradesh
10.	Prof. H.S Dhami, Vice Chancellor, Kumaon University, Nainital, Uttarakhand

13. Percentage of classes taken by temporary faculty – programme-wise information

- None

14. Programme-wise Student Teacher Ratio

- Engineering : 12:1 (M.Tech)
: 15:1 (B.Tech,MCA& MSc-IT)
- Computer Applications : 25:1 (BCA)

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual
Support Staff (Technical)	08	08	08
Administrative Staff	04	04	04

16. Research thrust areas as recognized by major funding agencies

- Image Processing (USAC)
- Bioinformatics (DBT, UCOST, DST)
- Network Security and Forensics (DST, DRDO)
- High Performance Computing (DST)
- Rural Informatics (USERC)

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise

(a) Number of faculty with ongoing projects from national funding agencies : 08

(b) Number of faculty with ongoing projects from international funding agencies : 00

(c) Total grants received : Rs. 37.33 Lacs

IN PROGRESS – FUNDED R&D / CONSULTANCY PROJECTS						
SN	Title	Project No.	Sanctioned Dept/ Agency	PI and Co-PI	Amount in Lakhs Duration of project	Date of sanction
1	Seismic organization of large pile groups in liquefying soils using parallel processing methods.	2012/36/49-BRNS	Government of India Department of Atomic Energy BRNS Secretariat	Dr. P. K. Emani (PI) Dr. Ankush Mittal (Co-PI)	24.35 3	18-03-2013

2	Vidya Vikas: A Central Web-portal for availability of various Academic Programmes offered by Educational Institutes	UCS&T/R&D/COM SC.-01/11-12/3992	Uttarakhand Council for Science and Technology (UCOST)	Dr. Ankush Mittal (PI) Dr. Puneet Goyal (Co-PI)	5.98 3 Applied for Extension	21-12-2011
3	Investigating the Source of the Spoofed Emails	UCS&T/R&D/PHY SC.- 05/12-13/6173	Uttarakhand Council for Science and Technology (UCOST)	Mr. Sumit Pundir (PI)	1.48 2 Applied for Extension	22-3-13
4	Automated surveillance system for traffic volume estimation and redirection	UCS&T/R&D/P HY SC.-05/12-13/6178	Uttarakhand Council for Science and Technology UCOST	PI: Prof. Durgaprasad Gangodkar Co-PI: Dr. Ankush Mittal Dr. Nitin Khanna	1.54 2 Applied for 6 months extension	22-3-13
5	Elucidation of possible vaccine candidates and drug targets for Encephalitis using reverse vaccinology approach	UCS&T/R&D/LS- 18/12-13/6141	Uttarakhand Council for Science and Technology UCOST	PI: Dr. Kumud Pant. Co-PI: Dr. Bhaskar Pant.	3.98 2 Applied for 4 months Extension	20-03-2013

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration :
Digital Image Processing (USAC)
Personal Tracking System (USAC)

b) International collaboration : None

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

SN	Funding Agency	No. Of Projects	Grant Received in Rs.
1	Dept. Of Atomic Energy	1	24.35 lacs
2	UCOST	4	12.98 Lacs

• Ongoing University Funded Projects

Sr. No	Name of PI	Name of Project	Funding Amount in Rs.

1.	Prof Dr. Kamal Ghanshala	Rural Informatics (Design and implementation of village empowerment model through leveraging ICT and associated technologies).	75,00,000.00
----	--------------------------	--	--------------

• Completed University Funded Projects

Sr. No	Name of PI	Name of Project	Funding Amount in Rs. Lakhs
1.	Prof Dr. Kamal Ghanshala	Baseline survey to assess IT awareness in Uttarakhand	35.7
2.	Dr. D R Gangodkar	Establishing private cloud computing facility for offering infrastructure and storage as service	3.0
3.	Dr. D R Gangodkar	Developing infrastructure for storage and analysis of big data	2.0
4.	Akhilesh Sharma	Alumni Website development	2.0
5.	Akhilesh Sharma	Mobile application for Women safety	2.0
6.	Dr. Devesh P Singh & Garvit Duggal	Android based software projects	2.0
7.	Mr D. Bordoloi and Sameer Goyal	Admission Counseling software development	2.0
8.	Mr Kamlesh Purohit Mr Ramesh Rawat	MIS based software for Library management	2.0
TOTAL			50.7

20. Research facility / centre with

- State recognition : USAC, USERC
- National recognition : None

- International recognition : None

21. Special research laboratories sponsored by / created by industry or corporate bodies

- Data Analytics lab (by EMC²)

22. Publications (since 2009)

- Papers published in peer reviewed International journals: 131
- Papers published in National/ International Conferences : 180
- Monographs : None
- Books / Chapters in Books /Edited Books : 35
- Number listed in International Database : 311
- Citation Index : 0 to 408
- SNIP : 0.090-3.136
- SJR : 0.120-1.379
- H – Index : 0 to 11
- Impact Factor : 0 to 3.452

23. Details of patents and income generated

- Indian Patent Application 2247/DEL/2014: A System and Method for Security Enhancement
Priority date – 07/Aug/2014 Filed Complete on 07/Aug/2014
Inventors: Puneet Goyal, Nitin Khanna
Also filed PCT on 28/Apr/2015 – PCT/IB2015/053080 (ISA – EP).
- Indian Patent Application 2646/DEL/2014: Secure Authentication using dynamic passcodes
Priority date – 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan
Also filed PCT on 15/Sep/2015 – PCT/IB2015/057079 (ISA – IN).
- US Patent Application 14/809746: A System and Method for Security Enhancement
Priority date – 07/Aug/2014 Filed Complete on 27/Jul/2015
Inventors: Puneet Goyal, Nitin Khanna
- Canada Patent Application 2899803 : A System and Method for Security Enhancement
Priority date – 07/Aug/2014 Filed Complete on 06/Aug/2015
Inventors: Puneet Goyal, Nitin Khanna
- Canada Patent Application (Appln. No. yet to receive) : A System and Method for Security Enhancement
Priority date – 15/Sep/2014 Filed Complete on 15/Sep/2015
Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan

24. Areas of consultancy and income generated : Software Development

Sl. No	Consultancy Assignments/ Training program	Department	Project Tenure	Amount(in Rs.)	Faculty Incharge
1	Training for Software Development and testing for AMOGEO ITES	CSE	Nov 2014- Oct 2015	2.0 Lakh	Dr. Sushil Dimri Dr. Devesh Pratap

25. Faculty selected nationally / internationally to visit other laboratories / institutions industries in India and abroad

Faculty	Visit
Dr. R.C. Joshi	Visited different organizations as Member/Chairman of Various expert Committees like AICTE, NBA, DEC, UGC
	Visited NIT Jaipur to deliver key note address on Cloud Computing
	Visited AKGEC Ghaziabad to deliver key note address on Wireless Sensor Networks in Environment Monitoring
	Visited DRDO Delhi as part of selection committee for Scientist-G
Dr. Kamal Ghanshala	Visited Birmingham City University as an invited expert
Dr. D.R. Gangodkar	Visited NBA Singapore for attending FDP
	Visited different organizations as Committee Expert
Dr. Puneet Goyal	Visited Microsoft Innovation Center (MIC) – G. L. Bajaj Institute of Technology & Management, Greater Noida as a mentor of students for Microsoft Imagine Cup 2014 National Finals
	Visited Indian Institute of Technology (IIT), Delhi as Jury Member, IIT Delhi Open House 2014 and 2015
	Visited as Keynote speaker on World Telecommunication & Information Society Day, celebrated on Monday, May 18, 2015 at The Institution of Engineers (India), Roorkee Local Centre, IIT Campus, Roorkee.
	Visited as Mentor on Startup-Weekend event organized by The Entrepreneurship Development Cell (eDC) of IIT Delhi at IIT Delhi in Sept. 2014.

	<p>Visited Office of the Patron, National Academy of Burns, India for discussion and consultation with Padmashree Prof. J.L. Gupta, (MS, FRCS, FICS, FAMS), Patron-NABI and Ex-HoD, Safdrajung Hospital Burns Department – New Delhi, in relation to project work aimed for assisting burn victims.</p> <p>Visited Indraprastha Institute of Information Technology(IIT), Delhi to participate in IIT Delhi Research Showcase (Apr 2014)</p> <p>Visited IBM Research Lab, ISID Campus along with students to meet and discuss latest research work with IBM experts (6th Dec. 2013)</p> <p>Visited IBM Labs for meeting with Dr. Gopal Pingali, Mr. Neeraj Gupta, and also with other IBM experts via tele-conferencing for research work in Information security area (Nov. 2013)</p>
Dr. Ankush Mittal	Visited IIT Roorkee to deliver Expert Lecture during QIP/STC on “Image Processing Techniques with Multidisciplinary Applications” organized by IIT Roorkee
Dr. Sushil Dimri	Visited Gurukul Kangri University and HNB Garhwal University as an Examiner for different exams
Dr. A.S. Shukla	<p>Visited institutions under UTU as an expert in inspection committees</p> <p>Visited Gurukul Kangri University and HNB Garhwal University as an Examiner for different exams</p> <p>Member of selection Committee in DEAL, Dehradun.</p>
D.Bordoloi	<p>Visited TCS, Gurgaon to discuss Industry Academic relations</p> <p>Visited Infosys, Chandigarh to discuss about Campus Connect Program</p>
Dr. Bhasker Pant, Dr. A.S. Shukla, Neha Garg, Manish Sharma, Sumit Pundir, Hemant Singh, Ankur Choudhary	Visited Infosys, Chandigarh to take part in Faculty Enablement Program on different technologies
Ankur Choudhary, Vijay Singh	Visited R.K. University, Rajkot, Gujrat to take part in Faculty Enablement Program on Mobile Computing organized by Infosys

26. Faculty serving in

- a) National committees b) International committees c) Editorial Boards d) any other (please specify)

Faculty	Committee/Editorial Board	National/ International	Membership
International			
Dr. D.R.Gangodkar	IEEE NGCT 2015	International	Program Committee Member / Reviewer
Dr. D.R.Gangodkar	IEEE Intelligent vehicle Symposium 2015, Korea	International	Reviewer
Dr. Bhasker Pant	IEEE Transactions on Evolutionary Computation	International	Reviewer
Dr. Puneet Goyal	IEEE Transactions on Image Processing	International	Reviewer
Dr. Puneet Goyal	Journal of Electronic Imaging	International	Reviewer
Dr. Puneet Goyal	Signal Processing: Image Communication (Elsevier)	International	Reviewer
Mr. Sushil C. Dimri	International Journal of Computer and Information Technology (IJCIT)	International	Reviewer
Dr. Devesh Pratap Singh	IEEE Transactions on Evolutionary Computation	International	Reviewer
Vijay Singh	IEEE Transactions on Evolutionary Computation	International	Reviewer
Vijay Singh	International Journal on Computation Theory and Engg	International	Reviewer
Dibyahash Bordoloi	IEEE Sensors Journal	International	Reviewer
National			
Dr. Ankush Mittal	Project Review and Steering Group (PRSG), Ministry of Communication and Information Technology	National	Expert Committee member
Mr. Sushil C. Dimri	“Pragyan” Journal of Information technology ,ISSN : 0974-5513	National	Reviewer
Mr. Sushil C. Dimri	International Journal of Mathematica (IJM)	National	Reviewer

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
- Periodic conduction of Workshops, FDPs at the institute
 - Faculties are encouraged to attend workshop, seminar in the related field and also to organize the same
 - Faculty members join Enablement Programs at Infosys as part of Campus Connect Program
 - Provision of Seed Money for conducting research
28. Student projects
- percentage of students who have done in-house projects including inter-departmental projects
 - Engineering – 100%
 - percentage of students doing projects in collaboration with other universities industry / institute
 - MCA – 100%
29. Awards / recognitions received at the national and international level by
- **Faculty Members**
- Prof. Dr. Kamal Ghanshala – Recipient of the Best Paper Presentation Award in International conference on Intelligent Systems, Data Mining and Information Technology (ICIDIT'2014) April 21-22, 2014 Bangkok (Thailand).
 - Prof. Dr. Kamal Ghanshala – Awarded Certificate for Excellent Paper at the 3rd International Conference on Computer Communication and Management (ICCCM) 2013, at Copenhagen, Denmark, May 19-20, 2013
 - Dr. Puneet Goyal – Awarded 2nd prize in Poster Competition at IIIT Delhi Annual Research Showcase 2014. Some of the Jury members there were : Dr. Kaushik Saha (Director, R&D, Samsung), Lipika Day (Principal Scientist, R&D, TCS), Dr. Turbo Majumder (Faculty, IIT Delhi).
 - Dr. Puneet Goyal received the Research of the Year award at International Innovation, Sustainability, and Entrepreneurship Summit 2014' held at IIT-Delhi, for his research work in security. This summit is an initiative of Foundation for Innovation & Technology Transfer (FITT)-IIT Delhi, IIT Delhi Alumni Association and Knowledge Resource Development & Welfare Group, India.
 - Dr. Puneet Goyal – served as Jury Member – IITD Open House 2014 and 2015 for IITD Alumni awards Evaluated several UG and PG projects.
 - Dr. Puneet Goyal received “Best Poster Presentation” award in IEEE Intl. Conference on Medical Imaging, m-Health and Emerging Communication Systems (MedCom – 2014) held at Greater Noida, India during November, 07 – 08, 2014

- Dr. A. S. Shukla awarded Vivekananda Award 2013 for Social Service by Uttarakhand Government. Also awarded for Highest Blood Donation (Individual) 31 times by Redcross Society and Uttarakhand Aids Control Society (2011-2015)
- Dr. E. S. Pilli received Best Paper Award in the International Symposium on “Cloud and Services Computing” during Dec. 16 -19, 2012 at NITK Surathkal.
- Dr. E. S. Pilli awarded ISEA Fellowship of Rs 15,000/- per month for one year from the Information Security Education & Awareness Project under the Department of Information Technology for exceptional research in Information Security.

➤ **Students**

- Abhishek Ranjan, B.Tech (CSE) student got AIR Rank 112 in GATE 2015(CSE) with 99.95 percentile.
- Paras Arora, B.Tech(CSE) student selected for MS Program at prestigious University of Southern California, and also for MS program at Stony Brook University (with financial aid).
- B.Tech CSE students: Syed Mohd Ali, Vaibhav Pande and Subodh Kumar won the 3rd prize in National Finals of Microsoft Imagine Cup 2014 under World Citizenship category, receiving prizes worth more than Rs. 1 Lakh from Microsoft, LinkedIn and Nokia. Around 60000+ teams from India participated in Microsoft Imagine Cup 2014.
- Megha Saraswat, B.Tech CSE 2015 student was awarded state level Rani Laxmibai Award (Rs. 50,000 cash, Bronze Statue of Rani Laxmi Bai and a citation) from UP Chief Minister Akhilesh Yadav on occasion of Birth Anniversary of Hockey Wizard Major DhyanChand on 29th Aug 2015
- Rahul Sharma B. Tech. (CSE) got All India Rank 14th in GATE 2014 with 99.99 percentile, while Akshay Rajput, B. Tech. (CSE) got all India Rank 70th in GATE 2014 with 99.96 percentile.
- Prakhar Gairola – B.Tech (CSE) got 99.96 percentile and All India Rank 99 in GATE 2013.
- Akshay Bhardwaj and Ayush K Dua obtained 2nd position in Multirover organized in Techkriti-Annual technical and entrepreneurial festival of IIT Kanpur in Mar 2014. They also won 1st prize in Robotics 2014 event at GB Pant University, Pantnagar.
- Abhilash Semwal, Btech(CSE) student was awarded Rs 5 lakh by Chief Minister of Uttarakhand Mr Harish Rawat for his innovation ‘Bomb Detector through Mobile.’ The same innovation was among top three contributions in IIT Kharagpur Tech Event, was recipient of Innovation Award in Bangalore. It was also selected as one of the top ten projects in Make in India Project.

- GEU CSE team of Ankit and Amit Rawat won the Infosys Aspirations 20-20 Chandigarh DC competition 2013 beating 300+ teams coming from 41 different colleges/universities of Uttar Pradesh, Haryana, Delhi, Rajasthan, Punjab and NCR region.
- Megha Saraswat received Special Jury Award during Regional finals of prestigious IET India Scholarship Regional Finals. She came within top 0.8% amongst around 4000 nationwide applicants.
- Saurabh Dwivedi, MTech-CSE student, did internship at IVC team of our IRCCYN laboratory (Nantes' Research Institute of Communication and Cybernetics) from 19 Jan 2015 to 27 Feb 2015.
- Nikunj Kumar Agrawal a student of B.Tech(IT) won 1st prize in the event 'India Calling' at IIT Kharagpur in 2013. He also won 2nd prize at ADZAT event in IIT Kharagpur in 2013.
- Sagar Rawat & Gurmohit Singh Grower obtained 2nd position in Robo competition during Cognizance 2014 the Annual Technical Festival of IIT Roorkee
- Tanya Kukreja selected for 2014 Summer Workshop on Design and Innovation at IIT Delhi with stipend of Rs. 10,000/- per month. There were only 25 students selected from all across the country.
- Two students of Btech(CSE) Abhishek Pandey and Abhishek Ranjan took part in the Nobel Laureates conclave at Indian Institute of Information Technology Allahabad in December 2013
- GEU students' team- The Coder's Protocol (Naman Wats, Preetam Roy, Rahul Jaiswal) got selected for ACM ICPC 2014 Kharagpur Site Contest. Only 100 teams were selected from 446 participating teams, all across India.
- GEU students' team- The Coder's Protocol (Naman Wats, Preetam Roy, Rahul Jaiswal) got selected for the ACM ICPC 2014 Amritapuri Site Contest They were one of the 255 teams selected from 1534 teams that participated from all across India. Most of the selected teams are from IITs/IITs only.
- GEU students' team- CodersCreed (Vijay Vikram, Vikas Chauhan, Jai Sharma) got selected for ACM ICPC 2014 Gwalior Site Contest to be held on December 20-21, 2014 at ABV-Indian Institute of Information Technology & Management, Gwalior, India. They were one of the 89 teams selected from 554 teams that participated from all across India.
- From amongst 77 participating teams, GEU students' team stood 6th in Startup-Weekend event organized by The Entrepreneurship Development Cell (eDC) of IIT Delhi at IIT Delhi in Sept. 2014.
- GEU team consisting of Preetam Roy Choudhury(BTech IT), Naman Wats(BTech CS) and Rahul Jaiswal(BTech CS) wins accolades at Asia ACM ICPC at IIT Kanpur

- Consistently highest number of placements among all branches
- Two students of BTech(CSE) Gaurav Arora and Lubhna Kaul becomes student Ambassadors of EMC for the session 2013-14
- 11 GEU CSE students completed IBM Internship projects under the Global Remote Mentoring program of IBM University Relations team.
- Three students Prachi Sharma, BTech(CSE), Drishti Sethi BTech(CSE), and Sahil Grover, BTech(IT) did two months internship (Jan-Feb 2014) at Polytech Nantes, France.
- Megha Saraswat, a student of B.Tech(CSE) represented Uttarakhand in the 64th National Basketball Championship held at Delhi. She also took part in the International Soft Tennis competition held at Ahmedabad in Nov 2013 and Senior National Soft Tennis competition in June 2013.
- First Prize, in Solo Dance in IIT Roorkee (Saharanpur Campus), Shashank Pathak, BCA VI, in event Rahpsody-2014, 7, 8, 9 March 2014.
- Second Prize, in Group Dance IIT Roorkee (Saharanpur Campus), Vivek Negi, Nitish Rawat, Deepak Dhami, of BCA and Shashank Pathak of BCA in event Rahpsody-2014, 7, 8, 9 March 2014.
- First Prize, in Solo Dance in Petroleum University, Shashank Pathak, BCA, in event Music Art Dance-2013, 26 October 2013 at IIT Roorkee.
- First Prize, in Solo Dance in IIT Roorkee, Shashank Pathak, BCA, in event Foot Loose, August 2013.
- Third Prize, in Group Dance IIT Roorkee (Saharanpur Campus), BCA in event Foot Loose, August 2013.
- First Prize in Dance Competition at Petroleum University, Harshit Sharma, on 25 October, 2013.
- First Prize in Dance Competition at Pantnagar University, Harshit Sharma, 07-09 February, 2014.

30. Seminars/ Conferences/Workshops organized and the source of funding (national/international) with details of outstanding participants, if any.

SN	Title	Activity Type	Dates	Resource Persons
1	Guest lecture cum Interactive Research Seminar	Guest Lecture	May 22, 2015	Mr. Sachin Gupta, Country Leader, Business Development, IBM Research India, New Delhi
2	Advances in Computer networks	FDP	Feb 16 – 20, 2015	Dr Aniket Mahanty of University of Auckland, New Zealand
3	Enterprise Mobile	FDP	Jul 22 – 25,	Mr. Gaurav Bhattacharjee,

	Application Development Using Worklight		2014	Technical lead, IBM India Software Labs, New Delhi
4	National Level Faculty Training Program on Cloud Infrastructure and Services	FDP	May 28 – 31, 2014	Mr RevelonDsouza, Trainer EMC2 Education services. Mr ShrayMadan, Program Admin, EMC2Academic Alliance India, Russia, South Asia, Australia, Newzeland
5	Guest lecture cum Interactive Research Seminar	Guest Lecture	Sep 17, 2013	Mr. Neeraj Gupta, Country Leader, GTS, IBM, India
6	Cloud Computing and High Performance Computing	FDP	May 30, 2013	Experts from IBM
7	Understanding of Tally ERP software	Workshop	Mar 8 – 15, 2013	Mr. Iqbal Singh Sawhney
8	Network Security Issues and Resource Optimization	FDP	Oct 27 – 28, 2012	Dr. R.C. Mittal(IIT Roorkee) Dr. Mayank Dave(NIT Kurukshertra) Dr. DurgaToshniwal(IIT Roorkee) Dr. R.B.Patel (GBPantEngg. Pauri)
9	MATLAB essentials for Communication & Speech Processing	FDP	Aug 25 – 26, 2012	Prof. Anamika Bhatia, Dept. of ECE Prof. Shashidhar G. Koolagudi, Dept. of CS/IT Prof. Rajarshi Mahapatra, Dept. of ECE Prof. Deepak Pandey, Dept. of ECE
10	FDP on Wireless Sensor Networks	FDP	Aug 4 – 5, 2012	Prof. Dharma P. Agrawal, OBR Distinguished Prof, University of Cincinnati, Prof. Manoj Mishra (IIT Roorkee),

				Dr. Narottam Chand(NIT Hamirpur), Dr. R.C.Joshi (Graphic Era University)
11	Application of Artificial Intelligence to Image Processing	Guest Lecture	Apr 27, 2012	Prof K K Biswas, Department of Computer Science Engineering, IIT Delhi
12	New Teaching Methodology	Guest lecture	Apr 16,2012	Prof. Vipin Gupta, Co- Director, Global Management Center, California State University
13	Workshop on Network Simulator	Workshop	Feb 25-26, 2012	Dr. Anjali Sardana (IIT Roorkee) Dr. P.Sateesh Kumar (IIT Roorkee)
14	Image & Signal Processing using MATLAB	Guest lecture	Apr 30, 2011	Mr. Vinod Taneja, Technical Director NIC, Dehradun.
15	National Conference on Power of Algorithms	Conference	May 08, 2010	Prof Durgesh Pant (Kumaon University) Prof R.K. Sharma (Thapur University) Dr Anuraag Awasti (CEO , CampCorp) Prof Suresh Chander (JNU, Delhi) Dr Harish Sharma (FRI, Dehradun) Dr SP Kulshrestha (NIC Dehradun) Dr K Ram Mohan Rao(, IIRS, Dehradun) Dr Col Rakesh Sharma

31. Code of ethics for research followed by the departments : Yes, as per UGC Guidelines

32. Student profile programme-wise:

(2014 pass out Batch)

Course Name	Applications Received	Selected		Pass Percentage (%)	
		Boys	Girls	Boys	Girls
B.Tech (CS)	484	148	92	81.1	93.5
B.Tech (IT)	315	118	52	74.6	88.5
BCA	280	106	59	67.0	91.5
M.Tech (All)	50	43	27	67.5	89.0
M.Sc(IT)	20	6	2	95.3	81.0
MCA	480	83	63	66.7	50.0

33. Diversity of Students

Name of the Programme	% of the students from the same university	% of students from other universities within the state	% of students from universities outside the state	% of students from other countries
M.Tech	6.00	40.00	54.00	0.00
MCA 2010	13.52	62.70	23.77	0.00
MCA 2011	35.46	37.59	26.95	0.00
MCA 2012	36.67	38.33	25.00	0.00
MCA 2013	39.51	38.27	22.22	0.00
MCA 2014	46.53	24.75	28.71	0.00
M.Sc (IT) 2010	0.00	44.44	55.56	0.00

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Exam	Year	No of Students
GATE	2015	27 students with more than 90 percentile including AIR 112
GATE	2014	35 students with more than 90 percentile including AIR 14 and 70
GATE	2013	21 students with more than 90 percentile including AIR 99
BARC	2015	5 students (out of All India 15 selections) in CSE including All India First Rank
BARC	2014	3 students in CSE (out of

		total 12 selected)
SSB (Defence services)	2015	01 student
IOCL	2015	01 student
IOCL	2014	01 student
NET	2013	01 student

35. Student progression

Student Progression	Percentage Enrolled
UG to PG <ul style="list-style-type: none"> B.Tech to M.Tech BCA to MCA 	10 % 60 %
PG to PhD <ul style="list-style-type: none"> M.Tech/ MCA to PhD 	10%
Employed <ul style="list-style-type: none"> Campus Selection 	<ul style="list-style-type: none"> 2014 Passing Out Batch – 67.64%
Entrepreneurs	1% (4 Students)

36. Diversity of staff

Percentage of faculty who are graduates of	
The same university	5.68 %
From other universities within the state	46.59 %
From Universities from other states	45.45 %
From universities outside the country	2.27 %

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period
Ph.D. – 10

38. Present details of departmental infrastructural facilities with regard to

- Library
 - 1 CSIT Departmental Library with 106 print volumes
 - 1 MCA Library with 23729 print volumes, 300 Audio-Visual volumes, 2262 Reference Books, Access to e-resources
- Internet facilities for staff and students
 - The campus is fully WI-Fi enabled. Wireless and wired internet access is provided through 24*7, 1Gbps and 55Mbps Internet

access.

- Total number of class rooms 18 Classrooms
- Class rooms with ICT facility 6
- Students' laboratories 7
- Research laboratories 1
- Cloud Computing and HPC Lab 1
- Data Analytics Lab 1

39. List of doctoral, post-doctoral students and Research Associates

a. from the host institution/university

- Post Doctoral Students : 01
- Research Associates : None
- Doctoral Students : 10

b. from other institutions/universities

- Post Doctoral Students : None
- Research Associates : None
- Doctoral Students : 13

40. Number of post graduate students getting financial assistance from the university.

- 53

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Proposal is put up to BOS which constitute of some internal and external expert.
- Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42. Does the department obtain feedback from

a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

- Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.

b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

- Yes. The feedback details from students are given to the HOD confidentially. HOD

appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.

- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?
- Yes. Feedbacks from alumni through regular alumni meet and employers considered for the upgradation of curriculum meeting current/latest need of employers and other industries.

43. List the distinguished alumni of the department

Name	Current Organization
Vaibhav Agarwal, BTech(CSE) 2010	Yahoo, USA
Abhishek Garg, BTech(CSE) 2010	Dell, USA
Mayank Sharma, BTech(CSE) 2005	Juniper Networks, Malaysia
Nitin Dandriyal, BTech(CSE) 2005	UBS Investment Bank, Singapore
Prakhar Gairola, BTech(CSE) 2013	Amazon, Hyderabad
Chandra Koduru Raja, MTech(IT) 2011	Amazon, Hyderabad
Prachi Sharma, BTech(CSE) 2013	United Nations, Geneva
Chandra Shekhar Joshi, BTech(CSE) 2010	Goldman Sachs, Bangalore
Avijit Sharma, BTech(CSE) 2010	Symantec, Pune
Meetul Jain, BTech(IT), 2010	Managing Director at Microsys Software Solutions, Noida
Mani Madhukar, MTech(CSE) 2011	Cloud Lead, South India, IBM, Bangalore

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Sr	Title	Type of Program	Dates	Resource Persons
1	Guest lecture cum Interactive Research Seminar	Guest Lecture	May 22, 2015	Mr. Sachin Gupta, Country Leader, Business Development, IBM Research India, New Delhi
2	Work shop on Cryptography and security	Workshop	Mar 14, 2015	Mr. Deepanshu Khanna, Cryptanalyst, Insergo Pvt. Ltd
3	Advances in Computer	Workshop	Feb 16 – 20, 2015	Dr Aniket Mahanty of University of Auckland, New Zealand

	networks			
4	Linux- Ubuntu	Workshop	Nov 20, 2014	Collaboration with IIT Bombay
5	C and CPP	Workshop	Oct 10, 2014	Collaboration with IIT Bombay
6	Enterprise Mobile Application Development Using Worklight	Workshop	Jul 22– 25, 2014	Mr. Gaurav Bhattacharjee, Technical lead, IBM India Software Labs, New Delhi
7	Demands of Software Industry	Guest Lecture	Apr 23, 2014	Mr. Sunny Puri, Team Leader
8	Scope of Research in Industry	Guest Lecture	Apr 21, 2014	Mr. Saurabh Kumar
9	Entrepreneurship	Guest Lecture	Mar 07, 2014	Surjan Singh Negi, Treewalker Technologies Pvt Ltd, Bangalore
10	Work shop on Android Application Development and Animation	Workshop	Feb 15, 2014	Mr. Amit, Training Head, CETPA Infotech, Pvt Ltd.
11	PHP & MySQL, Linux, C++, GIMP	Workshop	Jan 28, 2014	Collaboration with IIT Bombay
12	Search Engine Optimization	Workshop	Nov 30, 2013	Jagbeer Singh, Kreative Mines, a global Technology and Digital Media Company
13	My SQL PHP	Workshop	Oct 29, 2013	Collaboration with IIT Bombay
14	Cloud Computing and high performance computing	Guest Lecture	May 30, 2013	Experts from IBM
15	Hack-O-Mania 1.0 on network security	Workshop	May 11 – 12, 2013	Mr. Sulabh Jain, Research Analyst – Network Security for Sandrocke Securities Pvt. Ltd.
16	Loophole+ Ethical Hacking Workshop	Workshop	May 11-12, 2013	Kyrion Digital Securities (P) Ltd
17	Understanding of	Workshop	Mar 8 – 15,	Mr. Iqbal Singh Sawhney

	Tally ERP software		2013	
18	Network Security Issues and Resource Optimization	Workshop	Oct 27 – 28, 2012	Dr. R.C. Mittal(IIT Roorkee) Dr. Mayank Dave(NIT Kurukshertra) Dr. DurgaToshniwal(IIT Roorkee) Dr. R.B.Patel (GBPantEngg. Pauri)
19	MATLAB essentials for Communication & Speech Processing	Workshop	Aug 25 – 26, 2012	Prof. Anamika Bhatia, Dept. of ECE Prof. Shashidhar G. Koolagudi, Dept. of CS/IT Prof. Rajarshi Mahapatra, Dept. of ECE Prof. Deepak Pandey, Dept. of ECE
20	Wireless Sensor Networks	Workshop	Aug 4 – 5, 2012	Prof. Dharma P. Agrawal, OBR Distinguished Prof, University of Cincinnati, Prof. Manoj Mishra (IIT Roorkee), Dr. Narottam Chand(NIT Hamirpur), Dr. R.C.Joshi (Graphic Era University)
21	Application of Artificial Intelligence to Image Processing	Guest lecture	Apr 27, 2012	Prof K K Biswas, Department of Computer Science Engineering, IIT Delhi
22	Efficient Data base Design	Workshop	Mar 26, 2012	Mr. Gaurav Saxena, Lead Consultant with Headstrong services India Private Limited
23	Managing Codes	Workshop	Mar 25, 2012	Mr.Rajiv Ranjan Giri, Tata Consultancy Services, NOIDA
24	Project management concept as per Industry	Guest Lecture	Mar 24, 2012	Mr Arvind Joshi, Blackrock Inc.
25	Workshop on Network Simulator	Workshop	Feb 25-26, 2012	Dr. Anjali Sardana (IIT Roorkee) Dr. P.Sateesh Kumar (IIT Roorkee)
26	Writing efficient	Workshop	Feb 25 -26,	Mr. Sameer Goyal, Senior

	Code		2012	Associate Platform L1 at Sapient Global Markets
27	Image & Signal Processing using MATLAB	Workshop	Apr 30, 2011	Mr. Vinod Taneja, Technical Director NIC, Dehradun.
28	National Conference on Power of Algorithms	Conference	May 08, 2010	Prof Durgesh Pant (Kumaon University) Prof R.K. Sharma (Thapur University) Dr Anuraag Awasti (CEO , CampCorp) Prof Suresh Chander (JNU, Delhi) Dr Harish Sharma (FRI, Dehradun) Dr SP Kulshrestha (NIC Dehradun) Dr K Ram Mohan Rao(, IIRS, Dehradun) Dr Col Rakesh Sharma

45. List the teaching methods adopted by the faculty for different programmes.
- Instructional tools like Lectures, Assignments, Discussions, Classroom activities, quizzes (both online and offline) and presentations.
 - Individual / group projects are assigned to students for collaborative learning, better visualization of concepts throughout all semesters in the form of mini-projects, major projects and dissertations..
 - Industrial visits and guest lectures are organized for students to impart practical exposure.
 - The teachers make extensive use of latest ICT methodologies in order to make the delivery more efficient, effective and interesting. The faculty members work on laptops and deliver lectures using power-point presentations, and also make assignments, lecture slides, podcasts, etc. available through University Learning Management System (MOODLE).
 - Career Skills training is offered to instil and develop positive attitude, temperament and necessary skills in students.
 - Self study and guided seminars help develop presentation qualities in the students.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Periodical reviews through tests, quiz, and tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.

- Experiences learnt through their performance in exams, results and employability goad us to take necessary actions.
47. Highlight the participation of students and faculty in extension activities.
- Faculty and students involve in different workshops, seminars and conferences covering emerging technical areas.
 - Participation of the students in All India Inter-varsity competitions, Plantation in the campus, Blood donation in hospitals etc
48. Give details of “beyond syllabus scholarly activities” of the department.
- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
 - Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
 - Organization of conferences/ workshop/ seminar on thrust areas which provide an opportunity to interact with eminent experts.
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
Yes, BTech(CSE) and BTech(IT) was accredited by NBA on 16 March, 2007 and MCA on 27 July 2006 before becoming a University. Also all programs are ISO Certified.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- Updated the curriculum by introducing new areas like High performance computing, Bioinformatics, Data Mining, Sensor N/w , Image processing etc.
 - Faculty is encouraged to
 - Collaborate with industry
 - Participate in seminars/symposiums (national/ international)
 - Publish the findings of their research
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strength	Weaknesses
The Founder Promoter is a CSE expert in Data Structures field. He takes regular classes and engages himself in training and research. The Chancellor of University who is also	Collaborative research/ Courses need to be improved

Professor in the Department is internationally acclaimed academician and researcher.	
Highly Qualified and Experienced faculty members with exposure from Purdue and NUS Singapore	Frequent changes in technology causing obsolescence more frequent
Demand for the course in industry resulting in scope for high end employability	Less number of Industries around the city
Excellent Infrastructure and facilities	Less Govt initiation for Integration
MoU with Industries resulting in an innovative curriculum	Undergraduate students more attracted toward placements than research

Opportunities	Challenges
Lot of Scope for consultancy and research	To keep pace with change in technology and updating knowledge by the faculty members
Introduction of industry relevant UG and PG courses	To attract good researchers as both students and faculty
To attract research scholars through conferences and workshops/ GATE qualified PG Students	To further strengthen the research culture which is complimentary to high quality education
To build interdisciplinary programs with computing as the base, e.g. Computing and Maths, Computing and Economics, Computing and Digital Media, etc	To get all students suitably placed with high end packages
To grow the CSE program, particularly in emerging areas like mobile computing, robotics, etc	To continue and build on the momentum created towards achieving measures of excellence

52. Future plans of the department.

- Develop state of the art facilities for Data Sciences
- The department intends to keep pace with the emerging technology by pursuing research work in the contemporary challenging domains like Quantum Computing
- To start M.Tech program in Big Data Analytics
- Move towards more student centric teaching and learning process.

Evaluative Report of the Department

1. Name of the Department : **Department of Biotechnology**
2. Year of establishment : 2008
3. Is the Department part of a School/Faculty of the university : Yes, School of Engineering & Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D. Sc., D. Litt., etc.)
 - Under Graduate Courses
 1. B. Tech. Biotechnology
 - Post Graduate
 1. M. Tech. Biotechnology
 2. M.Sc. Biotechnology
 3. M.Sc. Microbiology
 - Dual Degree
 1. B. Tech. Biotechnology + MBA
 - Ph. D. Program in Biotechnology
5. Interdisciplinary programmes and departments involved –
Name of program : Dual Degree - B. Tech. Biotechnology + MBA
Departments involved : Department of Mathematics, Department of Management Studies, and Department of Professional Communication.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - Certificate course in Environment Biotechnology and Biodiversity Conservation with GEHU
7. Details of programmes discontinued, if any, with reasons : NIL
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
 - Semester with choice based credit system
9. Participation of the department in the courses offered by other departments

- Department of Hotel Management- Bachelor of Hotel Management (Food Science and Nutrition)

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	2	5	5
Associate Professors	4	2	2
Asst. Professors	10	9	9

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4
Prof. L.M. S. Palni	Ph.D (University of Wales, U.K).; FNASc, FAAS, FNA, FISPM, PDF (ANU, Canberra)	Dean & Prof.; Former Director, GBPIHED, Almora	Plant science (plant growth substances, plant tissue culture, plant-microbe interactions, Biodiversity Conservation)	43	3 guided + 1 submitted
Dr. A. Thapliyal	Ph.D. (HNBGU), M.Sc., B.Sc., (GATE) ; PDF Fellowship (USU-USA),	HOD & Professor	Signal Transduction, Neuroscience, Conservation Biotechnology	21	2 submitted + 2 ongoing as Supervisor + 4 as co-supervisor

Dr. S. M. Waheed	Ph. D. (JNU, Delhi), M. Sc., B.Sc.; PDF Fellowship (Rutgers, Case Western Reserve, Cleveland Clinic)	Associate Professor	Biotechnology, Vaccine Development	13	03 ongoing as Supervisor + 2 as co-supervisor
Dr. N. Rai	Ph.D. (Gurukul Kangari University), M.Sc., B.Sc.	Associate Professor	Microbiology, Herbal Drug Development	11	3 Guided +4 ongoing as Supervisor + 4 as co-supervisor
Dr. A. Rani	Ph.D. (GBPant Univ. of Agri. And Tech. Pantnagar), M.Sc., B.Sc., (NET ; GATE)	Assistant Professor	Microbiology, Bioremediation	6	2 ongoing as Supervisor +1 as co-supervisor
Dr. P. Sharma	Ph.D. (Jamia Hamdard), M.Sc.; B.Sc., (NET ; GATE)	Assistant Professor	Cell biology and immunology	10	2 ongoing as Supervisor + 1 as co-supervisor
Dr. P. Gautam	Ph.D. (Jamia Hamdard), M.Sc., B.Sc., (NET)	Assistant Professor	Microbial Pathogenesis and Diagnostics	9	4 ongoing as Supervisor
Dr. N. Kumar	Ph.D. (Bharathiar University/DRDO), M.Sc, B.Sc., (NET; GATE)	Assistant Professor	Molecular Biology, Fungal pathogenesis and Phytopharmacology	7	3 ongoing as Supervisor + 5 as co-supervisor
Dr. K Pant	Ph.D. (NIT, Bhopal), M.Sc, B.Sc.	Assistant Professor	Bioinformatics	9	1 ongoing as Supervisor +2 as co-supervisor
Dr. M. Pant	Ph.D. (HNBGU), M.Sc., B.Sc.	Assistant Professor	Plant Biotechnology	03	3 as co-supervisor

Mr. P. Sarkar	Ph.D. (Pursuing), M.Sc, B.Sc. (NET)	Assistant Professor	Biochemistry and Enzymology	11	NIL
Ms. A. Lal	Ph.D. (Pursuing), M.Tech., B. Tech.	Asst Prof	Bioprocess Technology	04	NIL
Ms. Shweta Tyagi	M.Tech/MBA	Asst Prof	-----	8	NIL
Dr. Ravindernath Chibber	M.Sc, Ph.D	Visiting Prof	Agriculture Biotech.	-----	NIL
Dr. Rakesh Kumar Shah	Ph.D, IFS officer	Visiting Prof	Biodiversity	-----	NIL
Dr Charl Anton Pauw	Ph. D.	Visiting Prof	Pollination Biology	-----	NIL

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors
- Prof. R.N. Chibbar, University of Saskatchewan, Saskatoon, Canada.
 - Dr Rakesh K Shah, Chairman, Uttarakhand Biodiversity Board, Govt of Uttarakhand, Dehradun.
 - Dr Charl Anton Pauw, Stellenbosch University, Matieland, South Africa

13. Percentage of classes taken by temporary faculty – programme-wise information
- 0%

14. Programme-wise Student

Teacher Ratio: UG = 1:16

PG = (a) M.Sc=1:20 (b) M.Tech= 1:12

*Faculty members are teaching to both UG and PG classes and are common for all programs optimally utilizing the existing expertise in the department.

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual -

Staff	Sanctioned	Filled	Actual (including CAS & MPS)
Lab Assistants	4	4	4
Lab Attendant	3	3	3

16. Research thrust areas as recognized by major funding agencies.

➤ Herbal drug development

- Molecular diagnostics and Bioremediation.
- Cell and tissue culture

17. Number of faculty with ongoing projects from
- a) National – 5 on going, 2 completed.
 - b) International funding agencies –nil
 - c) University funded - 1
 - d) Total grants received- Rs. 119.95 lakhs.

Names of the funding agencies, project title and grants received project-wise.

PI/Co-PI	Funding Agency	Project Title	Grants received (Rs.)
Dr. Ashish Thapliyal	UCOST	Screening medicinal plants of secretase enzyme activity...for treatment of Alzheimer	5.90 lakhs (2012-2015)
Dr. Kumud Pant	UCOST	Elucidation of possible vaccine candidates for Encephalitis vaccinology approach	3.98 lakhs (2012-2015)
Dr. Manu Pant	UCOST	In vitro propagation of orchids and macro propagation in Dehradun district of Uttarakhand (completed)	6.62 lakhs (2012-2014))
Dr. Pankaj Gautam	USBD	To develop novel monoclonal antibody of Salmonella species	6.00 lakhs (2012-2015)
Dr. Ashish Thapliyal	GEU Funded	Development of dairy, animal cell culture and molecular diagnostic facility	75.00 Lakh (on going)

18. Inter-institutional collaborative projects and associated grants received
- a) National collaboration –
 - I. Dept. of Biochemical Sciences (DBCS)- DIPAS (DRDO) – grant – NIL
 - II. USBD funded project entitled “DNA barcoding of fishes of Uttarakhand” of Dr. Tribhuvan Chandra (Co-PI) (with Pt. LMS Govt. PG College, Rishikesh) (grant) Rs. 7.89 lakhs (2011-2014)
 - b) International collaboration: Patrick Von Dijck Lab, VIB, Molecular Microbiology KV Leuven Kasteel Park, Arenberg, 31 3001, Leuven – Grant received NIL
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Dr. Anju Rani, CO-PI	DBT	Design up-gradation of vertical sub-surface constructed wetland unit for treatment of dairy waste water	Rs. 14.56 Lakh (2014-2015)
-------------------------	-----	---	----------------------------------

20. Research facility / centre with
- State recognition -
 - Plant Tissue Culture Facility (UCOST)
 - Microbial Technology & Animal Cell Culture lab (USBD now UCB)
 - National recognition : NIL
 - International recognition : NIL
21. Special research laboratories sponsored by / created by industry or corporate bodies -
: 01 (with VCP Cancer Research Foundation, Dehradun)
22. Publications (of all faculty members-OVERALL):
- Number of papers published in peer reviewed journals (national / international) – 79
 - Monographs - 00
 - Chapters in Books - 19
 - Edited Books - 05 (since 2008 – 15)
 - Books with ISBN with details of publishers - 5
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) – 31(Scopus) + 48 (Others)
 - Citation Index – range / average – 80 (total)
 - SNIP - 0.1 – 1.76
 - SJR – 0.2 – 0.5
 - Impact Factor – range / average – 0.1 – 1.5
 - h-index – 30
23. Details of patents and income generated. (income generation NIL so far)
- Department has filed 3 patents recently and is in discussion with BCIL for licensing and ToT.
1. 1447/Del/2014
Title: A Synergistic *Camellia sinensis* Based Anti-candidal Composition
 2. 1500/Del/2014
Title: Primers Probes and Test Kit For The Detection Of Salmonella
PCT Filed
 3. 1625/Del/2014
Title: A Phytochemical Rich Herbal Extract and Process of Extraction Thereof
PCT Filed

24. Areas of consultancy and income generated.: Area of consultancy are divided into two parts, Short Term Training and Academic Consultancy

- Short term training – 04
Income generated – 96,500 +46,500 +87,000 = INR - 2, 25,000.00
- Academic Consultancy-

S. N.	Name	Consultancy Type	Institute/Organization	Year	Amount (INR)
1	Dr. Ashish Thapliyal	Academic / New Courses function	Bharatam Institute, Selaqui, Dehradun	2013-14	17,005/-
2	Dr. Nishant Rai	Academic and Research	Gautam Buddha University, Noida	2015	20,000/-
3	Dr. Nishant Rai	Acad. and Res.	Amity University, Noida	2015	8,000/-
4	Dr. Nishant Rai	Academic and Research	Maharishi Markandeshwar Univ., Mullana, Ambala	2015	4,000/-
5.	Dr. Manu Pant	Academic and Research	GRD Institute, Dehradun	2013	5,000/-

Total = 54,000.00

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

Faculty	Place of visit	Purpose
Prof. LMS Palni	Chair / member of several committees. UGC Adjunct professor	Evaluation and review of projects, internal assessments; Member, Indian delegation; research collaboration , key note/invited speaker in national and
Prof. Ashish Thapliyal	Examiner at HNB GU, Gurukul Kangari University, Integral Univ., Invited speaker - Baba Bhimrao Ambedkar University, Manglayatan University,	Dissertation examinations, invited speaker at workshop, Member BOS, Chair of session
Dr. Nishant Rai	IDPL Haridwar, Examiner at Gurukul Kangari, Integral University, Invited speaker	Selection committee of scientist, Examiner, conference/workshop
Dr. Pankaj Gautam	CBSE school teacher workshop Dehradun	Invited speaker at CBSE teachers workshop

Dr. Navin Kumar	HNB GU Examiner	Practical Examinations
-----------------	-----------------	------------------------

26. Faculty serving in

a) National committees

Prof. LMS Palni in various committees of DRDO, DST, DBT etc.

b) International committees

Prof. LMS Palni in Earthwatch etc.

c) Editorial Boards (Past and Present) :

Prof. L.M.S. Palni Editor-in-Chief, International Journal of Tea Science; Member, Editorial Board, Proceedings of the National Academy of Sciences, India (Biological Sciences),

Dr. Nishant Rai (Editor), Dr. Ashish Thapliyal, Dr. Navin Kumar, Dr. Pankaj Gautam (Editorial Board Members): Biotechnology International Journal,

Dr. Promila Sharma (Editorial Board) International Journal of Plant Biotechnology

d) Any other (please specify)

- IBSC -Institutional Biosafety Committee, approved by DBT, New Delhi)

Dr. P. Gautam (Secretary), Dr. N. Rai (Member), Dr. N. Kumar (Member), Dr.

P. Sharma (Member)

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

- Periodic conduction and attendance of FDP
- Faculties are encouraged to attend workshop, seminar in the related field

Faculty	Workshop/training/similar program	Organizing Institue
Prof. Ashish Thapliyal	<ul style="list-style-type: none"> • Faculty Development Program in Entrepreneurship Development. Date: 25/01/2011 to 5-/02/2011. • National training course on “Molecular Markers for genetic diversity assessment and tools for genome resource conservation • Conservation and Enhancement of fisheries in Northern Hill States” • Developing Research Ideas, Writing Projects and Project Management Workshop. 	<ul style="list-style-type: none"> • sponsored by Entrepreneurship Development Institute (EDI) of India, Ahmadabad, Government of India and Department of Science and Technology (DST), NewDelhi • NBFGR, Lucknow • HNB Garhwal University, Srinagar, Uttarakhand by NBFGR • Jointly organized by Pt. LMS Govt. PG College, Rishikesh NASI, India
Dr. Nishant Rai	<ul style="list-style-type: none"> • Training course on “Biotechnology approach for genomic DNA isolation, sequencing, cloning and characterization” 	<ul style="list-style-type: none"> ○ IIT-Rorkee
Dr. Pankaj Gautam	<ul style="list-style-type: none"> • Recent Advances in Biomaterials and Nano-biotechnology 	<ul style="list-style-type: none"> ○ IIT-Rorkee
Dr. Manu Pant	<ul style="list-style-type: none"> • Orchid culture techniques 	<ul style="list-style-type: none"> ○ National Research Centre for Orchids [NRCO)], ICAR at Pakyong, Sikkim

All faculty members of Biotechnology	•Faculty Development Program “Novel Research Ideas in Biotechnology (NRIB)”	- sponsored by State Biotechnology Department, Government of Uttarakhand, Dehradun.
--------------------------------------	---	---

28. Student projects

- Percentage of students who have done in-house projects including inter-departmental projects
UG- 25% -30%
PG - 5% - 10 %
- Percentage of students doing projects in collaboration with other universities / industry / institute
UG – 70%-75%
PG – 90%-95%

29. Awards / recognitions received at the national and international level by

- Faculty –
 1. Prof LMS Palni was awarded Science Communicator Award in 22nd National Childrens’ Science Congress (2014) and Science and Technology Excellence Award in 9th Uttarakhand State Science and Technology Congress (2015).
 2. Prof. LMS Palni – Fellow of many National Science Academies
 3. Prof. LMS Palni - Member of IPBES Team selected as lead author of the first international assessment on pollination and pollinators.
 4. Prof. LMS Palni – Member steering committee of UNDP’s small grants programme and chair northern circle.
 5. Dr. Navin Kumar – Young Scientist Award, USSTC, UCOST, 2015.
 6. Dr. Nishant Rai – Best oral presentation, International Conference in Pharmaceutical Sciences, 2014
 7. Prof. Ashish Thapliyal – Best oral presentation, International Conference in Pharmaceutical Sciences, 2014
- Doctoral / post doctoral fellows –
 1. Ms. Payal Gupta, DST Inspire Fellow, 2012-16 and Young Scientist AwardUSSTC, UCOST 2014
 2. Mr. Ravi Saini, Young Scientist Award,USSTC, UCOST 2014
 3. Ms. Pushpa Ruwali, Young Scientist Award, USSTC, UCOST 2015
 4. Ms. Priyanka Sati, Young Scientist Award, USSTC, UCOST 2015
- UG Student
 1. Rakesh Biswas :

- Sam Global Award 2014- 27 Jan 2014, SRM University, Chennai.
 - Rhodes Youth forum Award -2012 (Cash award of INR 25 lakh)
 - Youth time Summer School Award- 2013, Croatia.
 - Invited speaker – Technology, Entertainment and Design (TED) , 2014
2. Ms Kamalakshi – B. Tech 8th, Young Scientist Award, USSTC, UCOST - 2015

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Conference: 01 – National (2010) Funding by DBT, UCOST, USBD

Title: Advance in Biotechnology and its role in Aquatic Biodiversity

Conservation and fisheries, 17-18 March, 2010

Jointly organized by Dept. of Biotech, GEU and

RCU Govt. PG College, Uttarkashi

Number of participants – 150

Workshop/ Seminars: 05

- a. Himalaya Day: Conservation of Himalayan Biodiversity- 100 participants
- b. Ecosystem services – 80 participants
- c. NRIB – 30 participants
- d. HRD training – 30 participants
- e. Regional Seminar – 120 participants

HRD Training (including short term)-06

- a. Microbial Technology – 30 participants
- b. Bioinformatics – 100 participants
- c. Plant tissue culture – 32 participants
- d. Bioinformatics – 15 participants
- e. RDT– 13 participants
- f. Farmer’s Training- with NGO (Appropriate Technologies India)

31. Code of ethics for research followed by the departments

As per UGC guidelines

32. Student profile programme-wise: 2015

Name of the Programme (refer to question no. 4)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech.	100	28	72	14%	38%
M. Tech.	17	10	7	17.6%	52.9%
M. Sc.	35	13	22	25.7%	51.4%

M.Sc Microbiology	23	5	18	13%	47.8%
Ph. D.	06	0	1	NIL	16.6%

33. Diversity of students:

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other univ. within the State	% of students From universities outside the State	% of students from other countries
B. Tech	---	---	----	1%
M. Tech	5%	30%	50%	---
M. Sc	0.85%	52.9%	46.25%	2%
Ph. D	24%	52%	24%	2%

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

- Civil Services and Defence Services examinations : NIL
- Defence services : 02
- NET : 01
- SET : 04
- GATE : 11
- Other (WII-NET) : 01

35. Student progression

Student progression	Percentage against enrolled
UG to PG	2-4 %
PG to M.Phil.	N/A
PG to Ph.D.	2-5%
Ph.D. to Post-Doctoral	00%
Employed	
<input type="checkbox"/> Campus selection	60%
<input type="checkbox"/> Other than campus recruitment	40%
Entrepreneurs	1%

36. Diversity of staff:

Percentage of faculty who are graduates	
of the same university	12.5%
from other universities within the State	25%
from universities from other States from	43.75%
Universities outside the country	18.75%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : (2008-2015)

Ph. D. : 06

38. Present details of departmental infrastructural facilities with regard to

- a) Library: 01 Departmental Library (136 volumes of books, dissertation thesis accessible to faculty/ students/ research scholars)
- b) Internet facilities for staff and students - available
- c) Total number of class rooms : 06
- d) Class rooms with ICT facility : 02
- e) Students' laboratories : 04
- f) Research laboratories : 02

39. List of doctoral, post-doctoral students and Research Associates

- a) From the host institution/university- Doctoral – 27

S.No.	NAME OF SCHOLAR	Batch
1.	Pratapar Sarkar	2009
2.	Rashmi Verma	2010
3.	Shweta Kohli	2010
4.	Swati Joshi	2010
5.	Anil Kumar	2010
6.	Tarun Sharma	2010
7.	Himani Badoni	2011
8.	Jigisha Anand	2011

9.	Pramod Rawat	2011
10.	Pushpa Ruwali	2011
11.	Saumya Singh	2011
12.	Shozeb Javed	2011
13.	Nagendra Singh Rathore	2011
14.	Ravi Kumar	2011
15.	Sakshi Painuli	2011
16.	Payal Gupta	2011
17.	Prashant Anthwal	2012
18.	Prabhakar Semwal	2013
19.	Bipin Kumar Sati	2013
20.	Kapil Tyagi	2013
21.	Priyanka Sati	2013
22.	Nupur Gupta	2013
23.	Vinay Kumar	2013
24.	Ankita Lal	2013
25.	Pranjali Gupta	2013
26.	Poonam	2014
27.	Neema Tufchi	2015

b) from other institutions/universities : NIL

40. Number of post graduate students getting financial assistance from the University.
: 3 PG Students
: 10 Ph. D. Students also get university fellowship.
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
 - Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
 - Proposal is put up to BOS which constitute of some internal and external expert.
 - Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.
42. Does the department obtain feedback from

- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
 - b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
 - c. Alumni and employers on the programmes offered and how does the department utilize the feedback?
 - Yes. Feedbacks from alumni through regular alumni meet and employers considered for the up-gradation of curriculum meeting current/latest need of employers and other industries.
43. List the distinguished alumni of the department (10 only)
- Higher Studies
 1. Jaspreet Kaur (MS Case Western Reserve University, Cleveland Ohio, USA)
 2. Nikita Bhatnagar (Qyunghee, University, KOREA ;Ph.D.)
 3. Ruchika Goyal (IIT-G; Ph.D)
 4. Deepika Nandi (RCB; Research and training work)
 5. Tusharika Gupta (IIT Gwahati; M. Tech)
 - Industry/corporate/Govt.
 1. Arti Rani (Panacea Biotec Ltd.)
 2. Praveen Kumar (Monsanto)
 3. Arpit Agnihotri (BIOCON)
 4. Shilpa Balyan (Assistant Scientist, Uttarakhand Council of Biotechnology)
 5. Gaurav Singh (Pfizer Ltd.)
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S no	
1	Seminar on “Intellectual Property and Innovation management in knowledge era” sponsored by NRDC – 13-14 October, 2009
2	National Conference on Advances in Biotechnology and its role in aquatic biodiversity conservation and fisheries, Uttarkashi, 17th – 19th March, 2010.
3	State level awareness campaign against sex-selection and pre-birth elimination of females – project Shrinkhala, Graphic Era University, Dehradun, Jan 29, 2011. This program had a series of workshops in Matli - Uttarkashi, GEU-Dehradun and MKP-Dehradun
4	Regional Seminar on ‘Current Trends in Pharmaceutical and Biopharmaceutical Industries & Students’ Meet on Development of Translational Innovative Ideas in Life Sciences’ (May 23 rd , 2011) sponsored by UCOST, Govt of Uttarakhand at Graphic Era University, Dehradun.
5	Guest Lecture by: Dr. Priya Sivaraman, Product Manager, BIO-RAD laboratories, California, USA. Title: Recent Diagnostic Techniques for Diabetes Date: November 13, 2009
6	Guest Lecture by: Prof. G.S.Randhawa , Professor, Department of Biotechnology, IIT, Roorkee Title: How to be a successful in life Date: August 06, 2011
7	Guest Lecture by: Prof Atul Kumar, Professor, College of Forestry and Hill Agriculture, Rani Chauri Title: Plant Tissue Culture and design of Tissue Culture Lab Date: October17, 2011
8	Guest Lecture by: Mr Nishant Kumar Malaviya, Clinical Research division, Pfizer Title: Future Prospect of Biotech in Clinical Research Date: April 7, 2012
9	Guest Lecture by: Dr A.K. Sharma, Retd. Scientist E, NBRI, Lucknow Title: Plant Tissue Culture Date: April 11, 2013
10	Guest Lecture by: Dr. Madan Mohan Varshney, Vice President of Flex Foods Ltd., Dehradun Title: Applications of Biotechnology in Food Industry Date: October 29, 2013 Venue: Conference room, HM block, Graphic Era University
11	Guest Lecture by: Dr Paul T. Jensen, MBBS, MD, Ohio State University, Wexner Medical Center, USA Title: Applications of Biotechnology in Medical Sciences and Career Development in USA

	Date: November 9, 2013 Venue: Conference room, MBA block, Graphic Era University
12	Guest Lecture by: Prof. Dinesh Bhatt, Dean Life Sciences, Gurukula Kangri University, Haridwar Title: Ecological Clocks, Biological Clocks and Health Issues Date: November 22, 2013 Venue: GEU 07, Graphic Era University
13	'Path of Innovation' Role of Ayurveda in Chronic Pancreatitis by Ved Balendu Ji, Occasion graced by Padamshri Sunita Narain, DG, CSE, New Delhi. Date: November 23, 2014 Venue: AMN Gosh, KDMIPE Auditorium, ONGC, Dehradun.
14	Guest Speaker: Dr. Kaptan Singh Associate Director, CRD, Ranbaxy Research Laboratories, Gurgaon. Title: Basic Requirement in Process Development of Generic Drug Date: December 12, 2014 Venue: New HM Seminar hall, Graphic Era University. After P Smetacek (chronological order)
15	Guest Lecture by: Mr Peter Smetacek Title: World Of Butterflies Date: September 20, 2014 Venue: NEW HM Seminar hall , Graphic Era University
16	Guest Lecture by: Prof. S.D. Purohit Title: 1. Science and Art of micro-propagation, 2. The GM controversy Date: October 17, 2014 Venue: NEW HM Seminar hall , Graphic Era University
17	Guest Speaker: Dr. Vivek Kumar Morya , Assistant Professor, Department of Biological Engineering, Inha University, South Korea. Title: Opportunities and Product- Oriented Research in Cosmeceutical Biotechnology Date: Feb 06, 2015 Venue: New HM Seminar hall, Graphic Era University.
18	International Seminar on Our Genes and Genomes-Past, Present and Future on 04 Feb, 2015 at ICFRE, FRI, Dehradun jointly by HNB Uttarakhand Medical University, CARDIFF University, UK, UCOST and Sri Dev Suman Uttarakhand University, Tehri, Garhwal.
19	Guest Speaker: Dr. VB Mathur, Director, WII, Dehradun and Prof. LMS Palni, Biotechnology, GEU Title: World Environment Day , Six Billion Dreams – One Planet : consume with care Date: June 5, 2015

	Venue: Wild Life Institute of India, Dehradun.
20	<p>Guest Speaker: Dr.Kaushal Kishor Rajak, Scientist, (ICAR-IVRI, Izatnagar, Bareilly)</p> <p>Title: Pen-side or point to care tests in diagnosis</p> <p>Date: September 19, 2015</p> <p>Venue: New HM Seminar hall, Graphic Era University.</p>

HRD Training	
	<p>Two week shands on training on “New Tools Barsand Advances in Microbial Biotechnology”-First Workshop and Lecture Series. (8th-20th January 2012) Sponsored: State Biotechnology Department, Govt. of Uttarakhand.</p> <p>Coordinator: Dr. Tribhuwan Chandra</p> <p>Total Students: 20 (All Uttarakhand)</p> <p>Content: Advances in Microbial Biotechnology</p>
	<p>Two days hands on training on “In-silico Drug Discovery and Drug Designing: A Practical Approach”, 30-31 October, 2012</p> <p>Organized By Department of Biotechnology, Graphic Era University, Dehradun, In association with Bio Discovery – Solution for Future.</p> <p>Coordinator: Dr. Tribhuwan Chandra, Ashish Thapliyal</p> <p>Total Students: 100 (National level) Content- Drug designing</p>
	<p>Short term training (STS) in plant tissue culture and transformation studies (June-July 2014)</p> <p>Total students: 32 (5 for 15 days, 27 for 30 days)</p> <p>Coordinators: Dr. Manu Pant and Ms. Ankita Lal</p> <p>Content- On training in various techniques of plant tissue culture</p>
	<p>Short term training (STS) in Bioinformatics (June-July 2014)</p> <p>Total Students: 15 (all from GEU)</p> <p>Coordinators: Dr. Tribhuwan Chandra and Mrs. Kumud Pant</p> <p>Content- Drug Designing and Docking</p>
	<p>Hands on Training on Gene Cloning and Related Techniques (Scheduled July 03 to July 08, 2015)</p> <p>Participants: 10</p> <p>Coordinators: Dr. Navin Kumar and Dr. Nishant Rai</p> <p>Content: Gene cloning</p>
	<p>Training to farmers: Four days program (08 - 11 February, 2014) for growers from Appropriate Technologies India (ATI) was organized to train them in cultivation of cymbidium orchids. (Special training for farmers from disaster hit villages of</p>

45. List the teaching methods adopted by the faculty for different programmes.
- Lectures (regular classes): Face to face mode
 - Seminars: Through self study and guided seminar
 - Projects: By students in group /individual for better visualization of their course content in the form of mini project and final year project.
 - Tutorials
 - Industrial Visit
 - Guest Lectures
 - Hands on practical experience and specialised training courses.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Periodical reviews through tests, quiz, and tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.
 - Experiences learnt through their performance in exams, results and employability got us to take necessary actions.
 - Feedback from alumni and industry
47. Highlight the participation of students and faculty in extension activities.
Science and Society Interactions:
- Public interactions of faculty and students (B.Tech/M.Tech/M.Sc.) in events like “Flower Show” held at Governor House, Dehradun every year (Feb-March). Involves display of the potential of plant tissue culture technique and its benefits to the public, inviting queries and demands from the visitors.
 - Training of farmers from NGO / (ATI Technologies) in orchid cultivation.
 - Outreach Program – Sahyog and Joy of Giving (programme organized by nodal faculty and students of Biotechnology Dept.)
 - Member, task force of DST for children centric programs(Dr. LMS Palni)
 - Invited expert member of science- society programs of earth watch international’s India activities (Dr. LMS Palni)
48. Give details of “beyond syllabus scholarly activities” of the department.
- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.

- Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
 - Organization of conferences/ workshop/ seminar on thrust areas which provide an opportunity to interact with eminent experts.
 - Encouraging students to do research and innovative projects
 - Student Publications
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
- DBT (Institutional Bio-Safety Committee)
 - ISO 9001:2008 Certification
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
Short Term Courses (in plant tissue culture, bioinformatics based drug designing & Gene Cloning)
Patent Filed – 03
PCT Filed – 02
(Details in point 23)
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strength	Weakness	Opportunities	Challenges
1) Highly qualified and dedicated faculty. 2) Modern Infrastructure for teaching & research 3) Research contributions (patents/ publication of papers in Scopus indexed journals by students beside faculty members. 4) Continuous extension activities like seminars, workshops etc. 5) High research component & externally funded research projects.	1) Limited scope for consultancy and collaborations with industry in this region. 2) Less number of core Biotech. companies in this region to offer placements in core sector. 3) Few external research labs in this part of country for advance level practicals. 4) Less government initiatives for plant and animal breeding projects.	1) To collaborate with national & international institutions for joint research & courses. 2) Encouragement by management and good support for research 3) Several existing research institutions and universities in Dehradun for scientific collaborations 4) Himalayan niche, flora and fauna provide more research opportunities. 5) Sourcing/availability of medicinal /aromatic plants	1) Increase placements in core industries. 2) More student selection in competitive exams. 3) Get facilities of animal house. 4) International / national collaborations 5) Increasing consultancy and product development with Biotech industry.

52. Future Plans of the department.

- Filing more commercially important Patents.
- Establish the facilities of animal housing.
- Commercialization of Research outcomes
- Attracting big grants/fund for research.
- Grant from UGC-SAP, DST-FIST etc. Programs
- Interdisciplinary programs and international collaboration
- Participation in incubation centre of GEU sponsored by UCOST and DST

Evaluative Report of the Department

1. Name of the Department : **Department of Mechanical and Automobile Engineering**
2. Year of establishment : 2003 (Mechanical Engineering)
: 2009 (Automobile Engineering)
3. Is the Department part of a School/Faculty of the university?
: Yes, School of Engineering and Technology
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.)

SL NO	Name of The Program Offered	Remarks (UG/PG/M.Phil/Ph.D.)
1.	Bachelor of Technology in Mechanical Engineering	UG
2.	Bachelor of Technology in Automobile Engineering	UG
3.	Master of Technology in CAD/CAM and Robotics	PG
4.	Master of Technology in Design Engineering – Part Time	PG
5.	Doctor of Philosophy in Mechanical Engineering	Ph.D

5. Interdisciplinary programmes and departments involved:
With Computer Science and Engineering Department:
M Tech in CAD/CAM/Robotics
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
Following are the course in Collaboration with
GEHU, Doon Rubber Pvt Ltd, Prakash Pipes Pvt Ltd, Aerosphere Pvt Ltd
 1. Certified course on advanced welding skills
 2. Certified course on CNC Training
 3. Certified course on Advanced Modelling and Simulation
 4. Certified course on Product Design Cycle
7. Details of programmes discontinued, if any, with reasons: None
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
: Semester with choice based credit system
9. Participation of the department in the courses offered by other departments

S N	Name of the courses handled for other Departments	Name of the other department
1	Workshop Practice	All branches in first year B.Tech(except Bio Technology)
2	Engineering Mechanics	All branches in first year B.Tech
3	Basic Mechanical Engineering	All branches in first year B.Tech
4	Computer Aided Engineering Graphics	All branches in first year B.Tech
5	Heat & Mass Transfer, Applied thermodynamics,	B.Tech. Petroleum Engineering

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

S N	Name of The Teaching Post	Sanctioned	Filled	Actual
1	Professor	6	5	5
2	Associate Professor	12	8	8
3	Assistant Professor	30	26	26

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S. No	Name	Qualificatio n	Designatio n	Specializati on	No of years of Exp.	No. of PhD Students guided for th last 4
1	Dr. RCS Mehta	Ph.D.	Professor	Production	39	2
2	Dr. Patil Pravin	PhD	Prof. / Dean (R&D) / HoD	FEA, Optimizatio n,Soft Computing Techniques	12.5	5 (ongoing)
3	Mr Y P Kumar	M Tech	Professor	Materials	43	
4	Dr. Debasis Chakraborty	PhD	Professor	Thermal Engg	12	
5	Dr. Atul Sidola	Ph.D.	Professor	Manufactru ing	10	

6	Dr. Veneet Singh	PhD	AS	Design Engg/Auto mobile	8.5	
7	Dr. Chandra Kishore	Ph.D.	AS	Materials	4	
8	Dr. Bhingole Pramod	PhD	AS	Nano Materials	3.8	1 (ongoing)
9	Dr. Pushpendra Kumar	PhD	AS	Robotics/Automation	2.3	1 (ongoing)
10	Mr. Maharshi Subhash	PhD Submitted	AS	CFD	5	
11	Mr. G S Kalra	M.Tech.	AS	Nano Coatings	14.6	
12	Mr. Punit Gupta	M.SC Engg	AS	Modelling	12	
13	Mr. Amir Shaikh*	ME	AS	CAD	34	
14	Saurab Kumar Yadav	PhD (submitted)	AP	Design Engg	1	
15	Mr Rajesh Prasad Verma	PhD (P)	AP	Welding, Optimisation	7.1	
16	Mr.Sachin Kumar	PhD Submitted	AP	Supply chain Management, Renewable energy	3.1	
17	Mr. Saurabh Diwangan	PhD (Viva Voce Completed)	AP	Material Science	-	
18	Mr. Namit Aggarwal	M.Tech.	AP	Thermal Engg	4.7	
19	Mr Kapil Kumar Sharma	M.Tech.	AP	Robotics/Automation	8.1	
20	Mr Raj Kumar Kapooria	M.Sc. Engg	AP	Manufacturing	19	
21	Mr.Jivesh Dixit	ME	AP	Vibration	1.2	
22	Mr Vipul Paliwal	M.Tech.	AP	Design, FEA	6.6	
23	Mr Ravi Verma*	M.Tech.	AP	Thermal	5.2	

				Engg		
24	Mr Nitin Kumar KC*	M.Tech.	AP	Thermal Engg	3.5	
25	Mr. Paritosh Mishra	M.Tech.	AP	Design, FEA	2.2	
26	Mr. Manoj Gwalwanshi	M.Tech.	AP	Thermal Engg	2.2	
27	Mr. Anurag Singh	M.Tech.	AP	Welding	2.2	
28	Mr. Raj Kamal Joshi	M.Tech.	AP	Design, FEA	1.1	
29	Ms Surbhi Uniyal	M.Tech.	AP	Design, FEA	6.1	
30	Mr.Prateek Negi	M.Tech.	AP	CAD	1	
31	Mr. Ashish Bisht	ME	AP	CAD	3.1	
32	Mr. Shiv Kumar	M.Tech.	AP	Material Science	1.1	
33	Neeraj Sengar	M.Tech.	AP	Automobile	5	
34	Ms. Vinita	M.Tech.	AP	Design	-	
35	Mr. Abhishek Mishra	M.Tech.	AP	CAM	-	
36	Ankur dixit	M.Tech.	AP	Automobile	2	
37	Mr. Anil Pundeer	M.Tech	AP	Mfg Science	7	
38	Mr Ravi Kanojia	BE M.Tech.(P)	AP	Design, FEA	9.5	
39	Mr Gagan Bansal	B.Tech. MBA	AP	SCM	3.2	

* For B.Tech First Year

Prof: Professor, AS: Associate Professor, AP: Assistant Professor, PTL: Pro Term Lecturer, (P): pursuing

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors

1. Dr. V K Tewari, Adjunct Professor and Vice Chancellor, Ex. UTU Vice Chancellor, Professor IIT Roorkee
2. Dr. R L Mehdiratta, Visiting Professor, Ex. Scientist, IIP Dehradun

13. Percentage of classes taken by temporary faculty – programme-wise information 0%
: NO TEMPORARY FACULTY

14. Programme-wise Student Teacher Ratio : UG 17:1
PG 12:1
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Sl No	Name of The Post	Sanctioned	Filled	Actual
1	Laboratory Technician	15	18	18*
2	Administartive Staff	01	01	01

*** Note: Following staff members are encouraged to pursue their M.Tech from GEU**

Sl.No	Name of the Staff	Qualification
1.	Mr Arvind Mishra	B.Tech. M.Tech.(P)
2.	Mr Vishal Kumar	B.Tech.
3.	Mr. Ramesh Lohani	B.Tech. M.Tech.(P)
4.	Mr Tushar Gupta	BE M.Tech.(P)
5.	Mr Yatika Gori	BE M.Tech.(P)

16. Research thrust areas as recognized by major funding agencies:
Finite Element Simulation, Vibrations, Mass Flow Sensors, Interdisciplinary research thrust area for development of enterprise through innovation
17. Number of faculty with ongoing projects from
- a) national : 2
 - b) international funding agencies : Nil
 - c) Total grants received: Rs. 312.5 Lakhs

Give the names of the funding agencies, project title and grants received project-wise.

SL NO	Title of the Project	Name of P.I.	Name of the funding agency	Grant received in Rs.
1	Development of simulation tool for vibration based omega type mass flow sensor	Dr. Pravin Patil	DST, New Delhi	18.3Lakhs
2	TBI	Dr. V K Tewari	DST	294.20 Lakhs

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration:

- Joint collaborative project with IRDE DEAL, Dehradun for development of terahertz Frequency component for defence application. This project is inhouse project of IRDE and Mr Mahendra Pal Singh, Reseach Scholar and Scientist is working towards his PhD thesis work.
- Dr, P Bhingole has submitted Project proposal on Magnesium Alloy to DST of Rs. 23 Lakhs on July 2015
- Dr. Pushpedra Kumar has alos submitted propject proposal on robotics to DST of Rs. 22 Lakhs on July 31, 2015

b) International collaboration: --

University funded ongoing projects:

Sr. No	Name of faculty/students	Title of project	Fund sanctioned Rs. in Lakh
1	Team GEU Motorsports	Racing Car	4.0
2	Team gagnents	Gocart Racing Car	1.5
3	Team GEU Motorsports Effi Car	Racing Car	0.68
4	Mechame Racers	EcoCart Racing Car	1.00

University funded completed projects:

Sr. No	Name of faculty/students	Title of project	Funds in Lakhs Rs.
1.	Mechame Racers	EcoCart/ Gocart Racing Car	1.5
2.	Team VONK	EcoCart/ Gocart Racing Car	3.0

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE,

etc.; total grants received. : --

20. Research facility / centre with
- a. state recognition : STEP/USAAC/ USERC
 - b. national recognition : TBI, Modelling and
 - c. international recognition : --
21. Special research laboratories sponsored by / created by industry or corporate bodies
- a) Computer aided Manufactruing Lab (Self Finance)
 - b) Advnaced Modelling and simulation Lab (DST Sponsored)

22. Publications:

Number of papers published in peer reviewed journals (national / international)	International : 32 National : 04
Monographs	: NIL
Chapters in Books	: 02

- Edited Books : --
- Books with ISBN with details of publishers : 0
- Number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host, etc.) : 12
- Citation Index – range / average : 0-2
- SNIP : Average 1.27
- SJR : Average 0.688
- Impact Factor – range / average : 0.34-3.01/1.1767
- h-index : 2

23. Details of patents and income generated :

The details of filed patents are as follows:

1. Indian Patent Application 728/KOL/2015 filed on 7/08/2015
Semi Rigid Joint By Somjit Mondal
2. Indian Patent Application 729/KOL/2015 filed on 7/08/2015
AFS Automatic Flow Stopper by Using Negative tensile spring By Somjit Mondal
3. Indian Patent Application 730/KOL/2015 filed on 7/08/2015
Self Stabilizing Parallel Shaft Gears By Somjit Mondal

24. Areas of consultancy and income generated : Rs. 3 Lakhs

The consultancy ar provided in advance skill development training in welding, CNC

programming, Modelling and simulation, hydro energy etc.

S.No.	Consultancy Assignments/ Training program	Project Tenure	Amount (in Rs.)
1.	Training for Fabrication and pipe design for Uttarakhand Construction Company (practical teaching and on the site training program)	Nov 2014-Nov 2015	1.00 lakh
2.	Skill Enhancement program for Pipe design and modelling for Prakash Pipe Industry, Bijnor , UP	Dec 2014- Nov 2015	2.00 lakh

Sr. No	Name of the consultancy project	Funding agency	Grants sanctioned in Rs. Lakhs
3	Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of uttarakhand	Hydel Projects in different locations of uttarakhand	75.00
4	Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	23.94

25. Faculty selected nationally / internationally to visit other laboratories / institutions Industries in India and abroad :

National:

Sr. No	Name of Faculty	Visited other laboratories / institutions ,industries in India
1	Prof (Dr.) Pravin Patil	IRDE, DEAL Dehradun
		IIP Dehradun
		Doon Rubber Pvt Ltd
		SARA Industries Ltd
2	Mr Punit Gupta	IIP Dehradun for Industrial Visit
3	Mr. R L Mehdiratta	IIP Dehradun

4	Mr. Prem Singh	Doon Rubber Pvt Ltd
		SARA Industries Ltd
5	Mr. Kapil Sharma	Hero Motorcorps Ltd
		Maruti Suzuki Ltd.

26. Faculty serving in

b) National committees :

Prof. (Dr) V K Tewari

Member of the "Confederation of Indian Industry (CII) Sub Committee on Industry Institute Interaction and Technical Education & Training"
 Member of Committee of Small Scale Industries of Uttaranchal Government
 Member, BOG, Mahaveer Teerthanakar University, Moradabad.
 Chairman, AICTE, NBA Committees
 Member, AICTE, NBA Committees
 Member, Advisory Board Mangalayatan University, Aligarh, UP
 Member, Selection Committees of several Technical Universities & Institutions
 Member, State Steering Committee, TEQIP-II (Technical Education Quality Improvement Programme), (A World Bank Funded Project), Uttarakhand State.
 Mentor and Performance Auditor , TEQIP II, (A World Bank Funded Project) MHRD, Govt. of India
 Member, Board of Governors, Birla Institute of Applied Sciences, Bhimtal, Nainital(As AICTE nominee)
 Member, State Advisory Board, SPIC MACAY, Uttarakhand.

c) International committees : --

d) Editorial Boards ---

e) any other (please specify)

Sr No	Name Faculty	Serving as
1	Dr. Pravin Patil	Peer-Reviewer for Elsevier and IEEE reputed international journals in Mechatronics area
2	Dr. Debasis Chakarborty	Peer-Reviewer for Elsevier and IEEE reputed international journals in Thermal engg area
3	Dr. Pushpendra Kumar	Peer-Reviewer for Elsevier and IEEE reputed international journals in Robotics area

4	Dr. P Bhingole	Peer-Reviewer for Elsevier and IEEE reputed international journals in Material Science area
5	Raj Kumar Kapooria	Peer-Reviewer for three International Journals. 1-International Journal of Energy Research, Wiley Publications, Canada 2-Journal of Energy in Southern Africa, University of Cape Town, Energy research Institute, Southern Africa 3- RSER, Elsevier Publications
6	Punit Gupta	Reviewer for IEEE Journal on Neural Networks

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

- Faculties are encouraged by providing financial support to attend workshop, seminar, refresher courses, orientation program, conference etc.
- Periodically, in collaboration with industry, FDP are organised on latest trends in industry.

28. Student projects

- a. percentage of students who have done in-house projects including inter-departmental projects : 20%
- b. percentage of students doing projects in collaboration with other universities
Industry / institute: 50 %
90% students did internship in various manufacturing companies across Dehradun, Haridwar, Pant Nagar MIDC

29. Awards / recognitions received at the national and international level by

- a. Faculty
 1. Arvind Mishara holds two Guinness World Record in 2014 and 2015 as follows:
 - i. Longest Marathon Reading: An effort for a Cause In **Galerie ho:** Marseilles, France (Recitation of Mahabharata) From May 12, 2015- May 17, 2015 (117 hours 33 minutes 02 seconds)
 - ii. Guinness World Record for the Longest Lecture of 139.42 Hours
 2. Dr Pravin Patil got DST Young Scientist Award 2013-14 in terms of grant of Rs. 18.3 lakhs.
- b. Doctoral / post doctoral fellows : Nil
- c. Students

Student Achievements in 2014-2015

S N	EVENT	ACHIEVEMENT
1	Elite Karting'15, a national level go-kart championship held at RPM circuit, Bhopal. Team Name Mechame Racers	1 st in North India. 5 th position among 133 teams all over India. Most dynamically balanced kart award. Fastest kart of the championship. Record Autocross in 24.9 seconds. Best fabricated kart of the championship. Best in sales presentation. Most adjustable kart of the championship. <ul style="list-style-type: none"> • 1st team in the final event to clear all 40 parameters of the technical inspection. • 12th rank in virtual round all over India. • cash prize of Rs 15000/
2	Eco-Kart 2015 Team Name Vonk	<ul style="list-style-type: none"> ❖ Best setup in virtual round ❖ Nominated for best design ❖ Nominated for best logo design ❖ Winner of face-off round with a record of 32 sec ❖ All India ranking 3rd ❖ Ist in North zone ❖ Cash prize of Rs 15000/
3	9 th Uttarakhand State science and Technology Congress 2014-15, 26-28 February, 2015 at Uttarakhand State Council for Science & Technology, Vigyan Dham, Dehradun.	Somjit Mandal , student of second year B Tech in ME has been awarded Young Scientist award for Best Oral Presentation under the discipline Engineering Science and Technology
4	“ Hell in a cell” conducted by at College of Technology (GBPUAT) Pantnagar	Team GEU Bortix consisting of team members Deepak Rajput (ME), Jai Anand (ME) , Manas Upadhyay (ECE), Naveen Thapliyal (CE) won the third position and got a cash prize of Rs 15000/
5	Combat robotics at University of Petroleum and Energy studies, Dehradun	GEU Bortix won the third prize and got a cash prize of Rs 5000/.
6	Vibrant Uttarakhand Trade fair and 9 th UCOST	GEU Bortix modified the concept of wireless electric lawn mower for making it economical. Appreciated

	summit.	by Hounourable Chief Minister of Uttarakhand Government.
7	SAE NIS 2014 Convention held at GEU Dehradun on 22 Nov 2014	<ol style="list-style-type: none"> 1. Prakhar Srivastava (3rd year ME) secured second position in Technical paper presentation and awarded a cash prize of Rs 3000. 2. Praveen Silori (Final year, ME) secured second position in Car Sketching competition and awarded a cash prize of Rs 3000. 3. Devendra Bisht (3rd year, ME) secured First position in Design challenge competition and awarded a cash prize of Rs 5000.

30. Seminars/ Conferences/Workshops organized and the source of funding (national
i. International) with details of outstanding participants, if any.

S N	NAME OF CONFERENCE/WORKSHOP	DATE	OUTSTANDING SPEAKERS
1	National seminar on Advanced Manufacturing Techniques in Context with Energy Conservation ❖ funded by PCRA	18, 19 Nov 2010.	Mr. Pradeep Kumar Motwani, Additional Director, CRC, Ministry of Petroleum and Natural Gas.
2	National seminar on Applications of Finite Element Method in Mechanical Engineering ❖ funded by Graphic Era University	27 May 2011	Prof (Dr.) S C Sharma, Prof. and Head (Mech.), IIT-Roorkee.
3	One day workshop on Latest Trends and Techniques in Product Design Using GD & T, Pro_E, CREO 5.0/CATIA/ANSYS/CNC Programming ❖ funded by Graphic Era University	13 Apr 2011	Mr. Arshad Ansari, MD at CAD ARENA.
4	Two days Short term course on Finite Element Analysis: Basic to Current Scenario ❖ funded by Graphic Era University	20-21 Oct, 2012	Dr. Indravir Singh, Mechanical Engineering Department, IIT-Roorkee.

5	Workshop on ASME membership ❖ funded by Graphic Era University	20 Sept 2013	Mr. Michael Kreisberg, Director-ASME, Global Membership Department.
6	Faculty development workshop on Finite Element software: ANSYS ❖ funded by Innovent Engineering Solution, Bangalore	03-04 Oct 2013	Mr. Ganesh B, Technical Expert.
7	Faculty development workshop organized on Finite Element Software: ANSYS ❖ funded by Graphic Era University	3 rd -4 th October 2013.	-
8	All India Conference/ Seminar on 'Status of Welding in Research and Advancement in Analysis of Welded Structure' (SWR- 2015) ❖ funded by Graphic Era University ❖ Department Of Science and Technology ❖ The Institution of Engineers	February 20-21, 2015	Dr Rajendra Dobhal, Director General, Uttarakhand State Council of Science and Technology, Dehradun.

Some of the recent activities in ME/ AME Departments

Engine overhauling workshop: A three day workshop (14th Aug to 16th Aug 2015) organized first time ever in GEU Campus with NIT Kurukshetra mentors.





National SAE Events participation:

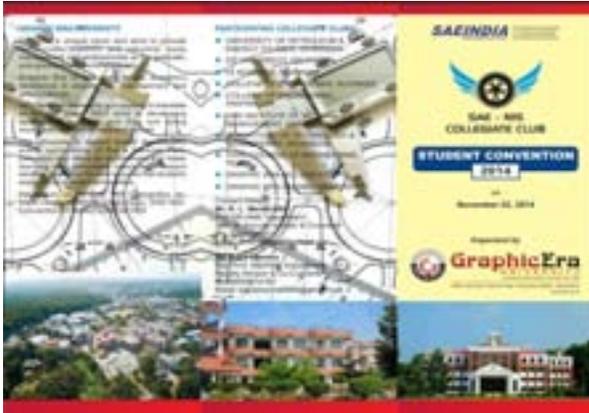


Elite Karting'15 was a national level go-kart championship organised by Elite Techno Group, held at RPM circuit, Bhopal (25/Feb/2015-28/Feb/2015) in which Mechame Racers, a team from Department of Mechanical and Automobile Engineering – Graphic Era University had participated and secured 1st position in most dynamically balanced kart category and overall 5th position.

Team VONK of Mechanical and Automobile Engineering Department, consisting of 15 students, participated in national level event named Eco-Kart 2015 and finally secured 3rd position in overall India and 1st position in North India. They got prize money of 15000 INR for attaining 3rd position

SAE NIS student convention 2014

SAE NIS Student convention-2014 was held at Graphic Era University on 22 Nov 2014. This Convention is Sponsored by Graphic Era University & SAE Northern India Section. The SAE Collegiate Clubs of different Universities/Colleges in and around Dehradun, participated in various events of the convention.



All India Seminars on “Status of Welding in Research and Advancement in Analysis of Welded Structures”

On dais: L to R Er C.M. Dimri, Chairman IEI, UKSC; Er N. Singh Chairman CVDB IEI; Dr Rajendra Dobhal (Chief Guest), DG UCOST; Prof R.C. Joshi, Chancellor GEU, Prof V.K. Tiwari, VC GEU; and Prof Sanjay Jashola, VC GEHU

View of participants



The Institution of Engineers (India), Uttarakhand State Centre in association with Graphic Era University (GEU) organized an All-India Seminar on “Status of Welding in Research and Advancement in Analysis of Welded Structure, SWR-2015” at Graphic Era University Campus on February 20-21, 2015 under the aegis of Mechanical Engineering Division Board. The seminar inaugurated by Chief Guest Dr. Rajendra Dobhal, Director General, Uttarakhand State Council of Science and Technology (UCOST), and Guests of Honor, Prof. (Dr.) R. C. Joshi Chancellor GEU, Er. Narendra Singh IEI Council member, Prof. (Dr.) V. K. Tewari GEU Vice-chancellor, Er. C. M. Dimri IEI UKSC Chairman, and Dr. Sanjay Jashola GEHU Vice-chancellor.

In inaugural speech chief guest Dr. Dobhal stated that academicians have a vital role to play in the field of scientific research. He also stated that the technologies developed from the experiments and various researches are being patented at a large scale, however their commercial and industrial use are minimal and it needs to be increased for better productivity.

Prof. P. K. Ghosh (Dean IIT Roorkee) threw light on the various alterations in techniques of fusion welding, role of pulsing the current in fusion welding, safety in welding and various new methods of welding for strong weldment, while expressing his views in the seminar as a keynote speaker. Dr. V. P. Dutta from DEAL DRDO, Prof. (Dr.) S. K. Nath Head of Materials and Metallurgy Department IIT-Roorkee, Er. B. S. Negi IEI UKSC Member, Prof. (Dr.) Alakesh Manna Head of Mechanical Engineering Department of PEC-Chandigarh and many other eminent scientists expressed their views on present status, various researches done and future scope in the field of welding and mechanical experimental testing.

The seminar attended by Dr. Pravin P. Patil, GEU Dean Research, Er. Rajesh P Verma, Prof. GEU, Er. J. P. Tomar, Imm. Past Chairman IEI UKSC, Dr. Rajesh Chandra, Chairman IEI Roorkee Local Centre, Dr. D. P. Jain, Mr. Punit Gupta, HOD Mechanical GEU, and IEI UKSC Executive members Er. R. V. S. Chauhan, Er. A. C. Goel, Er. C. Prakash Sharma, Er. Satish Chand Chauhan, Er. Vinod Kr Saxena, Er. Ram Shankar, Er. S. C. Bhasin, Er. M. K. Tayal, Er. R. P. Jamloki, Er. R. K. Jain, Er. S. H. A. Jafri and many more IEI UKSC members and GEU members.

This two days seminar attended by approximate 110 participations from top notch Institutions like IIT Roorkee, IIT Jodhpur, NIT Jamshedpur, GBPUA&T Pantnagar, Integral University Lucknow besides both the universities of Graphic Era Group and engineers from industries like Hero Moto Corp Ltd, BHEL, THDC India Ltd, UJVNL, Ph.D & M.Tech, B.Tech scholars of various Universities and Institutions. During seminar 22 papers and the project of Hero Moto Corp Ltd presented.

ARVIND MISHARA

(Asst. Professor)

Guinness World Record 2015

Longest Marathon Reading: An effort for a Cause

In

Galerie ho: Marseilles, France

(Recitation of Mahabharata)

From *May 12, 2015- May 17, 2015*

(117 hours 33 minutes 02 seconds)



World Record

March 8, 2014

GEU Faculty Mr Arvind Mishra (ME Dept) made a World Record for the Longest Lecture of 139.42 Hours



Invited Lecture and Project Discussion

13th October 2014

Title : A talk on "Recent Technologies in Vehicle Development Program- A Global Perspective" and Discussion on areas like joint development of SAE formula car, collaborative projects and student exchange programs.

Sponsored by : Graphic Era University in collaboration with Birmingham City University, United Kingdom

Resource Person :

- Mr. Paramjit Singh Chima, Head- School of Engineering, Design and Manufacturing Systems, Birmingham City University, United Kingdom

Mr. Abhishek Dutt, Country Coordinator, Birmingham City University, United Kingdom

A Report on Guest Talk – Industry Development Cell

A guest talk was organized on August 28, 2015 by the Department of Mechanical and Automobile Engineering, Graphic Era University, Dehradun. The speaker was Dr. Navneet Arora. Currently, he is a professor of Mechanical and Industrial Engineering in Indian Institute of Technology (IIT), Roorkee. Apart from his academics and research activities, Prof. Arora is deeply dedicated to Social activities and Human Values. He is a wonderful motivational speaker. In this talk, he discussed about the success and peace mantras for achieving excellence in Life. He motivated the listeners to use his maximum potential or abilities in doing any work, whatever the profession may be. He urged Graphic Era students to help others in a selfless way to obtain real peace and happiness in life. In response, the listeners were also very much impressed from the speaker and subject matter of discussion and asked the concerned authorities to conduct such lectures in future as well. As such types of positive feedings and motivational talks can boost and coordinate their energy in achieving success and satisfaction in life. Faculty members and students from Mechanical and Automobile Engineering Department were mainly, listed as the participants in the talk.



31. Code of ethics for research followed by the departments

The code of ethic followed for all students, scholars and faculty engaging in research is

- No plagiarism is to be done while undergoing research activities.
- Due citations, references and acknowledgements must be made while reporting

findings of others.

iii) All guidelines of UGC are followed.

32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass	
		Male	Female	Male	Female
B.Tech. Mechanical Engineering	263	253	10	217	10
B. Tech. Automobile Engineering	60	57	3	48	2
M. Tech. CAD/CAM & Robotics (Full Time)	14	11	3	7	0

33. Diversity of Student

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
M.Tech (CAD/CAM & Robotics)	20	20	60	-----
Ph.D	50	-	50	-

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Category	Number of students
GATE	15
GRE	05
Indian Army	02

35. Student progression (in 2014-2015)

Student progression	Percentage against enrolled
UG to PG	1 %

PG to M.Phil.		-NA-
PG to Ph.D.		33 %
Ph.D. to Post-Doctoral		-
Employed		
<input type="checkbox"/>	Campus selection	70%
<input type="checkbox"/>	Other than campus recruitment	25%
Entrepreneurs		10%

36. Diversity of staff

Percentage of faculty who are graduates from	
Of the same University	20 %
From the Universities within the state	0 %
From other states	80 %
From Universities outside the country	0%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : 01

38. Present details of departmental infrastructural facilities with regard to

S N	Name of The Infrastructural Facility	Quantity/Details
1	Library	Departmental Library has 209 volume of Text Books, Reference Books, Handbooks and Tables
2	Internet For Staff And Students	Wi Fi Facility is available For Faculty, Staff and Students in all departmental buidling
3	Total Number Of Class Rooms	7 Lecture Halls
4	Class Room With ICT Facility	3 Lecture Halls
5	Student Laboratories	23 Laboratories For Students Including Workshop

6	Research Laboratories	02 (CAM , Modelling and Simulation)
---	-----------------------	-------------------------------------

Some of the state of the art Labs of departments are shown as follows



CAM Lab



TIG/MIG



Air Conditioning Lab



39. List of doctoral, post-doctoral students and Research Associates

a. from the host institution/university :

S.N	Name	Date of Admission	Status	Enroll No	Supervisor	Research Area
1	Ashwani Kumar	16-08-12	PT-EXT	PHD12ME011	Dr. Pravin Patil	Finite Element Analysis of heavy vehicle transmission system
2	Ashwani Khairola	04-08-14	PT-EXT	PHD14ME016	Dr. Pravin Patil , Dr. S.B.Singh	Soft computing techniques
3	Mahendra Pal Singh	04-08-14	PT-EXT	PHD14ME017	Dr. Pravin Patil, Dr. V.P. Dutta	Optimizaton Techniques for tera hertz freq components

4	Faraz Ahmad	Aug 18 2015	FULL TIME	PHD15ME021	Dr. Pushpendra Kumar, Dr. Pravin Patil	Robotics & Finite Element simulation
5	Yogesh Kumar Sharma	Aug 18 2015	FULL TIME	PHD15ME022	Dr. Pramod Bhingole, Dr. Pravin Patil	Nanomaterials & Finite Element Simulation

b. from other institutions/universities : --

40. Number of post graduate students getting financial assistance from the university.
: 07

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs).
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Proposal is put up to BOS which constitute of some internal and external expert.
- Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42. Does the department obtain feedback from

a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feed back?

- Yes. The feedback received from the faculties is discussed in the faculty meetings and necessary modification /upgradation of curriculum is taken up by BOS and the Academic Council of the university.

b. Student on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

- Yes. Continual feedbacks are taken from students, regarding teaching, course content, rapport with students and their suggestions. These are received confidentially by HOD who shows it to the concerned faculty for necessary improvement/corrective measures or acceptance of new ideas/approaches.

c. Alumni and employers on the programmes offered and how does the department utilize the feedback?

The departmental board has interaction with alumni and employers and the genuine suggestions are analysed and incorporated in curriculum to improve knowledge of student and staff according to the needs of industries which help student get employment in the industries.

43. List the distinguished alumni of the department (maximum 10)

Sl No	Name of Alumni	Batch	Company of work
1.	Praveen Ranakoti	2007-11	Johnson Controls, Germany
2.	Gaurav Singh Chuphal	2011-15	Officer in Indian Army
3.	Ishank Sachdeva	2009-13	Olam International , Gabon Africa
4.	Shivam Batra	2009-13	Olam International , Gabon Africa
5.	Mayank Kukreti	2008-12	ASHOK LEYLAND
6.	Anurag Butola	2010-14	ISRO, Kerala
7.	Nihal Gupta	2009-13	University of Texas
8.	Tushar Gupta	2010-14	University of Texas
9.	Gangadhar Ashish	2006-10	Steel Ministry, RINL
10.	Vipul Bhatnagar	2010-14	Infosys, Pune
11.	Vivek Bhatnagar	2003-07	Honda Automobiles

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

For details refer section 30.

45. List the teaching methods adopted by the faculty for different programmes.

- I. Lectures (regular classes): Face to face mode
- II. Seminars: Through self study and guided seminar
- III. Projects: By students in group /individual for better visualization of their course content in the form of mini project and final year project.
- IV. Tutorials
- V. Industrial Visit
- VI. Guest Lectures
- VII. Hands on practical experience and specialised training courses.
- VIII. Teaching aids such as LMS Moodle, LCD Projectors, Overhead projectors and charts and models are used by the teachers for effective teaching. Apart from the laboratory equipment the following software are also used to enhance the level of understanding of the students.
- IX. Modelling tools such as Pro-E, AutoCAD, Matlab are used to explain the theory involved and run simulations for comprehensive understanding of Design of automobile Components which helps student creativity and enhancement of the

knowledge.

- X. ANSYS is used as FEM tool to analyse the performance of structures and components.
- XI. Students of Final year are encouraged to take up projects related to industry such as Automobile, power, manufacturing, process industry etc.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

By periodical review through class test, assignments, quiz, tutorials, and internal assessment etc.

47. Highlight the participation of students and faculty in extension activities.

The department has been involved in community activities ever since its inception. It motivates and inspires to sensitize faculty and students by organizing the following institutional social activities regularly.

- Independence day, Republic day celebration
- Blood donation camps
- Aids Day, Earth Day, Environment Day, Youth Day, Women Day
- Awareness Drives (like World Aids Day, Rashtriya Ekta Divas, Disability Day, Tree Plantation drive, etc)
- Disaster relief campaigns for Uttarkashi Disaster (2012), Kedarnath Disaster (2013), J&K Floods (2014)
- Cleanliness Drives (Swachh Bharat Abhiyaan)
- Nukkad Plays

48. Give details of “beyond syllabus scholarly activities” of the department.

- i) Faculty enhances knowledge in Faculty Development programs which are conducted at University level.
- ii) Guest lectures are held for faculty and students on topics of interest pertaining to new technologies benefiting students.
- iii) Trainings on Software like ANSYS are held for the faculty to get hands on experience on the latest tools.
- iv) Specialized laboratory visits for students to reinforce teaching of classroom and laboratory.
- v) Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
- vi) Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.

- vii) Organization of conferences/ workshop/ seminar on thrust areas which provide an opportunity to interact with eminent experts.
- viii) Quiz competition
- ix) Cultural activities of the university e.g Grafest
- x) Sports: President Cup Cricket tournament Graphic Era University Dehradun
- xi) Design and fabrication of racing cars for various events at national level.
- xii) Taekwando Competition

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details : Yes. Department is ISO 9001:2008 Accredited by QMS.

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- Development of Nano Composite Materials
- Development of simulation tool for vibration based mass flow sensor using FEA
- Vibration study of Heavy vehicle transmission system
- optimization of parameters for terra hertz frequency components for defence applications

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

➤ Strengths

- Full back up support of management
- Dedicated faculty
- Excellent infrastructure in terms of class rooms and laboratories
- Industry specific equipments in the laboratories.
- Good teaching and learning environment
- Meritorious students
- Continuous upward revision of course curriculum to meet industry requirements
- Faculty of international exposure

➤ Weakness

- Poor placement approach of core sectors industries in Uttarakhand
- Trend for placements in IT and ITES companies
- Less initiatives of Govt. To promote industry institute interface

➤ Opportunities

- MOU with foreign Universities for higher studies and research
- Increase industry liaison through Alumni Network
- To upgrade department research facilities through UGC/AICTE/DST funding
- Consultancy with local /nearby industries
- To organize short term courses in CAM.
- Full and outright support of management to establish and develop it as leading department
- Locational advantage as the city is in the hub of R& D Organisations
- Possibility to utilise expertise of scientists and engineers of DEAL, IRDE, IIP and IIT Roorkee for continual monitoring and upgradation of curriculum, guest lectures, internships, project/dissertations etc
- Possibility to collaborate with industry for their industry oriented research through Industry-Academia interaction.

➤ Challenges

- To establish the department on sound foundation and to develop it for high quality education.
- To produce well trained human resources ready to takeoff
- To develop intimate lineage with the manufacturing sector for win-win collaborations
- To develop it as a locale research location in the area of Mechanical and Automobile Engineering sector.
- To attract research/consultancy projects.

52. Future plans of the department.

- Consolidation of existing programme, and upgrading the laboratories
- Attract qualified faculty specially in automobile engineering
- Increase linkage with core industry
- Focus on research through Ph.D programs and Projects

Evaluative Report of the Department

1. Name of the Department : **Department of Civil Engineering**
2. Year of establishment : 2007
3. Is the Department part of a School/Faculty of the university?
: Yes, School of Engineering and Technology
4. Names of programmes offered (UG, PG, M.Phil, Ph.D., Integrated Masters; Integrated Ph.D., D-Sc., D.Litt., etc.)
 - U.G. – B. Tech. (Civil Engineering)
 - P.G- M. Tech. (Structural Engineering),
M. Tech. (Geo-Informatics)
 - PhD Programm: CE
5. Inter disciplinary programmes and departments involved:
 - M. Tech. (Geo – Informatics) in collaboration with CS/IT Deptt.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - Certificate program on Structure Planning and Design for Residential Buildings in Higher Himalayan Regions of Garhwal (in collaboration with Department of Architecture, GEHU, Dehradun)
 - Virtual lab in collaboration with IIT Roorkee
7. Details of programmes discontinued, if any, with reasons : N.A.
8. Examination System Annual/Semester/Trimester/Choice Based Credit System
 - Semester with choice based credit System
9. Participation of the department in the courses offered by other departments:

Course	Year	Department Involved
Basic Engg. Drawing	I Year (B.Tech)	All Branches
Engineering Geology	II Year (B.Tech)	Petroleum Engg. Deptt

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	06	06	06
Associate Professors	09	03	03
Asst. Professors	30	20	20

11. Faculty profile with name, qualification, designation, area of specialization, experience and research, under guidance

S.N	Name	Qualification	Designation	Specialization	No. of years of Exp.	No. of PhD/ Mphil students guided for the last 4
1.	K. K. Gupta	M.Tech Ph.D (Submitted)	Asso. Prof.	Water Res. Engg.	24	--
2.	S. K. Govil	M. Tech.	Professor	Geomatics Engg.	40	--
3.	Dr. S. Kumar	Ph.D.	Professor	Water Res. Engg.	7	01 (ongoing)
4.	Dr. PP Bahuguna	Ph.D.	Professor	Geotechnical Engg.	34	01
5.	Dr. P.K.Emani	Ph.D.	Professor	Structural Engg.	13½	--
6.	Dr. Vikash Khatri	Ph.D.	Asso. Prof.	Geotech Engg.	4	--
7.	Nitin Mishra	M.Tech	Asst. Prof.	Water Res. Engg.	3½	--
8.	Sarita Budiyaal	M.Tech	Asst. Prof.	Water Res. Engg.	2	--
9.	S. Dev Prasad	M.Tech	Asst. Prof.	Geotech Engg.	3	--
10.	Alim Rawsan	M.Tech	Asst. Prof.	Structural Engg.	1	--
11.	P. Vaishnav	M.Tech	Asst. Prof.	Geotech Engg.	1	--

12.	A. K. Sharma	M.Tech	Asst. Prof.	Const. Costing & Quant. Sur.	5½	--
13.	Ritesh Kumar	M.Tech	Asst. Prof.	Soil Dynamics	-	--
14.	Shivani Dhariyan	M.Tech	Asst. Prof.	Earthquake Engg.	1	--
15.	Prabhat Kumar	M.Tech Ph.D (submitted)	Asst. Prof.	Earthquake Engg.	1½	--
16.	Mr.Gaurav Barkhanda	M.Tech	Asst Prof	Structural Dynamics	-	--
17.	Ms.Nishta Kapoor	MBA	Asst Prof	Economics	2	--
18.	Mr.Aditya Joshi	M.Tech	Asst Prof	Remote Sensing	7	--
19.	Mr.Bhupendra Singh Rautela	M.Tech	Asst Prof	CAD/STAAD	14	--
20.	Mr.GPS Bhati	ME	Visiting Prof	Water Resources	34	--
21.	Dr. N.K.Aggarwal	Ph.D.	Visiting Prof	Engg. Geology	38	--
22.	Mr.Dushyant Kumar	M.Tech.	Visiting faculty	Structure	28	--
23.	Mr.Rakesh Verma	M.Tech	Visiting faculty	GIS and Remote Sensing	-	--
24.	Mr. Avinash Panwar	M.Tech	Asst Prof	Water Resources Engg.	1¼	--
25.	Ms. Jyoti Kainthola	M.Tech	Asst Prof	Environmental Engg.	1¼	--
26.	Ms. Ritiksha Danu	M.Tech	Asst Prof	Geoinformatics Engg.	-	--
27.	Ms. Preiti Maurya	M.Tech	Asst Prof	Geotechnical Engg.	-	--
28.	Mrs. Neha Jagtap	M.Tech	Asst Prof	Geomatics Engg.	-	--
29.	Mr. Ankur Goel	M.Tech	Asst Prof	Geomatics Engg.	-	--

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors
- 1 Dr. Amit Gupta, Consultant at Engineering Consultants and Planners, Roorkee.
 - 2 Prof. (Dr.) Ram Mohan Rao, Senior Scientist geo-informatics ISRO, NRSC, Hedrabad.
 - 3 Dr. Sameer Saran, HOD, Geo-informatics ISRO, IIRS kalidas marg Dehradun.
 - 4 Dr. Subrat Sharma, Senior Scientist, GIS Division GB Pant Institute of Environment Science Kosi, Katarmal, Almora, UK
 - 5 Prof Ajay Gairola, Head Deptt of Civil Engg, IIT Roorkee

13. Percentage of classes taken by temporary faculty : ZERO

14. Programme-wise Student Teacher Ratio

B.Tech.	:	17.7:1
M.Tech.	:	15:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

	Sanctioned	Filled	Actual (including CAS & MPS)
Staff (Technical)	05	04	04
Administrative Staff	01	01	01

16. Research thrust areas as recognized by major funding agencies : Seismic Design.

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

a) National Level : 01

Principal Investigator	Name of the Project	Sponsoring Agency	Outlay in Rs.
Dr. P K.Emani	Development of In elastic design curves for seismic design of concrete piles and pile groups	DST fast track scheme for young scientists by SERB division	9,01, 000.00/-
Dr. P K.Emani	Seismic behavior of large pile groups in liquefying	BRNS scheme of BARC, Department of	24, 35, 800.00/-

	soils using parallel processing methods	Atomic Energy (DAE)", Govt. of India	
--	---	--------------------------------------	--

- b) International Level : NONE
c) Total grants received : Rs. 33, 36, 800/-

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration :

- Collaboration with IWRS, IITR. Grant received Rs. 55,000 for conducting various activities related to water resources management.
- Training of GEHU Bhimtaal project staff involved in concurrent evaluation of flood protection scheme of Gaula River catchment, Haldwani development block of Nainital district, funded by department of Irrigation, Haldwani, Kumayun division, Uttarakhand.
- Project on training of staff for use of GIS and Remote Sensing tools by USAC, Dehradun.

b) International collaboration : NONE

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. :

Principal Investigator	Name of the Project	Sponsoring Agency	Outlay in Rs.
Dr. P K.Emani	Development of In elastic design curves for seismic design of concrete piles and pile groups	DST fast track scheme for young scientists by SERB division	9,01, 000.00/-
Dr. P K.Emani	Seismic behavior of large pile groups in liquefying soils using parallel processing methods	BRNS scheme of BARC, Department of Atomic Energy (DAE)", Govt. of India	24, 35, 800.00/-

20. Research facility / centre with

- state recognition :
Material Testing Center identified by Doon Associates "A" class contractor with National Highway Department and Govt. of Uttarakhand.
- national recognition : NONE
- international recognition : NONE

21. Special *research*. laboratories sponsored by / created by industry or corporate Bodies

: ONE (Structural Analysis and Design (STAAD) Lab.)

22. Publications:

- * Number of papers published in peer reviewed journals (national / international) : 22 (international)
- * Monographs : NIL
- * Chapters in Books : NIL
- * Edited Books : NIL
- * Books with ISBN with details of publishers : NIL
- * Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Sciences Directory, EBSCO host etc.): : 09
- * Citation Index – range / average
 - SNIP : 0.08 – 1.64
 - SJR : 0.22 – 1.44
 - Impact Factor – range / average : 0.12 – 1.29
 - h-index : 08 – 32

23. Details of patents and income generated : NIL

24. Areas of consultancy and income generated :

S.N.	Consultancy Assignments/ Training program	Department	Project Tenure	Amount (in Rs.)
1.	Provision of expertise service on Testing of Material Strength for Ashmeet Associates Engineers and Contractors (at three projects sites in UP and Uttarakhand)	Civil Engg.	Sept 2014 -Aug 2015	2.00 lakh
2.	Provision of expertise service on Testing of Material Strength for Alankara Constructions (at two projects sites in Dehradun, Uttarakhand)	Civil Engg.	Sept 2015 - Aug2016	2.00 lakh
3.	Skill Enhancement program for Pipe design and modelling for Prakash Pipe Industry, Bijnor , UP	CE/ME (shared)	Dec 2014 - Nov 2015	2.00 lakh

25. Faculty selected nationally / internationally to visit other laboratories / institutions/ industries in India and abroad :

- Prof. K.K.Gupta selected as UKPSC Paper setter, reviewer and evaluator of candidates.

- Dr. Sanjeev Kumar and Prof. K.K.Gupta visited various institutions affiliated to UTU, Uttrakhand as external examiner.
- Prof. K.K.Gupta visited the laboratory of Ambuja Cement Pvt. Limited, Dehradun.
- Dr. Sanjeev Kumar, Prof. Nitin Mishra and Prof. K.K.Gupta visited laboratory of water treatment plant, Dehradun and Waste water treatment plant, Haridwar.

26. Faculty serving in

a) National committees b) International committees c) Editorial Boards d) and other (please specify)

➤ National committees : 01 (Prof. K.K.Gupta – UKPSC)

➤ International committees : NONE

➤ Editorial Boards : Dr. Sanjeev Kumar serving in following committees

International Research Journal of Environmental Sciences: Editorial Board Member

Research Journal of Earth Sciences: Reviewer

Research Journal of Recent Sciences: Reviewer

Research Journal of Engineering Sciences: Reviewer

Research Journal of Agriculture and Forestry Sciences: Reviewer

International Research Journal of Environmental Sciences: Reviewer

International Journal of Engineering Research and Technology: Reviewer

IWRS Student Chapter, Graphic Era University, Dehradun Center: Convener

- Prof. Nitin Mishra serving as Faculty Advisor, IWRS Student Chapter, Graphic Era University, Dehradun Center under Indian Water Resources Society, IIT Roorkee.

- Dr. P.K.Emani serving as a reviewer in earthquake engg. and engineering vibration (EEEV), Springer.

➤ Others :

- Prof. K.K. Gupta Life Membership of ISTE, IE and IWRS.
- Prof. Nitin Mishra Life Membership of IWRS
- Dr. sanjeev Kumar Life Membership IWRS

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

- Periodic conduction of FDP
- Faculties are encouraged to attend workshop, seminar in the Civil Engineering related field.
- Apart from this, Faculty members are permitted to pursue higher qualifications.

28. Student projects

- percentage of students who have done in-house projects including interdepartmental projects: 100%

- percentage of students doing projects in collaboration with other universities / industry / institute: 25%

29. Awards / recognitions received at the national and international level by

Faculty:

- Dr. P. K. Emani got ISET B.K. Maheshwari Award for Best Ph.D. Thesis in Soil Structure Interaction in India for the year 2014.
- Dr. P.K.Emani got young scientist award 2012 by DST, New Delhi.
- Prof. Nitin Mishra got Kathpalia award 2013 for best M.Tech Theses at IITR, Roorkee.

Doctoral / post doctoral fellows: NONE

Students:

➤ Academic:

- Kalyani Kumar got first prize of IDEAZ (Paper Presentation) of COGNIZANCE 2014 at IIT Roorkee.
- Apoorva Shrivastava and Abhishek Pokhriyal got third prize of IDEAZ (Paper Presentation) of COGNIZANCE 2015 at IIT Roorkee.

➤ Extra Curricular (Sports):

- Mohd. Aasif won the gold, silver and bronze medal in state level shooting competition held at Dehradun in 2014.
- Ms. Aprajita Verma won the title “Miss North India-2015” contest.

30. Seminars/ Conferences/Workshops organised and the source of funding (national / international) with details of outstanding participants, if any.

Seminars/ Conferences organized

S.N.	Name of the conference	Sponsoring agency	Resource person	Date
1	Environment Quality assessment & Monitoring	Uttrakhand Environment Protection and Pollution Control Board	1. Dr. Rajendra Dobhal 2. Shri Pankaj Gupta 3. Mr. A.Toshniwal	5 th June, 2010
2.	Global warming and its effects on water resources	DST, New Delhi and UCOST, Dehradun	1. Dr. P.S.Roy, 2. Dr. Anand Sharma 3. Dr. Z. Ahmad 4. Dr. C.S.P. Ojha	3 rd -4 th Dec., 2010

Workshops Conducted

Sl.No	Name of the workshop	Date	Resource person
-------	----------------------	------	-----------------

1	Environmental Management and Climate Change (Challenges and Technological options in Uttarakhand)	15 th Sept. 2010	1. Shri Jai Raj 2. Dr. Rajendra Dobhal Dg UCOST 3. Dr. Ajay Gairola
2	Training Workshop on soil testing methods for Dehradun Civil Contractors	20 Jan 2011	1. Dr S S Gupta, GBTUP
3.	Workshop on use of GPS Device	15 April 2012	1. Dr P. Champathiray IIRS
4.	Workshop on Earthquake resistant techniques for residential buildings	10 March 2013	1. Dr V.K. Gupta IIT Roorkee
2	Concrete Mix Design	29 th Nov. 2014	1 Mr. Girish Bhardwaj, Technical Head, Ultratech Cement Ltd.

Invited talks/special talks

Sl.No	invited talk topic	resource person
1	Catastrophic Modeling: Applying Civil Engineering in the Insurance industry, 11 March 2010.	Dr. Deepak Badoni Senior Director, Software Product Management at RMS
2	Cement manufacturing and properties, 12/11/2010.	Mr. B.S. Sidhu and Mr. Gaurav Senior Manager (customer support service), Zonal head, Ambuja Cement Ltd., Uttarakhand region.
3	Cement manufacturing and properties, 22/01/2011.	Mr. B.S. Sidhu Senior Manager (customer support service), Zonal head, Ambuja Cement Ltd., Uttarakhand region.
4	Preparation of concrete, 26/02/2011.	Mr. B.S. Sidhu Senior Manager (customer support service), Zonal head, Ambuja Cement Ltd., Uttarakhand region.
5	Durability of Concrete, 18/04/2011.	Mr. B.S. Sidhu Senior Manager (customer support service), Zonal head, Ambuja Cement Ltd., Uttarakhand region.
6	Career planning, 09/04/2011	Prof D.P. Giridhar Ex VC GEU, Dehradun
7.	SEW Infra. Interactive Session, 13/04/2011	1. Mr Nagaraju (GM HR) 2. Mr S. Venkat (vice president) SEW Infrastructure
8.	Structural Masonry System	1. Dr. M.R. Yogananda, MRINMAYEE,

	(Economic Alternatives and Earthquake Resistance Systems), May 09 th and 11 th , 2011.	Bangalore 2. Dr. K. S. Jagadish, Emeritus Professor, IISc Bangalore
9.	Cement manufacturing and physical/chemical properties of cement. 14 th Sept., 2012	Mr. B.S. Sidhu and Mr. P. Rawat, Senior Manager (customer support service), Zonal head, Ambuja Cement Ltd., Uttarakhand region.
10.	World Environment Day 5 th June, 2013.	1. Dr. N. Bagchi, Ex. Senior, Ministry of environment and forest. 2. Dr. P. Sharma, Assistant Prof.
11	Latest technology being used in the construction. 13 th April 2014	Mr. D N Basu, Sr. Technical Director at Simplex Infrastructure Ltd.
12	Structural Engineering 5 th Aug 2014	Mr. Risipal Arya, Retd. Head, Civil Engineering Division, Power Transmission of Uttarakhand
13	Basics of Hydropower (Minor and major) 29 Jan 2015	Mr. GPS Bhati, Retd. Chief Engineer, U.P. Irrigation deptt.
14	Space and its usefulness for a common man 26 March 2015	Dr. Sameer saran and Dr. P.K. Gupta, IIRS, DDN

31. Code of ethics for research followed by the departments:

- As per UGC Guidelines
- Turnitin software is also being used for originality check
- Periodic evaluation of course work
- Continual evaluation of research work through DPMC.

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage		Total pass percentage
		Male	Female	Male	Female	
UG (B.Tech.-Civil) 2011-15	241	158	19	65.56	7.88	73.44
PG (M.Tech-SE) 2013-15	5	4	1	80	20	100

33. Diversity of students (2014 – 2015)

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
PG (M.Tech – Structural Engineering)	00	100	00	Nil
PG (M.Tech – Geo Informatics) (2015-16)	100	00	00	Nil
PhD*	Nil	Nil	Nil	Nil

*None could be selected through entrance exam/interview.

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

- Civil services : NONE
- Defense services : 04
- NET : NONE
- SET : NONE

GATE	
Batch	No. of Students
2009-13	17
2010-14	12
2011-15	09
Total	38

List of GATE 2013 qualified students

S. No.	Name	Percentile
1.	Nikhil Garg	99.35
2.	Sandeep Petwal	95.82
3.	Narendra Singh Negi	93.95
4.	Amit Semwal	92.70
5.	Ritiksha Danu	92.24
6.	Vishnu Shankar Rana	91.98
7.	Nitin Lakhera	91.44
8.	Subham Pundeer	91.20
9.	Ritika Semwal	90.05

10.	Radhika Sharma	89.75
11.	Akshay Panwar	89.75
12.	Vineet Kumar Verma	88.75
13.	Monika Tewari	88.40
14.	Ashish Kumar	88.40
15.	Shahnawaz	87.99
16.	Rahul Sharma	87.56
17.	Sneha Singh	82.89

List of GATE 2014 qualified students

S.No.	Name	Percentile
1	Siddharth Garia	96.44
2	Umesh Chandra	95.14
3	Ashish K.Chaudhary	94.32
4	Shubham dangwal	93.44
5	Gupta Abhishek Keerat	92.32
6	Gagan Arora	89.86
7	Gaurav Thakur	89.30
8	Vipin Thapliyal	89.14
9	Ankur Saini	89.14
10	Bibek kumar sinha	89.14
11	Swaroop semwal	88.83
12	Ishan Rayal	88.43

List of GATE 2015 qualified students

S. No.	Name	Percentile
1.	Ankit Uniyal	96.00
2.	Prachi Lingwal	93.65
3.	Sangeeta	93.57
4.	Praveen Nautiyal	93.18
5.	Shristi Negi	91.99
6.	Rakshit Bisht	91.78
7.	Shail Gairola	91.57
8.	Hafeez Ahmad	90.76
9.	Gaurav Pant	90.00

Other competitive examinations:

UKPSC

:

08, UK Payjal Nigam:

02

35. Student progression

Student progression	Percentage against enrolled	
UG to PG	On an average of 8-10% (including IN and OUT)	
PG – to M.Phil.	N/A	
PG to Ph.D.	NIL	
Ph.D. to Post-Doctoral	NIL	
Employed ➤ Campus selection	Year	No. of Students
	2011	30
	2012	38
	2013	20
	2014	38
	2015	46
Other than campus recruitment	15	
Entrepreneurs	9	

36. Diversity of staff

Percentage of faculty who are graduates	
of the same university	11.76
from other universities within the State	29.41
from universities from other States from	58.83
universities outside the country	NIL

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:

- M.Phil. : NONE
- Ph.D. : 02
- D.Sc. : NONE
- D.Litt. : NONE

38. Present details of departmental infrastructural facilities with regard to

a) Library: Apart from central library the department is maintaining a separate library for quick reference by the staff members and students. Laboratory Manuals, M.Tech and B.Tech project reports are kept in the department library for reference.

No. of Volumes: 225

No. of Titles: 115

b) Internet facilities for staff and students: Yes (Campus fully Wi-Fi)

- iii. 24 hours internet facilities are available for both staff and students
- iv. Wi-Fi facilities are also available for faculty members.

- c) Total number of class rooms : 08
- d) Class rooms with ICT facility : 04
- e) Students' laboratories: 09
 - Structure analysis Lab.
 - Concrete Lab.
 - Geomatic Engineering Lab.
 - Fluid Mechanics Lab.
 - Hydraulics and water resource engineering
 - Transportation engineering
 - Geotechnical engineering
 - Environmental engineering
 - CAD lab
- f) Research laboratories : 01

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university : None
- b) from other institutions / universities : None

40. Number of post graduate students getting financial assistance from the university:
:01(Scholarship of Rs. 8000/per month)

'01(Fee waiver)

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Proposal is put up to BOS which constitute of some internal and external expert.
- Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42. Does the department obtain feedback from

- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
 - b. Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
 - c. Alumni and employers on the programmes offered and how does the department utilize the feedback?
 - Yes. Feedbacks from alumni through regular alumni meet and employers considered for the upgradation of curriculum meeting current/latest need of employers and other industries.
43. List the distinguished alumni of the department (maximum 10)
- | | |
|---|---------------|
| • Mr. Ambrish Rawat, Assistant Engineer, RWD Deptt. UK | Batch 2007-11 |
| • Mr. Ashish Mishra, Assistant Engineer, UK Peyajal Nigam | Batch 2007-11 |
| • Aditya Uniyal, CDS Entry IMA, Dehradun | Batch 2009-13 |
| • Shubham semwal, Flying officer Engineer, Indian Air Force | Batch 2010-14 |
| • Miss Anisha Jatav, Assistant Engineer, UK Peyajal Nigam | Batch 2007-11 |
| • Mr. Sudhir Saini, Assistant Engineer, Irrigation Deptt. UK | Batch 2007-11 |
| • Mr. Shivam Rawat, Assistant Engineer, Irrigation Deptt. UK | Batch 2007-11 |
| • Mr. Kishore Kumar, Assistant Engineer, PWD Deptt. UK | Batch 2007-11 |
| • Ms. Kalyani Kumar, Pursuing M.S. (Structural Engg.) from School of Engineering, Aalto University, Finland | Batch 2010-14 |
| • Ms. Apurva Srivastava, Pursuing M.S. (Civil Engg.) from France | Batch 2011-15 |
44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
- The details are already provided in Q.30
45. List the teaching methods adopted by the faculty for different programmes.
- Instructional tools like Lectures, Assignments, Discussions, Classroom activities, lab experiments, quizzes and presentations.

- Individual / group exercises and projects are assigned for collaborative learning, better visualization & application of concepts.
 - In addition to lectures, tutorials, industrial visits and guest lectures are organized for practical exposure and observational learning.
 - ICT is leveraged for making the delivery more efficient, effective and interesting. The faculty members work on laptops and deliver lectures using power-point presentations, and also make assignments, lecture slides, etc. available through individual course websites, or University Learning Management System (MOODLE).
 - Keeping in view the desired graduate attributes, learning outcomes and nature of delivery learning techniques are emphasized by the department.
 - Last but not the least, Career and Life Skills training is offered to instil and develop positive attitude, temperament and necessary skills in students.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Periodical reviews through tests, quiz, tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.
 - Experiences learnt through their performance in exams, results and employability goad us to take necessary actions.
47. Highlight the participation of students and faculty in extension activities.

Both the faculty and students of this department actively participate in workshop, seminar and various technical quizzes.

- The areas in which our students excel outside the academic curricula include cultural performance, commitment to society, sports and quiz activities, dance and drama performance.
 - Students are also associated with different clubs of university such as music, chess, science, photography.
48. Give details of “beyond syllabus scholarly activities” of the department
- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
 - Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
 - Organization of conferences/ workshop/ seminar on thrust areas which provide an opportunity to interact with eminent experts.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
- The Civil Engineering department is certified by ISO 9001 -2008.
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- Department always motivate students to do research works.
 - Workshop/Seminars are conducted by department to enhance the knowledge of students.
 - Organizes expert guest lecturer by faculty of other academic institutions/industry experts.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department
- Strengths:
 - Excellent Infrastructure
 - Programme is revised regularly
 - Placement Opportunities
 - Emphasis on co-curricular and extra-curricular activities.
 - Special attention to the weaker students.
 - Weaknesses:
 - Lack of Sponsored and Consultancy projects
 - Inter institutional collaborations at National & International level.
 - Lack of focused research in specific areas
 - Lack of campus recruitment from the core companies
 - Lack of govt Department initiatives to identify the labs as research centre.
 - Opportunities:
 - Advanced laboratories
 - Possibility of international and national collaboration and joint ventures
 - Sponsored and consultancy Funded projects
 - Prospects for Research activities and Research oriented projects
 - Digitalize classrooms
 - Challenges:
 - Providing more industrial exposure to students

- Retention of faculty
- Enhancement in placement through core companies
- Further improvement in consultancy/Research projects
- Faculty recharging

52. Future plans of the department.

- Improve the industry – Institute Interaction to provide more opportunities for students to meet Industry – society needs.
- More emphasis on personality development programmes for students along with regular academics.
- Development of laboratories & procurement of advanced software.
- To conduct more national and international conferences/ workshops.
- Transforming from faculty centric to students centric learning.

Evaluative Report of the Department

1. Name of the Department : **Department of Petroleum Engineering**
2. Year of establishment : 2012 (B.Tech Programme initiated)
: 2013 (Department established)
3. Is the Department part of a School/Faculty of the University
: Yes, Part of School of Engineering and Technology
4. Names of programmes offered (UG, PG, M. Phil., Ph. D., Integrated Masters; Integrated Ph.D., D. Sc., D. Litt., etc):
UG : B. Tech (Petroleum Engineering)
Ph. D
5. Interdisciplinary programmes and departments involved :
1. Geomatic Engg with Civil Engg dept. GEU
2. Drillings Methods with Mechanical Engg dept GEU
6. Courses in collaboration with other universities, industries, foreign institutions, etc.:
1. Industrial visit to Institute of Drilling Technology ONGC, IOCL refinery at Panipat
2. Internship at ONGC, IRS, Oil India, IOCL, Essar Oil etc
7. Details of programmes discontinued, if any, with reasons : None
8. Examination System: Annual/Semester/Trisemester/Choice Based Credit System
: Semester with Choice Based Credit System
9. Participation of the department in the courses offered by other departments: Yes

Course	Department
Engineering Geology	Civil Engineering

10. Number of teaching post sanctioned, filled and actual (Professors/Associate Professor/Asst. Professor/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	1	7*	7

Associate Professor	2	0	0
Asst. Professor	4	4	4

* Includes Visiting/Adjunct Professor (4+1)

11. Faculty profile with name, qualification, designation area of specialization, experience and research under guidance

S. N.	Name	Qualification	Designation	Specialization	No of Exp.	No of Ph.D./M.Phil. students guided for the last 4
1.	Prof. Dr A. K. Awasthi	Ph. D	Dean, Adjunct Professor	Petroleum Geosciences, Sedimentology	47	1
2.	Dr. Gautam Das	Ph. D	Professor	Chemical Reaction Engineering	29	
3.	Dr. Virendra Bahadur Singh	D. Phil	Professor	Applied Geology	15	-
4.	Ms. Rita Yadav	M. Tech	Assistant Professor	Petroleum Processing and Petrochemical Engineering	8	-
5.	Mr. Ravi Shankar	M. Tech	Assistant Professor	Geological Technology	3	-
6.	Mr. Anil Mundhe	M. Tech	Assistant Professor	Petroleum Engineering	2.5	-
7.	Mr. Amit Saxena	Ph. D	Assistant Professor	Petroleum Engineering	--	--
8.	Dr.Mohan Chandra Pandey	Ph.D	Visiting Prof	Geophysics	34	--
9.	Dr.Anil Kumar Jain	Ph.D	Visiting Prof	Chemistry	32	--
10.	Dr.AK Dubey	Ph.D	Visiting Prof	Geology	35	--
11.	Mr. Nand Kishore Agarwal	M.Tech	Visiting Prof	Engineering Geology	38	--

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors
- Prof. Dr. A. K. Awasthi, Adjunct Professor
 - Dr. M. C. Pandey, Visiting Professor, Ex Group General Manager (Geophysics) ONGC
 - Dr. A. K. Dubey, Visiting Professor, Ex Director, Wadia Institute of Himalayan Geology (Structural Geology)
 - Dr. A. K. Jain, Visiting Professor, Ex Dy Gen Manager (Petroleum Geochemistry), ONGC
 - Mr. N.K. Agarwal, Visiting Professor, Ex Director Geological Survey of India.

13. Percentage of classes taken by temporary faculty-programme-wise information
- B. Tech: Zero

14. Programme-wise Student Teacher Ratio : B. Tech 16.5:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual:

Category	Sanctioned	Filled	Actual
Technical Staff	2	2	2
Administrative Staff	1	1	1

16. Research thrust areas as recognized by major funding agencies : Petroleum Geosciences, Refining, Drilling Fluid; GEU

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, projects title and grants received project-wise : None

18. Inter-institutional collaborative projects and associated grants received:

a) National collaboration: b) International collaboration:

GEU has sanctioned seed money of Rs 28 Lakhs for the following projects

1. Late Quaternary deep sea foraminifer and clay mineral in the southern south china sea: Plaeoenviromntal deductions
2. Gasification of petcoke/biomass to produce liquid fuel.
3. Development of esters of fatty acids as flow improvers for Indian waxy crude oils.

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS. DPE; DBT, ICSSR, AICTE, etc.; Total grants received. : None

20. Research facility / centre with

- State recognition : Field-based Geoscientific research facilities
- National recognition : Geomatic investigation facility
- International recognition :

21. Special research laboratories sponsored by / created by industry or corporate bodies
: Remote Sensing GIS Lab (Self Finance)

22. Publications:

- Number of papers published in peer reviewed journals (national / international):
 - National : 1
 - International : 4
- Monographs : No
- Chapters in Books : No
- Edited Books : No
- Books with ISBN with details of publishers : None
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database – International Social Science Directory, EBSCO host, etc.) : 2
- Citation Index-range / average : 0-390
- SNIP : 1.129-3.439
- SJR : 1.235-3.488
- Impact Factor-range / average : 2.339-7.885 (2013-2015)
7.885(Earth Science Reviews ,2015)
- h-index : 103-118

23. Details of patents and income generated : One patent in the filing stage

24. Areas of consultancy and income generated :
Competency in Applied Geology/Micropaleontology/Paleoceanography/Resistivity Method/Refining/Enhanced Oil Recovery/Drilling Fluid

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :

Prof A. K. Awasthi :

- Wadia Institute of Himalyan Geology Dehradun for Selection Committe meetings,
- Dept of Geology, Jammu University research work evaluation for Ph. D degree award.
- KDMIPE, Dehradun to explore the possibility of collabration

Prof V. B. Singh:

- Dept of Earth & Planetary Sciences, University of Allahabad for taking practical examination.
- Wadia Institute of Himalyan Geology Dehradun to participate in Colloquim on Micropaleontology & Stratigraphy
- Institue of Drilling Technology Dehradun with students for their industrial visit.
- IOCL refinery at Panipat, with student for industrial visit
- National Fertiliser Ltd Panipat, for students industrial visit

Mrs Rita Yadav:

- Survey of India Dehradun for industrial visit.

Mr Ravi Shankar:

- Survey of India Dehradun with student for industrial visit.
- Wadia Institute of Himalyan Geology Dehradun for interaction with scientist.

Mr Anil Mundhe:

- Institue of Drilling Technology Dehradun for industrial visit
- Indian Institute of Petroleum Dehradun to participate in a workshop.

26. Faculty serving in

- a) National committees b) International committees c) Editorial Boards d) any other (please specify) : Former Vice President, Indian Geological Congress
Selection Committee of Wadia Institute of Himalyan Geology Dehradun – Chairman; Member

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programmes workshops, training programmes and similar programmes).

- Faculties are encouraged to attend workshop, seminar, refresher courses, and orientation programmes. (Dr V. B. Singh prticipate in GEOINDIA 2015)
- The faculties are attending the classes taken by senior industry experienced, visiting faculties and are trained.

28. Student projects

- Percentage of students who have done in-house projects including inter departmental projects: ~5%
- Percentage of students doing projects in collaboration with other universities / industry / institute:
68% students did internship in ONGC, Oil India Ltd, Institute of Reservoir Studies, WIHG, IOCL Refinery, Essar Oil

29. Awards / recognitions received at the national and international level by

- Faculty : Prof. A. K Awasthi – WIHG
Scientists Selection Commitees
- Doctoral / post doctoral fellows : Not at present in this 2+ dept.

- Students : Mr Akshay Anand participated in National shooting championship and secure rank 300 out of 3000 participant

30. Seminars/Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any. : Two Workshops

1.Modern approach of Geophysical Prospectus of for petroleum; 20.11.2014 at GEU

Funding Agency- Graphic Era University

Important Participants

- Prof.H.sinvhal, IIT Roorkee
- Prof.S.S.Teotia, Kurukshetra university
- Prof. V.N.Singh, IIT Roorkee
- Dr.P.Chandra Shekharan, ONGC
- Dr.D.Singh,Geopic, ONGC

2. Source Rock Evaluation Techniques

Funding from Graphic Era University

Venue: GEU, Date: 5.5.15

Important Participants

- Prof.G.M.Bhatt,Jammu University
- Dr. Raza khah, ONGC
- Mr.P.B.Pati, ONGC
- Dr. Seema Singh, Punjab University

31. Code of ethics for research followed by the departments : As per UGC 2009 guidelines.

32. Student profile programme-wise

Name of the programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech (Petroleum Engineering)(2012-2016 Batch)	73	57	5	Does not apply	Does not apply
B. Tech (Petroleum Engineering)(2013-2017 Batch)	79	57	9	Does not apply	Does not apply
B. Tech (Petroleum Engineering)(2014-2018 Batch)	68	48	6	Does not apply	Does not apply

33. Diversity of students

Name of the programme	% of	% of students	% of students	% of
-----------------------	------	---------------	---------------	------

(refer to question no. 4)	students from the same university	from other universities within the State	from other universities outside the State	students from other countries
B. Tech (Petroleum Engineering) (2013-2017 Batch)	0	28	72	Nil

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE, and other competitive examinations? Give details category-wise:

- Not applicable as students are yet to graduate

35. Student progression:

Not Applicable as the first batch of B. Tech is yet to complete the programme

Student Progression	Percentage against enrolled
UG to PG	Zero, as the first batch students have get not graduated
PG to M.Phil	Not applicable, No PG Programme in the Department
PG to Ph.D.	Not applicable, No PG Programme in the Department
Ph.D. to Post Doctoral	Not applicable
Employed <ul style="list-style-type: none"> ▪ Campus Selection ▪ Other than campus recruitment 	
Entrepreneurs	

36. Diversity of staff:

Percentage of faculty who are graduates	
of the same university	Nil
From other universities within the State	10%
From universities from other States from	90%
universities outside the country	Nil

37. Number of faculty who were awarded M. Phil., Ph. D., D. Sc. and D. Litt. During the assessment period: Not applicable in assessment period

38. Present details of departmental infrastructural facilities with regard to
- Library: managed centrally
 - Internet facilities for staff and students. Yes (24 hours Wi-Fi internet facility)
 - Total number of class rooms: 3
 - Class rooms with ICT facility: 3
 - Students' laboratories: 7
 - Research laboratories: --
39. List of doctoral, post doctoral students and Research Associates: Candiddate appeared in Ph. D examination but not qualify the examination.
- From the host institution / university : 1 Applicant; He could not qualify the written examination
 - From other institutions / universities : 1 Applicant; She could not qualify the written examination
40. Number of post graduate students getting financial assistance from the university.
- Not Applicable (Presently only UG programme is running)
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
- Yes, Inputs from faculty, domain experts from industry and IIT Roorkee/ other institutions are considered by Departmental Faculty Board and its recommendations are placed for consideration by Board of Studies and then by the Academic Council.
 - BOS dated June 16, 2015 has recommended to start M. Tech (Petroleum Exploration) with effect from session 2016-2017
 - M. Tech (Gas Engineering) with effect from session 2017-2018
 - These recommendations of BOS are to be considered by Academic Council
42. Does the department obtain feedback from
- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feed back?
 - Yes. The feedback received from the faculties is discussed in the Faculty Board of Department and necessary modification /upgradation of curriculum is taken up by BOS and the Academic Council of the university.
 - Student on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. Continual feedbacks are taken from students, regarding teaching, course content, rapport with students and their suggestions. These are received confidentially by HOD who shows it to the concerned faculty for necessary improvement/corrective measures or acceptance of new ideas/approaches.
 - Alumni and employers on the programmes offered and how does the department utilize the feedback?

- Not Applicable (Since the Department was established in 2012 and the first batch has not completed 4 year B. Tech programme.
Experts from prospective employer (oil industry) have reviewed the curricula for improvement; in fact some of them were and are the members of our BOS.
43. List the distinguished alumni of the department (maximum 10): Not Applicable
(Since the dept was established in 2012 and the first batch is not completed)
44. Give details of student enrichment programmes (special lectures / workshop / seminar) involving external experts.
- i. Special lecture and Training on Remote Sensing and GIS software ERDAS and Geomedia from Feb, 21 to Feb 27, 2014
 - ii. Guest Lecture by Prof Harsh Sihawal, IIT Roorkee March 9, 2014
 - iii. Guest Lecture by Mr Ashok Kumar, DGM, Frontier Basin ONGC, on September 6, 2014
 - iv. Guest Lecture by Prof V. N. Singh, IIT Roorkee on September 13, 2014
 - v. Guest Lecture by Mr Dhruendra Singh, GM, ONGC on May 18, 2015
45. List the teaching methods adopted by the faculty for different programmes.
- Regular class lectures
 - Power Point Presentation
 - Industry oriented practical in labs
 - By providing opportunity towards students' individual attention, special slot is kept in the time table.
 - Geological field work training
 - Through exposure to Ground Survey equipments labs at Survey of India, Dehradun
 - Video Shows
 - Physical Modelling
 - Assignments
 - Special lecture cum demonstration of working of drilling rig and drilling fluid lab at Institute of Drilling Technology ONGC Dehradun
 - Visit to Indian Oil Corporation Refinery at Panipat
 - Visit to National Fertiliser Ltd Plant at Panipat
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
By periodical review through class test, assignments, quiz, tutorials, and internal assessment etc.
47. Highlight the participation of students and faculty in extension activities.

- Help provide expertise in selection of scientist/others to Wadia Institute of Himalayan Geology Dehradun
 - Both the faculty and students of this department actively participate in workshop, seminar and various technical quizzes.
 - The areas in which our students excel outside the academic curricula include cultural performance, commitment to society, sports and quiz activities, dance and drama performance.
 - Students are also associated with different clubs of university such as music, chess, science, photography
48. Give details of “beyond syllabus activities “of the department.
- Quiz competition
 - Cultural activities of the university e.g Grafest
 - Sports: President Cup Cricket tournament Graphic Era University Dehradun
 - Sports: Uttarakhand State Shooting Championship Dehradun
 - Individual field visits
49. State whether the programme/department is accredited / graded by other agencies? If yes, give details
- It is a new department in establishment stage
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- By inducting highly qualified and vastly experienced visiting professor with specializations in various aspects of petroleum industry and research institution.
 - By arranging special lectures by domain experts from outside the organization.
 - By arranging visit to geological sites and industries for real world exposure based knowledge.
 - Young regular faculty attends regular classes’ alongwith students, which are conducted by experienced expert (visiting faculty) from industry.
51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
- Strengths
 - Full back up support of management
 - Dedicated faculty
 - Oil industry based experienced and highly qualified senior faculty/guest faculty
 - Good rapport and outreach to Oil and Natural Gas Corporation Ltd, Oil India Ltd, Indian Institute of Petroleum Wadia Institute of Himalayan Geology etc.

- Full cooperation and support from other departments of the university for conducting classes & organizing academic trips
- Weakness
 - New born department
 - Non availability of highly qualified and industry experienced young regular faculty
 - Limited availability of downstream based subject experts
 - Paucity of cost prohibitive high end equipments, softwares
 - Costly books and journals, poor availability of research students for Ph D Programme
- Opportunities
 - Full and outright support of management to establish and develop it as leading department
 - Locational advantage as the city is in the hub of Petroleum Sector
 - Nearness of geologically important sites for training and research studies
 - Possibility to utilise expertise of scientists and engineers of ONGC, IIP and WIHG, Dehradun, and IIT Roorkee for continual monitoring and upgradation of curriculum, guest lectures, internships, project/dissertations etc
 - Possibility to collaborate with industry for their industry oriented research through Industry-Academia interaction.
- Challenges
 - To establish the department on sound foundation and to develop it for high quality education.
 - To produce well trained human resources ready to takeoff
 - To develop intimate linkage with the Petroleum Sector for win-win collaborations
 - To develop it as a locale research location in the area of Petroleum studies
 - To attract research/consultancy projects

52. Future plans of the department

- Consolidation of existing programme, and upgrading the laboratories
- Attract qualified faculty specially in downstream and reservoir engineering
- Initiation of M. Tech programmes in
 - (i) Petroleum Exploration and
 - (ii) Gas Engineering
- Increase linkage with Petroleum industry
- Focus on research through Ph.D programs and Projects

Evaluative Report of the Department

1. Name of the Department : **Department of Electrical Engineering**
2. Year of Establishment : 2004
3. Is the Department part of a School/Faculty of the university?
: (School of Engineering and Technology)
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) :
 - **UG**
 - **B.Tech, Electrical Engineering**
 - **PG**
 - **M.Tech, Control System**
 - **Ph.D**
5. **Interdisciplinary programmes and departments involved:**Presently, department is not running any interdisciplinary programmes, however faculty members of the department are associated with other departments for the subjects related to machine, control system, network theory, measurement. Also, numerous researches have been contributed in the area of Bio-Medical Engineering.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - (i) Short-Term Course on Maintenance, Testing and Installation of Power Sub-Station in collaboration with Ever-Tech Engineering Pvt. Ltd.
 - (ii) Short-Term Course on Relay Maintenance collaboration with Ever-Tech Engineering Pvt. Ltd.
 - (iii) Open courseware in collaboration with Spoken Tutorials of IIT Bombay
 - (iv) Nodal Centre, Virtual Lab, in collaboration with IIT-Roorkee
 - (v) Certificate course on Implementation of Signal Processing Tool using MATLAB in collaboration with Graphic Era Hill University, Dehradun
7. Details of programmes discontinued, if any, with reasons :**None**
8. Examination System: Annual/Semester/Trimester/Choice based credit system:
Semester with Choice Based Credit System
9. Participation of the department in the courses offered by other departments:

S. No	Course Offered	Name of the other department
1	Basic Electrical Engineering (TEE – 101/201)	Common to all engineering branches
2	Electrical and Electronics Lab (PEE - 151/251)	Common to all engineering branches

3	Basic Electrical and Electronics Engineering	Department of Bio-Technology
---	--	------------------------------

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled	Actual (Including CAS & MPS)
Professor	4	3	3
Associate Professors	8	3	3
Asst. Professors	12	10	8

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S.N.	Name	Qualification	Designation	Specialization	No of years of Experience	No. of Ph.D./M. Phil/ M. Tech/ students guided for the last 4
1.	Dr. Pradeep K. Juneja	Ph. D	Professor	Process control	8	04 (Ongoing)
2.	Dr. Padamnabh Thakur	Ph. D	Associate Professor	Power system	13	01 (Ongoing)
3.	Dr. Deepak Joshi	Ph. D	Associate Professor	Neural Engineering	2	NIL
4.	Mr. PankajAswal	B.Tech MBA	Associate Professor	Power System	8	NIL
5.	Mr. Parvesh Saini	M.Tech	Assistant Professor	Instrumentation and Control	7	NIL
6.	Mr. Afzal Sikander (On Study Leave)	M.Tech	Assistant Professor	Control System	4	NIL
7.	Mr. Ashutosh Bhatt	M. Tech	Assistant Professor	Power System	3	NIL
8.	Mr. Vivek Sharma	M. Tech	Assistant Professor	Power Electronics & Drives	2	NIL
9.	Mr Kshitij Gaur	M. Tech	Assistant Professor	Power System	3	NIL
10.	Mr	M. Tech	Assistant	Power System	3	NIL

	NitinSundriyal		Professor			
11.	Mr. Manoj Badoni (On Study Leave)	M.Tech	Assistant Professor	Power System	7	NIL
12.	Mr. Ankit Bhatt*	M. Tech	Assistant Professor	AHEC	3	NIL
13.	Mr. MayankChaturvedi*	M. Tech	Assistant Professor	Control System	3	NIL
14.	Ms. Prateeksha Chauhan*	M. Tech	Assistant Professor	Control System	6	NIL
15.	Mr. Sameer Singh*	M. Tech	Assistant Professor	Power System	3	NIL
16.	Mr. Vijay Mehra	M. Tech	Visiting AP	RF and Microwave	45	NA

Note:*04 faculty members have been involved in first year (B. Tech)

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors:

- (i) Prof. Devadutta Das, Former Professor, IIT-Roorkee
- (ii) Er. R.K.Singhal, Retired DGM, Utrtrahand Power Cooperation Limited, Dehradun

13. Percentage of classes taken by temporary faculty – programme-wise information:**Zero**

14. Student - Teacher Ratio (Programme-wise):

- (i) U.G –15:1
- (ii) P.G –10:1

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual :

Staff	Sanctioned	Filled
Academic Support (Technical)	06	06
Administrative	01	01

16. Research thrust areas as recognized by major funding agencies: **Renewable Energy**

17. Number of faculty with ongoing projects from:

- a) National: 03
- b) International funding agencies: None
- c) Total grants received. : Rs. 55 Lacs

Give the names of the funding agencies, project title and grants received project-wise:

Project Title	Grant Received	Funding Agency
Solar Energy Light Project	Rs. 55 Lacs	Graphic Era University, Dehradun

18. Inter-institutional collaborative projects and associated grants received
- a) National collaboration: **02**
- (i) Research Project on Renewable Energy in collaboration with AMOGEO ITES India Ltd.
- (ii) Collaboration with Gujarat Energy Research & Management Institute (GERMI) and AMOGEO ITES India Ltd.
- b) International collaboration: Currently none. However steps are being taken to initialize this collaboration with those universities with whom MOU has been signed.
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : **01**

Project Title	Grant Received	Funded By
Solar Energy Light Project	Rs. 55 Lacs	Graphic Era University, Dehradun

20. Research facility / centre with
- a) State recognition **02**
- (i) Training Centre, Dhawan Electrical Works,
- (ii) Training Centre, Adhunik Yantra Pvt. Ltd., Selaqui
- b) National recognition **02**
- (i) Nodal Centre, Virtual Lab, in collaboration with IIT – Roorkee
- (ii) Testing and Maintenance of Power Sub Station equipment, collaboration with EverTech Engineers Pvt. Ltd.
- (iii) Proposed R&D centre on Renewable Energy Technology in collaboration with GERMI and AMOGEO ITES India Ltd.
- c) International recognition **NONE**
21. Special research laboratories sponsored by / created by industry or corporate bodies:

Research Lab proposed in collaboration with EverTech Engineers Pvt. Ltd.

22. Publications:
- a) Number of papers published in peer reviewed journals (national / international)
- International Journal: **38**
 - National Journal: **01**
- b) Monographs: **NIL**
- c) Chapters in Books : **03**
- d) Edited Books : **NIL**
- e) Books with ISBN with details of publishers: **02**
- f) Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : **39 (Journal)**
- g) Citation Index – range / average: **1 - 42**

- | | | |
|----|----------------------------------|----------------------|
| h) | SNIP (range): | 0.256 – 2.376 |
| i) | SJR (range): | 0.142– 2.074 |
| j) | Impact Factor – range / average: | 0.2 – 3.2 |
| k) | h-index (range): | 1 – 4 |
23. Details of patents and income generated: **NONE**
24. Areas of consultancy and income generated: Income Generated Nil, however
- (i) Consultancy has been offered to Dr. Deepak Joshi, in Prosthetic Engineering, by Indian Council of Medical Research
 - (ii) Consultancy has been offered to Dr.P. Thakur, in Power Engineering, by Evertech Engineer Pvt. Ltd.
 - (iii) Consultancy has been provided to AMOGEO ITeS India Limited for improvement in solar efficiency by Dr. P.Thakur.
25. Faculty selected nationally / internationally to visit other laboratories / institutions/industries in India and abroad:
- **Dr. P.Thakur**, Invited as External Member, Assessment Board, DEAL, Dehradun in
 - **Dr. P.Thakur**, Invited as resource person for Expert Lecture on “Power Quality” at Motilal Nehru, National Institute of Technology Allahabad (UP) in
 - **Dr. P. Thakur**, Invited as a resource person for Key Note address, National conference, TREE 2014 May 22-23, 2014, at, G. B. P. E. C., Pauri, Uttarakhand
 - **Dr. P.Thakur**, invited for Session Chair, TREE 2014, May 22-23, 2014, at G.B.P.E.C, Pauri
 - **Dr. Deepak Joshi**, Invited to deliver TEQIP lecture at NIT Raipur on 27th March, 2015.
 - **Dr. Deepak Joshi**, Invited to deliver lecture at CSIR, Chandigarh on 27th November, 2014
 - **Dr. Deepak Joshi**, Visiting Scientist, AIIMS, New Delhi (2015)
26. Faculty serving in
- a) National committees: 01
 - Dr. P. Thakur**, Key note speaker and Session Chair, TREE – 2014, at, G. B. P. E. C., Pauri, Uttarakhand
 - Dr. P. Thakur**, Member, Assessment board, DEAL Dehradun
 - b) International committees: **01**
 - Dr. P. Thakur**, Member, Technical Program Committee, Second International Conference on Engineering and Systems – 2015, MNNIT Alahabad (UP)
 - Dr. P. Thakur**, Member, Organising and programme committee, Second International Conference on Mathematical Techniques in Engineering Applications - 2016, Graphic Era University, Dehradun.
 - c) Editorial Boards: **NONE**
 - d) Any other (please specify): **Reviewer / Member**
 - **Dr. P. Thakur**
 - Preferred Reviewer EPC&S, Taylor and Francis
 - Active Reviewer of IEEE Transaction on Power Delivery, IET-GTD, Springer, ASEJ Elsevier.

- **Dr. Deepak Joshi**
 - Preferred reviewer in Journal of medical engineering and technology, Taylor and Francis
 - Preferred reviewer in medical engineering and physics, Elsevier
 - Member, American Association for Advancement of Science (USA)
 - Member, American Society of Biomechanics (USA)
- **Mr. PankajAswal**
 - Preferred Reviewer: Journal Of Management & Organization (Cambridge University Press)
 - Preferred Reviewer: Computational and Mathematical Organization Theory (Springer)
- **Dr. Pradeep Kumar Juneja**, Life member, ISTE (Indian Society for Technical Education)

27. **Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs):**

- Periodic conduction of FDP
- Faculties are encouraged to attend workshop/seminar/Conference/STCs,/FDPs in the related field.

28. **Student projects**

- a) Percentage of students who have done in-house projects including inter-departmental projects: **100%**
- b) Percentage of students doing projects in collaboration with other universities/ industry / institute: **Zero**

29. **Awards / recognitions received at the national and international level by**

a) **Faculty**

- **Dr.Pradeep Kumar Juneja**,
 - Has received New Idea Fund (NIF) scholarship for project entitled “Design and development of high current pulser with sharp rise and fall time and varying pulse width for electrochemical processes in semiconductor devices” for duration of one year at Central Electronics Engineering Research Institute (CEERI) Pilani, Rajasthan(2003-04).
- **Dr. Deepak Joshi**,
 - Winner of invention prize of USD 2000 from Intellectual Ventures Asia.

b) **Post-doctoral fellows:NIL**

c) **Students:**

Research Publications (2012- till date):

International Journal	12
International Conference	34
National Journal	NIL
National Conference	17
Book Chapters	02
Total	65
Total Number of Students Involved	51

Technical Activities

Student's Name	Name of The Event	Year	Course	Achievement/Award
SagarRawat	International Robotics Challenge, IIT Bombay	2015	B. Tech	Received Project Fund of Rs. 30,000/-
Priyanka Sharma	National Conference on REIT, COER Roorkee	2015	M. Tech	Best Paper Award with Cash prize of Rs. 1100/-
Shubham Kumar kanaujia	Hoverush, IIT Kanpur	2015	B. Tech	1 st Position with Cash prize of Rs. 25,000/-
Shubham Kumar kanaujia	Multi-rover, IIT Kanpur	2015	B. Tech	2 nd Position with Cash prize of Rs. 50,000/-
Shubham Kumar kanaujia	National Boeing Competition, IIT Kanpur	2015	B. Tech	7 th Position
Ishan Kaushik	Survival for the fittest/ UPES, Dehradun	2014	B. Tech	1 st Position with Cash prize of Rs. 8000/-
SagarRawat	Robo Competition, Cognizance '14, IIT-Roorkee	2014	B. Tech	2 nd Position
Ishan Kaushik	Cognizance '13, IIT Roorkee	2013	B. Tech	2 nd Position
PulkitGarg	Cognizance '13 IIT-Roorkee	2013	B. Tech	3 rd Position

Extra-Curricular Activities

Student's Name	Name of The Event	Year	Course	Achievement/Award
ChinmayBisht	SJOBA Thunderbolt Rally 2014 (560 kms)	2014	B. Tech	8 th Position
ZiyaQureshi	Youth Festival, Doon University, Dehradun	2014	B. Tech	Represented GEU and won 1 st Prize
RishBangwal	Spardha '14, G.B.P.U, Pantnagar	2014	B. Tech	Being captain of University Basketball team won 1 st prize
MrinaliniPandey	NCC	2014	B. Tech	Best Cadet from Uttarakhand and got recommended for Republic Day Camp
ChinmayBisht	Automission Dirt Track rally, February 2011	2011	B. Tech	3 rd Position

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Activity	Title	Sponsored by	Date	Details of outstanding participants (If any)
Seminar(International)	NO			
Seminar(National)	National Seminar on Renewable Energy, Emerging Technology and Challenges	Ministry of New and Renewable Energy, MNRE (New Delhi)	Aug 9-10 , 2010	Dr. B.S. Negi, Director Ministry of New and Renewable Energy, New Delhi

Conference (International)	International Conference on Environmental and Energy Conservation	GEU	Nov 27-28, 2009	Mr. Jens Berktof, Director (GTZ), Indo German Energy Program
Workshop(International)	NO			
Workshop(National)	MATLAB Learning	Self-Financed	3- 4, DEC, 2011	Details not Available
	Circuit sapiens	Self-Financed	6-11 MAY, 2013	Details not Available
	Sixth Sense Robotics	IIT Roorkee	22- 23 Feb, 2014	Details not Available

31. Code of ethics for research followed by the departments: *As per UGC guidelines*

32. Student profile programme-wise:

Details are provided for the batch passed out in 2014 and 2015.

Name of the programme (Refer Que. No. 04)	Applications Received	Selected		Pass percentage	
		Male	Female	Male	Female
B. Tech (EEE) (2010 – 14)	140	112	28	87	91
B. Tech (EEE) (2011 – 15)	169	135	34	80.74	82.35
M. Tech Control System (2012 – 14)	13	8	5	88	100
M. Tech Control System (2013 – 15)	13	02	11	50	73
Ph. D	NIL	NIL	NIL	NIL	NIL

33. Diversity of students

**M. Tech (Batch: 2014 – 16 and 2015 – 17)

Name of the Programme (refer to question no. 4)	% of Students from the Same University	% of students from other Universities within the State	% of students From Universities outside the State	% of Students From Other countries

M. Tech (Control System) (currently 14** students enrolled)	29	50	21	00
Ph. D (04 students enrolled)	50	25	25	00

34. How many students have cleared Civil Services and Defence Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Name of the exam	Number of students qualified
UPSC – Indian Engineering Services	01
Combined Defence Services	08
Public Service Commission/PSU	06
NET	NIL
SET	NA
GATE	<ul style="list-style-type: none"> • 2010 – 2014 Batch: 05 students • 2009 – 2013 Batch: 13 students • 2008 – 2012 Batch: 11 students • 2011 – 2015 Batch: 06 students Total: 35 students with more than 90 percentile
MAT/XMAT	NA
CAT	01

35. Student progression

Student Progression	Percentage against enrolled
UG to PG	19% (Total enrolled = 27) data since 2013
PG to M. Phil	NA
PG to Ph. D	50% (Total enrolled 04) data since 2011
Ph. D to Post-Doctoral	NA
Employed	<ul style="list-style-type: none"> • 23% • 38%
Entrepreneurs	10%

36. Diversity of staff (Total faculty = 16)

Percentage of faculty who are graduates	
of the same university	00
From other universities with in state	50
Universities from other state	50
Universities outside the country	NIL

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period: **02 (Ph. D)**

- Dr. P. Thakur (Dec, 2014)
- Dr. Pradeep K Juneja (Nov, 2012)

38. Present details of departmental infrastructural facilities with regard to

- a) Library: **Yes**
- b) Internet facilities for staff and students: **Yes**
 - v. 24 hours internet facilities are available for both staff and students
 - vi. Wi-Fi facility is also available for faculty members
- c) Total number of class rooms: **Three**
- d) Class rooms with ICT facility: **One**
- e) Students' laboratories: **Thirteen**
- f) Research laboratories: **One**

39. List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university: **02**

S. No	Name of the Student	Month – year of Enrolment	Status of Ph. D Candidature
1	Ms. Shweta Goyal	July, 2014	Full Time
2	Ms. Nikita Rawat	July, 2015	Full Time

- b) from other institutions/universities: **02**

S. No	Name of the Student	Month – year of Enrolment	Status of Ph. D Candidature
1	Mr. Vikash Chaudhary	Jan, 2013	Part Time
2	Mr. Pushendra Singh	July, 2015	Part Time

40. Number of post graduate students getting financial assistance from the university (admitted in 2014): **01**

- **Nalini Rajput, Student, M. Tech (Control System), Batch 2014 – 16**

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs).
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Inputs from external experts.
- Inputs are deliberated in BOS and the recommendations of BOS are considered and brief agenda by Academic Council is transmitted to Board of Management for approval.

42. Does the department obtain feedback from?

- a) **Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?**

- ✓ Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
- b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?**
 - ✓ Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
- c) Alumni and employers on the programmes offered and how does the department utilize the feedback?**
 - ✓ Yes. Feedbacks from alumni through regular alumni meet and employers considered for the upgradation of curriculum meeting current/latest need of employers and other industries.

43. List the distinguished alumni of the department (maximum 10)

Sl. No.	Name	Batch	Designation and Organisation
1	RamasheeshYadav	2007 – 2011	Selected in IES, ARM, Eastern Indian Railway
2	Kumar Saurav	2009 – 2013	Assistant Manager ,HAL
3	Kamal Joshi	2004 – 2008	Honda Cars, Bhiwadi
4	AbhishekBaluni	2004 – 2008	Senior Software Engineer Mind Tree
5	RohitBhargav	2004 – 2008	Major, Indian Army
6	AbhijeetSah	2008 – 2012	AE, Bihar Electricity Board
7	Vipin Gupta	2008 – 2012	Assistant Manager, BOSCH
8	Vinita Mehar	2005 – 2009	Assistant engineer, UPCL
9	GeetaPrajapati	2008 –2012	SE, Infosys
10	Pradeep Chauhan	2008 – 2012	Assistant Manager, Power Grid

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S. No	Name of the student enrichment program conducted	Date	Sponsored authority (If any)	Name of expertise
1	Expert Lecture on “Installation and Commissioning of sub-stations”	05/08/2015	GEU, Dehradun	Mr. SatyendraUpadhyay, M. D, EverTech India Pvt. Ltd.
2	Expert Lecture on “Challenges of Power Generation of Conventional and Renewable Energy Sources”	2/8/2014	GEU, Dehradun	Prof (Dr.) R. K. Singh Professor, EED, MNNIT Alahabad (UP)
3	Expert Lecture on “Application of AI Techniques (NN and Fuzzy Logic”	24/2/2014	GEU, Dehradun	Dr.A. K. Pant Adjunct Professor and Former Director, ECE Deptt, Birla Institute of Applied Science, Bhimtal

4	Expert Lecture on “The challenges of power generation from conventional and renewable energy sources”	10/01/2014	GEU, Dehradun	Dr. R. C Bansal Professor, Department of Electrical, Electronic and Computer Engineering, University of Pretoria, South Africa
5	Expert lecture on Electrical Design and Drafting.	23/10/2013	GEU, Dehradun	Mr. Sarabjeet Singh Project Manager, IL&FS Engineering and Construction Company Ltd, Gurgaon (HR)
6	Expert Lecture on LabVIEW	April, 2013	GEU, Dehradun	Mr. Pranav Raj Application Engineer, National Instruments (India)

45. List the teaching methods adopted by the faculty for different programmes.

- Lectures (regular classes):Face to face mode
- Use of ICT enable tools
- Use of NPTEL Module, OCW etc.,
- Seminars: Through self-study and guided seminar
- Projects: By students in group /individual for better visualization of their course content in the form of mini project and final year project.
- Learning Management System for Student Teacher Interaction - MOODLE
- Tutorials
- Industrial Visits
- Guest Lectures
- Hands on practical experience and specialised training courses.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Periodical reviews through tests, quiz, and tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.
- Experiences learnt through their performance in exams, results and employability goad us to take necessary actions.
- Feedback from Industry.

47. Highlight the participation of students and faculty in extension activities.

- a. Active and periodic participation of the faculty of the department in various workshops/FDPs/STCs held in reputed institutes/organisation in India.
- b. Active participation of students in extracurricular activities, national and international I conferences held in the university and/or other organisation, such as:
- c. PulkitGarg (B. Tech EEE, 2011 – 15 batch) participated in international conference on Advances in computing and communication engineering held at Tula’s Institute Dehradun during 01 – 02, May, 2015.
- d. Following students from the department have participated in the various National/International Conferencesand competitions across India.
 - i. Priyanka Sharma, NehaPandey and Nikita Rawatof 2013 – 15 batch participated in national/international conferences held.
 - ii. JagritiUniyal, Monalisa Joshi and PratibhaYadav of 2014 – 16 batch participated in national/international conferences held.

- iii. Shubham Kumar kanaujia (Batch: 2012 – 16) participated in event “SKYPARKS” conducted by Techkriti, the annual and entrepreneurial festival of IIT Kanpur held from 19th to 22nd March – 2015.
- iv. Shubham Kumar kanaujia (Batch: 2012 – 16) participated in event “Boeing National Aeromodelling Competition – 2015, held at IIT Kanpur held from 19th to 22nd March – 2015.
- v. IshanKaushik (2011 – 15 batch) participated in event “survival for the fittest”, held at UPES, Dehradun, February 2014
- vi. SagarRawat participated in event “RoboSapiens”, in Cognizance’14 held at IIT Roorkee
- vii. IshanKaushik participated in Cognizance’13, organized IIT-Roorkee
- viii. PulkitGarg participated in Cognizance’13, IIT-Roorkee
- ix. MrinaliniPandey won NCC Best Cadet from Uttarakhand and got recommended for Republic Day Camp in 2014

48. **Give details of “beyond syllabus scholarly activities” of the department.**

- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
- Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
- Organization of conferences/ workshop/ seminar on thrust areas which provides an opportunity to interact with eminent experts.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. **ISO Certified (9001-2008)**

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- In last 04 , more than 115 research papers have been published in various conferences and journals of repute such as IEEE transaction on power delivery, IET-GTD, Journal of Medical Engineering and Technology, Applied Mathematical Modelling, IEEE transactions on Neural Systems, Annals of biomedical engineering, Taylor & Francis, Springer, EPC&S, etc..
- Eminent professors from international and national organisations shared their knowledge and expertise in the field of Electrical Engineering with students through expert lectures.

51. **Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

Strengths

- Well-equipped labs and infrastructure
- Dedicated faculty and staff
- Good learning environment
- Updated laboratories (in software and hardware)
- Good Research facilities

Weaknesses

- Due to non-availability of high degree of industry interface continuous intervention is amiss.
- More inclination towards service industry that's why affect core engineering branches.
- Mel down in industrial sector.
- Shrinking industrial hub.
- Declining interest to join core working area.

Opportunities

- Increasing industry liaison through alumni network
- International collaboration
- Up-gradation of the department with more facilities can be realized by UGC/AICTE and DST funding.
- To attract the persons from research institutions to give boost to the research environment.
- Frequent conduction of workshop/conference/short-term course to attract more researchers/academician/manufacturer.

Challenges

- Induction and retention of highly qualified faculty
- Limited sources to upgrade existing labs and create new labs in upcoming/emerging areas
- Retention and availability of good quality students for continual research activity
- To attract consultancy projects through industry linkages.
- Collaborations with well-known International institutes/industries.

52. Future plans of the department:

Department is planning to:

- a) Set up a lab on installation commissioning of Sub-stations in collaboration with EverTech Engineers Pvt. Ltd.
- b) Start an additional P.G course in the department on M. Tech. In Power System
- c) Set up some virtual labs to enhance the quality of research work and academics.
- d) Start a Centre of Excellence in the field of Power Quality and Renewable Energy Systems.
- e) Start vocational training programs for students through the program 'In-house training' under the university scheme.

Evaluative Report of the Department

1. Name of the Department : **Department of Management Studies**
2. Year of establishment : 1998
3. Is the Department part of a School/Faculty of the university?
: Yes, Department is part of School of Management & Hospitality of the University.
4. Names of programmes offered: UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt., etc.):
 - Ph.D. in Management
 - Post Graduate Programs
Master of Business Administration (MBA)
 - Under Graduate Programs
Bachelor of Business Administration (BBA)
Bachelor of Commerce (BCom (Hons))
5. Interdisciplinary programmes and departments involved
 - Programme : B.Tech Biotech + MBA (Dual Degree)
 - Duration : 10 Semester Full-time programme
(Parent department Biotech, four in Bio-tech, last year in Management)
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - Collaboration with foreign Universities like:
California State University, San Bernardino (US)
Birmingham City University, Birmingham (UK)
Fulda University of Applied Sciences, Germany
for student exchange, faculty exchange and internships.
 - Collaboration & MOU with IAU for live projects, industrial training and continual education.
7. Details of programmes discontinued, if any, with reasons,
 - None
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System:
 - Semester with Choice Base Credit System
9. Participation of the department in the courses offered by other departments.

The department extends faculty support to other departments like Engineering, Computer Applications, Biotech, Hotel Management and Mass Communication.

S.No.	Name of Course	Participating Department
1.	Economic Development & Planning	Mass Communication
2.	Micro-Economics	Commerce
3.	Business Communication	Hotel Management
4.	Hotel Accounts	Hotel management
5.	Principles of Management	Engineering
6.	Industrial Economics	Engineering
7.	Financial Management	Engineering
8.	Strategic Management & Info Systems	Engineering
9.	Human Resource Planning & Development	BTech (Biotech)
11.	Financial Management in Hotels	Hotel Management
10.	Organizational Behaviour	Hotel Management
11.	Career and Life skills training	Various UG & PG Programs
12.	Entrepreneurship Development	Various departments

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate

Professors/Asst. Professors/others)

Faculty	Sanctioned	Filled	Actual
Professors	06	4	4
Associate Professors	12	8	8
Asst. Professors	36	30	30
Others	--	-	-

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S. N	Name of Faculty	Qualification	Designation	Specialization	No. of years of Experience	Number of Ph. D Students Guided for the last four
1.	Maj Gen (Dr) OP Soni, VSM	Ph.D., M.Phil.(Mgt), M.Phil(NS), M.B.A, M.Sc.(Tech),	Professor	Logistics & SCM	43	One*

		M.Sc.(DS), MA (Econ), LLB, PGD SCM, PGD PR&A				
2.	Brig. R. P. Nautiyal	M.Phil., SDMCA , M.Sc.	Visiting Faculty	OB	49	-
3.	Prof. Dr. M.P. Singh	PhD, MA(Econ)	Professor	IB	19	Two* and One (Awarded)
4.	Dr. Misbah Ul-Islam	Ph.D., M.Com, MBA, B.Com.	Professor	Finance	13	One*
5.	Maj Gen. R. Shivrain	Masters in Strategy and International Relations ,	Associate Professor	PDP	44	-
6.	Dr Pankaj Jha	Ph.D., M.Sc., B.Sc.	Associate Professor	Statistics	15.5	Four*
7.	Dr. Rupa Khanna	Ph.D, MBA, MMM, M.Com, MSc. (Biochemistry), UGC NET Qualified	Associate Professor	Marketing and International Business	15	Two*
8.	Dr. Vishal Sagar	Ph.D	Associate Professor	Marketing	15	-
9.	Dr. Kamal Kant Joshi	Ph.D	Assistant Professor	EVS	7	-
10.	Dr. Rahul Raj	Ph.D., M.Tech. (HR), AMAeSI	Associate Professor	HR	2	-
11.	Dr. N. S. Bohra	Ph. D, MBA, UGC NET, NSE Certified	Associate Professor	Finance	10	Three*
12.	Mr. Amjad Ali	DBA, M.Com., MFC	Associate Professor	Finance	13	-
13.	Ms. Nidhi Saini	MBA	Associate Professor	Marketing	12	-
14.	Mr. Sachin Ghai	Ph.D. (Pursuing), MA Economics, BMIT	Assistant Professor	Economics , General Management, Communication,	13	-

				Soft Skills & PDP		
15.	Dr. Neeru Chaudhary	Ph.D	Assistant Professor	Human Resource	8	-
16.	Ms. Aditi Gangodkar	MBA	Asst Prof	General Management	4	-
17.	Mr. Sandeep Chaudhary	Executive PGDM, Executive MBA, B.Com.	Assistant Professor	Marketing	12.5	-
18.	Dr. Rashmi Tripathi	Ph.D., MBA, B.Com	Assistant Professor	HR and IR	10	Two*
19.	Dr. Uday Khanna	Ph.D. (Submitted), M.B.A. PGDBM, B.Sc.	Assistant Professor	Marketing	15	-
20.	Dr. Navneet Rawat	Ph.D., MBA, BMIT	Assistant Professor	Marketing	10	-
21.	Mr. Girish Lakhera	MBA, MA (Humanities), BA	Assistant Professor	HR	28	-
22.	Mr. Sanjeev Kumar Arora	Ph.D. (Submitted), M.Phil. MBA, MSc, MA, B.Com.	Assistant Professor	Marketing and Business, Analytics	11.5	-
23.	Dr. Happy Paul	Ph.D. , MBA, BA, NET-JRF	Assistant Professor	HR	5	-
24.	Ms. Anupama Singh	MBA, B.Tech.	Assistant Professor	Production	8	-
25.	Dr. Abhishek Negi	Ph. D., MBA, M.Com.	Assistant Professor	Marketing	9	Four*
26.	Mr. Amar Johri	Ph.D. (Pursuing), MBA, PGDED	Assistant Professor	Finance	8	-
27.	Mr. Deepak Kaushal	Ph.D. (Pursuing), MBA, M.com, PGED, NSE Certified	Assistant Professor	Marketing	8	-

28.	Mr. P.C. Barthwal	MBA	Asst Prof	HR	20	-
29.	Mr. Piyush Baluni	MBA	Asst Prof	IT	8	-
30.	Dr. Smriti Tondon	M.Com, MBA, Ph.D.	Asst Prof	Finance	2	-
31.	Dr. Anamika Chhetri	MA, PGDBM, Ph.D., UGC (NET), SLET	Asst Prof	HRM	4	-
32.	Mr. Kartikeya Raina	MBA, BBA, Diploma In Entrepreneurship	Asst Prof	HR	3.5	-
33.	Mr. Nihar Ranjan Pandey	MBA	Asst Prof	Accounts	19	-
34.	Ms. Rakhi Ghanshala	MBA	Asst Prof	Human Resource	5	-
35.	Mr. B.K. Koul	MA, B.Ed	Asst Prof	Humanities	20	-
36.	Ms. Upasana Agarwal	MBA	Asst Prof	Human Resource	5	-
37.	Ms. Gayathri Jha	PGDM	Asst Prof	Human Resource	12	-
38.	Ms. Megha Bhardwaj	MBA	Asst Prof	Commerce	6.3	-
39.	Mr. Umesh Joshi	M.Com	Asst Prof	Commerce & Finance	8	-
40.	Mr. Satanjay Singh Pundeer	M.Com	Asst Prof	Commerce	12	-
41.	Ms. Ritika Raina	MBA	Asst Prof	Finance	3.5	-
42.	Ms. Subodh Pundeer	M.Com	Asst Prof	Commerce	12	-

* Ongoing

12. List of senior Visiting Fellows, Adjunct Faculty, Emeritus Professors :

Prof Harish Chaudhary, DoMS IIT Delhi
 Prof S.S.Khanka, NIFM Delhi
 Prof J.P.Singh, IIT Roorkee
 Prof R.C.Sharma, Director CEMCA
 Prof V.K.Singh, Gurukul Kangri University Haridwar
 Prof. Pankaj Madan, Gurukul Kangri University Haridwar

Dr Shailendra Kumar, IIIT Allahabad
Prof Atul Dhyani, HNBGU Srinagar
Prof Vikas Srivastava, IIM Lucknow
Prof Mukesh Pandey, GBPTU Pantnagar

13. Percentage of classes taken by temporary faculty – programme-wise information : Zero

14. Programme-wise Student Teacher Ratio

(PG) MBA 15:1

(UG) BBA, BCom 25:1

Note: Faculty teaching PG is also teaching UG as well as other programmes.

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual : Administrative staff - One

16. Research thrust areas as recognized by major funding agencies :

Identified thrust areas for funding are:

1. Workforce and skill development
2. Inclusive growth & Sustainable development - carrying capacity and competitiveness of cities
3. Continual education, Management and executive development
4. Developing effective teaching – learning practices
5. Financial Inclusion

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. :

1. Project on Bayesian analysis of SEIR epidemic models funded by DST and FICCI, Under CV Raman International Fellowship for African Researchers. – Rs. 1,60,000/-
2. Project on Rural CPI for Uganda funded by DST and FICCI, Under CV Raman International Fellowship for African Researchers. – Rs. 1,60,000/-

18. Inter-institutional collaborative projects and associated grants received : None

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. :

One Ongoing funded project on Orchids funded by UCOST involves interdisciplinary

research and collaboration between Biotechnology and Management department for the benefit of local growers. Funding of Rs. 3,00,000/- has been done by the University.

20. Research facility / centre with

- State recognition : No
- National recognition : No
- International recognition : No

21. Special research laboratories sponsored by / created by industry or corporate bodies : None

22. Publications:

- Number of papers published in peer reviewed journals (national / international) : 54
- Monographs : NIL
- Chapters in Books : NIL
- Edited Books : NIL
- Books with ISBN with details of publishers: 1 (Vayu Education of India, Delhi)
- Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : 11
- Citation Index – range / average:
- SNIP:
- SJR : 0 to 0.12
- Impact Factor – range / average : 0 to 0.4
- h-index : 0 to 3

23. Details of patents and income generated : None

24. Areas of consultancy and income generated

- Real Estate Development (Consultancy) : 25000 INR
- Assertiveness in Goal Realization (Management Development) : 23000 INR
- Human Resource / Knowledge Portal (Consultancy) : 66000 INR
- Training programme for sales and promotion team for Business Development AMOGEO ITES : 1,50,000 INR
- Market sensitization for publications of Savera Educational and Book Suppliers Meerut : 1,00,000 INR
- Training programme for marketing and sales team for market outreach for Savera

25. Faculty selected nationally / internationally to visit other laboratories / institutions

- industries in India and abroad :

Certain Faculty members of the Department have visited industries and institutions as part of International Immersion Program to Malaysia, Singapore and Dubai. The details are given below:

S.No.	Faculty Name	Purpose	Department/ Institution/ Industry visited	Location	Date
1	Sandeep Chaudhary, Sachin Ghai, Anupama Singh, Sanjeev Arora	International Immersion Program	Royal Salengor, MATRADE Centre, Beryls Chocolate, Nissan, Panasonic, Yakult	Malaysia	06-08 May 2013
2	Vishal Sagar, Shilpi Mittal, B.K.Koul	International Immersion Program	Nanyang Business School, NTU, NEWWATER	Singapore	25-28 Aug 2014
3	Vishal Sagar, Rupa Khanna	International Immersion Program	Dubai Industrial City, Dubai Port, Dubai Stock Exchange, PepsiCo	Dubai	2-8 Sep 2015
4	Dr. M.P. Singh	Expert Member	Selection committee for Department of Commerce & Management, H.N.B. Garhwal University, Srinagar, U.K.	Srinagar, (U.K.)	2012
5	Dr. M.P. Singh	Expert Member	Committee for extension of approval for UG programme at affiliated institutions of HNBGU and UTU.	Dehradun and Srinagar (U.K.)	2012-13
6	Dr. M.P. Singh	Keynote speaker	National conference on Emerging Trends in Engineering and Technology, ETET-2014 at UTU	Dehradun	2014
7	Sachin Ghai	Guest Speaker for Induction program	Department of Design and Fine Arts, Graphic Era Hill University	Dehradun	August 2015
8	Sachin Ghai	Resource person for IEEE	Graphic Era Hill University	Dehradun	20-28 July 2015

		Workshop			
9	Sachin Ghai	Paper Presentation	International Conference of IJAS	Harvard	5 May 2011
10	Maj Gen OP Soni	Special Invitee	Academic Council meeting, Graphic Era Hill University	Dehradun	19 September 2015

26. Faculty serving in

- f) National committees : None
- g) International committees : None
- h) Editorial Boards:
- Prof. Sachin Ghai - Member of Editorial Advisory Board and reviewer for the book - 'Promoting Socio-economic Development through Business Integration' published by IMT Ghaziabad with IGI Global in 2014
 - Dr. Rashmi Tripathi – member of Editorial Board of International Journal of Innovative Research in Engineering and Management - 2015
- i) Any other (please specify)
- Dr. Pankaj Jha is also in the 'Review Committee' of The Journal of Social Science and Technical Research, ISSN: 2348-0599, A Peer Reviewed bi-annual Journal.
 - Maj. Gen. OP Soni is member Academic Council, CII Institute of Logistics, Chennai.

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

Strategies: Faculty sensitization and development programs are organized from time to time, with internal as well as external resource persons. Few of those are listed below.

Besides, faculty members are also allowed for attending workshops, FDPs, seminars and conferences outside.

Sl. No	Name of the Programme	Date	Resource Person
1	FDP on Strategic Management in Global Context	17-19 Nov 2014	Prof. Lutz H Schminke
2	FDP - High Impact Teaching : Teaching and learning through Open Educational Resources	25-26 July 2014	Prof. R.C Sharma (IGNOU) Prof. Sachin Ghai

3	FDP - Implementing Best Practices in Teaching	18-Jul-14	Prof. Jayant Chakraborti
4	Panel Discussion on "Maximizing the value from MBA"	21-Jul-14	Mr. Anil Taneja, Mr. Vijendra Chauhan, Mr. P.K. Prasoon
5	National Workshop on "Analytical Techniques for Research"	17-23 June, 2013	Dr. Neeraj Kaushik, Dr. CP Gupta and Dr. Ajay Chauhan - Professor, IMT Ghaziabad
6	NLP for Excellence in Teaching	12-13 June, 2013	Mr. Neeraj Gauri and Ms. Shalini Chopra, Founders of The Final Flourish and Ex. Director and Associate Director of DELL
7	Sensitization program on Setting and Measuring Learning Outcomes.	16 July, 2015	Prof(s). Sachin Ghai and Sandeep Chaudhary

28. Student projects

- Percentage of students who have done in-house projects including inter-departmental projects
Dissertation – 100%
- Percentage of students doing projects in collaboration with other universities/industry / institute
 - a. Internship Project (with Industry) : 100%
 - b. Indian students doing internship abroad : 3 (AIESEC)
 - c. Foreign students doing internship at DoMS : 3

Live Projects with Industry

Name of Student	Batch	Course	Projects
Ankush Rohila, Archit Gupta, Ashwini, Gurjinder Dhillon, Naveen Semalty	2011-13	M.B.A	Undertook project titled "STUDY OF UNSTRUCTURED MARKET IN DEHRADUN" sponsored by IAU
Geetika Gupta, Nikhil Goel, Amal Jaiswal	2012-14	M.B.A	Undertook project titled "Study Of Consumer & Consumption Trends

Arvinder Singh, Nitender Singh, Gaurav Singh Chauhan, Parul Gabbi Rishabh Keshwani, Shivali Rawat, Varun Aggarwal			of Packaged Foods & Drinks in Dehradun sponsored by IAU
---	--	--	---

29. Awards / recognitions received at the national and international level by

- Received by Faculty : None
- Received by Doctoral / post-doctoral fellows: None
- Received by Students :

To mention few of our student achievements:

Student of B.Tech Biotechnology & MBA dual degree Rakesh Biswas has been felicitated at various forums for his contribution to environment. He has been invited in TEDX Mumbai to deliver a talk and has represented as youth ambassador for India in Rhodes Youth Forum in Greece, Pakistan, and Bangladesh.

Besides, Apporva Khanduri and Somesh Pathak won second prize at 10th National Competition for Management organized by AIMA.

Students of MBA Akash Dutt, Depender S Khhatti, Zainab Islam, Madhvi Singh and Palak Rana have presented papers in International Conferences and published in Conference Proceedings.

9 students of 2012-14 have cleared NSE Certifications in Financial Market.

Besides, students of the department have participated & achieved laurels in extra curricular activities at events like Commonwealth games, Indian Idol, Lakme Fashion Week, etc.

The graduates are doing well in Jobs as well as in Entrepreneurship, and are also serving the Armed Force.

30. Seminars/ Conferences/Workshops organized and the source of funding (national /International) with details of outstanding participants, if any.

- Self Sponsored : 16
- Sponsored : 6

Sl. No	Name of the FDP/ workshop	Date	Resource person
--------	---------------------------	------	-----------------

1	Workshop on Financial Planning	25 February, 2015	Prof Sunil Madan, SEBI Certified Financial Educational Resource Person
2	FDP	17-19 November, 2014	Prof. Lutz H Schminke
3	Distinguished Visiting Professor Program	5-14 November, 2014	Prof. Lutz H Schminke
4	Workshop on Entrepreneurship	03 November, 2014	Prof. Kartikeya Raina
5	Sameeksha – Union Budget Analysis Seminar	11 March, 2015	Prof. Sachin Ghai, Dr. M Islam, Dr. N S Bohra, Mr. Pankaj Gupta (IAU),
6	FDP - Implementing Best Practices in Teaching	18 July, 14	Prof. Jayant Chakraborty
7	FDP - High Impact Teaching - Online teaching and E-learning through Open Educational Resources	25-26 July, 2014	Prof. Sachin Ghai Prof. R.C Sharma
8	Panel Discussion on "Maximizing the value from MBA"	21 July, 2014	Mr. Anil Taneja, Mr. Vijendra Chauhan, Mr. P.K Prasoon
9	Workshop on Equities and Trading Securities	18 - 19 September, 2013	Mr. Abhishek Rathi and Ms. Prapti Uniyal, Founder and CEO, OM Investment Solutions, Dehradun
10	National Workshop on "Analytical Techniques for Research"	17-23 June, 2013	Dr. Neeraj Kaushik, Dr. CP Gupta and Dr. Ajay Chauhan - Professor, IMT Ghaziabad
11	NLP for Excellence in Teaching	12-13 June, 2013	Mr. Neeraj Gauri and Ms. Shalini Chopra, Founders of The Final Flourish and Ex. Director and Associate Director of

			DELL
12	Stock Mind - The hunt for tomorrow's smart investor	5 February, 2013	Ms. Malini Prasad, Senior Marketing Professional, ICICI Securities. Sponsored by ICICI Securities
13	Workshop on Fixed Income Securities	4-6 October, 2012	Mr. Rupinder Monga, Senior Analyst, Evalueserve, MBA from Rotterdam Business School, Amsterdam
14	Workshop on Case Based Learning	7-8 December, 2012	Dr. Pankaj Madan, Professor, Gurukul Kangri University, Haridwar
15	Workshop on Training and Development	10 September, 2011	Mr. Vikrant Bhatnagar, Head Functional Skills Development, Bharti Airtel
16	Attitude Building	9 September, 2014	Swami Ashwani of Rama Krishnan Ashram of Dehradun
17	Financial Derivatives	11 December, 2014	Mr. Zubin Mehta, Sponsored by SEBI
18	'Role of SEBI in Financial Planning for Young investors'.	17 April, 2015	Mr. Prasoon, Sponsored by SEBI
19	Students attended Awareness Programme on "Product Certification" & Presentation on Draft of Small Factories (Regulation of Employment & Condition of Service) Bill, 2014	31 October, 2014	Experts from Industry, Sponsored by IAU
20	Regulation framework for Direct Selling-Opportunities & Challenges"	9 January, 2015	Experts from Industry, Sponsored by PHD Chamber of Commerce
21	Investors Education Seminar	21 November, 2014	Mr. Harjinder Singh, Mr. Zubin Mehta, M. Anil Taneja Sponsored by SEBI, BSE, PHD Chamber of

			Commerce
22	Three days capsule for students on Monetary and Fiscal Policy	7-10 December, 2014	Prof. Sachin Ghai, Department of Management, GEU

31. Code of ethics for research followed by the departments : As per UGC guidelines.

32. Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Year	Applications received	Selected		Pass %
			Male	Female	
MBA	2012-14	311	56	51	85%
BBA	2011-14	410	108	65	83.8%
B.Com (H)	2014-17	60	22	22	NA

33. Diversity of Students

Name of the Programme (refer to question no. 4)	Year	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
MBA	2010	11%	55%	34%	-
MBA	2011	16%	58%	26%	-
MBA	2012	39%	29%	32%	-
MBA	2013	28%	66%	6%	-
MBA	2014	27%	66%	7%	-
B.Com (H)	2014	NA	66%	34%	NIL

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

- 8 students have cleared UGC NET

35. Student progression

Student progression	Percentage against enrolled	
	Year	%
UG to PG	2011	17

	2012	40
	2013	29
	2014	31
PG to M.Phil.		-
PG to Ph.D.		33%
Ph.D. to Post-Doctoral		-
Employed		
• Campus selection		75-90% (Over)
• Other than campus recruitment		Data not available
Entrepreneurs		5%
		(Based on info available. Actual figure would be quite high)

36. Diversity of staff

Percentage of faculty who are graduates	
of the same University (10) of 39	25.64%
from other universities within the State from (10) of 39	2.645%
from universities of other States (18) of 39	46.14%
From universities outside the country (1) of 39	0.03%

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period:

- Faculty members awarded Ph.D during the assessment period - 11

38. Present details of departmental infrastructural facilities with regard to

- Well stocked Department Library
Total Volumes: 9500 for Management programs, 4500 for Commerce program.
Titles: 1484 for Management programs, 90 for Commerce program.
Journals: 16 National and 13 International
CDs/DVDs: 70
E-books & E-journals- 4976 (Access to online databases like SCOPUS, Science Direct, EBSCOHost, etc.)
- Dedicated Computing Facility (Dell 88 Lab) with projection support
- Hi speed Internet facility 24x7 through WiFi and a dedicated leased line of 1Gbps from BSNL
- 8 Lecture Theatres, 4 Class rooms with Projector & Audio facility for various programs offered at the Department

e. Common research facility of University

39. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university 11 (PhD scholars / Doctoral students)
Sachin Ghai, Amar Johri, Anil Dhasmana, Pankaj Aswal, Chirag Singhal, Chitra Lakhera, Deepak Kaushal, Pankaj Agarwal, Vineyendra Mani Tripathi, Jayanta Chakraborti, Kartikeya Raina
- from other institutions/universities: 16 (PhD scholars / Doctoral students)
Manish Garg, Anchal Singh, Abhinav Gupta, Seema Singh, Yogesh Chandra Kandpal, Nav Jyoti Singh Negi, Ajay Singh Chauhan, Ambica Prakash, Kulbir Kaur Bhatti, Shilpa Wadhwa, Atul Dev, Shashti Bhallabh Joshi, Summer Afreen, Gunjan Awal Moudgil, Barsha Rani

40. Number of post graduate students getting financial assistance from the university.

- Under loyalty program 10% concession in fee is offered to students upgrading from University UG program to MBA, and to siblings of current students or alumni.
2014 – 16: 28 Students
2015 – 17: 18 Students
- Scholarship is offered to meritorious students - @ Rs.5000/- per semester with 70% and above, @ Rs.7500/- per semester with 75% and above.
2014 – 11 Students (@ Rs 5000/- per sem)
2015 – 8 Students (2 @7500/- per sem, 6 @5000/- per sem)

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

Feedback from various stakeholders like faculty, external experts from academia are included while designing and upgrading programs, through:

- Recommendations of Department Academic Committee / Department Faculty Board
- Industry Academia Interactions
- Board of Studies (External Experts and Senior Faculty Members)
- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
- Proposal is put up to BOS which constitute of some internal and external expert.
- Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - Yes, Periodic feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
 - The department have a committee for teaching-learning and academic quality, which generally evaluate curriculum and teaching learning-system in the department.
 - The committee organizes a faculty meeting from time to time, where faculty members present and share their experiences and detailed review of the course taught including objective, pedagogy, assessment, challenges and outcomes.
 - Apart from this, the department conducts Board of Studies annually to review curriculum.
 - b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
 - Student feedback on faculty members is generally taken by the HR department.
 - c) Alumni and employers on the programmes offered and how does the department utilize the feedback?
 - Yes. Feedbacks from alumni through regular alumni meet and employers considered for the up gradation of curriculum meeting current/latest need of employers and other industries.
 - Keeping demand of industry and prospective employers in mind w.r.t the programs, curriculum and skills, regular interactions with industry representatives are carried out and the recommendations are brought in by the academic committee while framing & conducting the BoS.
 - Talks and Guest lectures from HR and Other professionals are organized regularly to learn their expectations and to sensitize the department, faculty and students on industry trends and requirements.
43. List the distinguished alumni of the department
Given the modest span of period as University – Alumni at Managerial and Senior Executive levels of Companies/Organizations.

Sl No	Name	Batch	Name of Organization	Designation
1	Prabhanjan Prasoon	2003-05	Sopra Group, New Delhi	Manager – PMG
2	Pradeep Negi	2003-05	RBI, New Delhi	Manager
3	Wafa Rehman	2005-07	Standard Chartered Bank, Dubai	Onboarding Specialist – Middle East, Talent Acquisition, HR
4	Raghuvir Singh Pratap	2007-09	SARA SAE. Singapore	Sr. Executive, International Marketing
5	Deepander Khati	2009-11	Royal Bank of Scotland New Delhi	Sr. Analyst
6	Raunak Jain	2009-12	Tula's Institute, Dehradun	Vice-President
7	Sahib Sablok	2007-09	Halonix Technologies Channel Partner	Entrepreneur
8	Surbhi Gupta	2008-11	Wipro	Hiring Manager
9	Mohit Dora	2007-11	Wipro	Hiring Manager
10	Sajan Rajnikant Patel	2009-11	Aegis Value Homes Ltd	Vice President
11	Deepak Mittal	2003-05	Crisil	Associate Director, Business Development

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

S. No	Date	Name of the Event	Name of Guest	Topic of the Lecture
1	17-23 Jun, 2013	National Workshop on "Analytical Techniques for Research"	Dr. Neeraj Kaushik, Dr. CP Gupta and Dr. Ajay Chauhan	Workshop on Research Techniques
2	7 Aug, 2013	Industry Guest Lecture	Mr. Nikhil Datta	Business Etiquette required in Industry
3	22 Aug,	Industry Guest Lecture	Mr. Manish Raj Sharma	Communicate

	2013			with Self & Public
4	26 Aug, 2013	Industry Guest Lecture	Mr. Vinay Singh	How to be a good human before good professional
5	27 Aug, 2013	Investment Awareness Program	TATA Asset Management Company, Investors Clinic	Investment Awareness Program on Mutual Funds
6	5 Sept, 2013	Guest Lecture	Dr. B.P Kathel	Creative Thinking
7	17 Sept, 2013	Guest Lecture	Mr. Neeraj Gauri and Ms. Shalini Chopra	Role of Behaviour in Interviews
8	18 - 19 Sept, 2013	Two days Workshop for MBA III semester Finance students	Mr. Abhishek Rathi and Prapti Uniyal	Workshop on Equities and Trading Securities
9	19 Sept, 2013	Guest Lecture	Mr. Himanshu Manglik	Shape your Brand, Shape your Career
10	20 Sept, 2013	Investment Awareness Program	TATA Asset Management Company, Investors Clinic	Investment Awareness Program on Mutual Funds
11	29 Sept, 2013	Guest Lecture	Mr. Nitin Rohtagi	Career in Business Research
12	04 Oct, 2013	Training in Business Communication at EMAMI, Rudrapur	Dr. Rashmi Tripathi and Ms. Shilpi Mittal	Communication Strategies in Organizations
13	08 Nov, 2013	Guest Lecture	Mr. Apurva Bhandari	Entrepreneurship and Green Technology
14	18-22 Nov, 2013	Guest Lecture on Supply Chain Management	Prof. Harold Dyck	Supply Chain Management
15	16 Nov, 2013	Guest Lecture	Mr. Anoop Nautiyal	Social media changing the life & shared his personal

				experiences
16	12-14 Nov, 2013	Guest Lecture	Mr. Vineet Chettari	Global workshop on Sustainable development
17	22 April, 2014	Guest Lecture	Mr. Nischal Mahajan	Personal Effectiveness and Success Multiplier
18	27 May 14	Special Lecture	Mr. Frank Saladis, PMP	Project Management Leadership
19	21 Mar 14	Guest Lecture	Mr. Utkarsh Gupta	Career opportunities in IT Industry
20	12 April 2014	Guest Lecture	Mr. Neeraj Goyal	Case study on ONGC re- structuring
21	7 Feb. 2014	Guest Lecture	Mr. Parvesh Painuly	Entrepreneurship
22	23-Jul-14	Special Lecture	Prof. Sachin Ghai	Creativity, Innovation and Change
23	11 Sept. 2014	Guest Lecture	Lt. Gen. (Retd.) H.B Kala	Leadership Demystified
24	10 Oct. 2014	Guest Lecture	Mr. Zubin Mehta	Introduction to Stock and Capital Markets
25	20-Oct 2014	Guest Lecture	Mr. Utkarsh Gupta	CV building and Interview preparation
26	7-Nov 2014	Guest Lecture	Mr. S Murlidharan	Entrepreneurship

45. List the teaching methods adopted by the faculty for different programmes.

The faculty members use a variety of tools in their pedagogy to enhance the teaching learning experience and its effectiveness. These include:

- Instructional tools like Lectures, Assignments, Discussions, Classroom activities, Case and situational analysis, Role plays/simulation exercises, quizzes and presentations.

- Individual / group exercises and projects are assigned for collaborative learning, better visualization & application of concepts.
- In addition to lectures, tutorials, industrial visits and guest lectures are organized for practical exposure and observational learning.
- Technology component is also embedded in the process for making it more efficient and absorbing. The faculty members deliver through power-point presentations, and also make assignments, lecture slides, podcasts, etc available through individual course websites, or University Learning Management System.
- Keeping in view the desired graduate attributes, learning outcomes and nature of delivery, at Post graduate level Inverted Classroom and Blended learning techniques are emphasized by the department.
- Last but not the least, Career and Life Skills training is offered to instil and develop positive attitude, temperament and necessary skills in students.

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Periodic reviews through tests, quiz, tutorial, feedback from students, faculty, employers and alumni are made and corrective actions are taken.
- Experiences learnt through their performance in exams, results and employability goal us to take necessary actions.
- We have an academic quality cell for enforcing effective teaching-learning and ensuring academic quality, which generally evaluates curriculum and teaching learning-system in the department. At the end of the semester, this cell conducts a review meeting of all faculty members to analyse the performance, challenges and delivery practices undertaken.
- The department conducts periodic Industry Academia Interface that serves as a trigger point for improvements / changes in the curriculum proposed in the BOS Meeting. This helps in understanding industry expectations and designing of relevant & updated curriculum.
- The department ensures providing adequate exposure to students and developing Knowledge, Skills and right Attitude through PDPs, guest lectures, industrial visits, international immersion program, live projects, internship, training, outbound learning, co & extra curricular activities, etc to prepare them for market.
- The department also imparts Career and Life Skills training to students to prepare and equip them for career and life.

47. Highlight the participation of students and faculty in extension activities.

- The Students of Management undertake social responsibility initiatives under the

banner of 'Kartavya', in which they spread awareness on social issues such as road safety, girl foeticide, drug abuse, etc. They organize nukkad nataks and also do charity. The students of Management also participate in NSS and NCC.

- The Students are motivated to participate in various workshops and Seminars.
- Besides, the students have worked on live projects for organizations like Sony, IAU, etc.
- The areas in which our students excel outside the academic curricula include cultural performance, community service, sports & games (Cricket, Football, Badminton, Chess), quiz activities, dance and drama performance. Further, our students are also associated with different clubs of university such as music, chess and photography.
- Our students have also represented in National events and forums like Commonwealth Games (Opening Ceremony), Indian Idol, Lakme Fashion Week, etc.
- Few students of management have earned NSE Certification and Entrepreneurship diploma from EDI.
- Besides, conducting MDPs, Workshops and Consultancy, the faculty also involves itself in charity and few of them are associated with NGOs.
- Faculty has also contributed in fund raising for J&K flood relief and Uttarakhand Catastrophe.

48. Give details of "beyond syllabus scholarly activities" of the department.

- The department organizes / conducts MDPs, FDPs, Workshops, Events, Research & Consultancy, Seminars, Outbound programs, Certifications and other Co-curricular activities
- The details of such activities/events are covered in point no(s) 24, 27, 30 and 40
- The faculty members have contributed more than 50 papers in National and International Journals, and few faculty members have been in the Editorial advisory and review committees. Details covered in point no. 26.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

Yes,

- MBA Program received NBA Accreditation on 16th of March 2007
- Department is ISO 9001:2008 Certified

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The department in general and faculty in particular has developed expertise in following areas, and offers programs, training and consultancy based on same:

- Student Centric Teaching Learning practices, using OERs
- Career and Life Skills interventions & techniques

- Assessing employee resilience as an important parameter for recruitment
- Socio economic change assessment and Carrying Capacity of cities
- Role of Assertiveness in achieving Organizational effectiveness
- Creativity, Innovation and enforcing Change
- Skill development and training expertise

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

➤ Strengths:

- Highly qualified & experienced faculty with diverse backgrounds and expertise .
- Excellent infrastructure.
- Innovative teaching learning practices.
- Expertise in training, research and consultancy.
- More than 90% students placed (out of those registered for placement).

➤ Weaknesses:

- Lesser concentration of large corporate houses and industries.
- Difficulty in getting niche area experts & professionals, in terms of time and travel.
- Small number of students with prior work experience.
- Limited funding agencies for research in management domain.

➤ Opportunities:

- Tremendous scope to train manpower and offer consultancy for process improvements in MSMEs
- To promote Entrepreneurship and Small & Medium Business in the region.
- To work with Government of Uttarakhand and its various organs (on thrust areas like Disaster Management, Skill development, etc).
- To address the need of working professionals regarding continual education
- To leverage advantage of global tie-ups and collaborations with institutions in India and Abroad, for collaborative research and exchange.

➤ Challenges:

- Attracting and retaining global talent.
- Attracting international students.
- Developing corporate interaction.
- Lack of funding opportunities from agencies in the area of Management.
- Developing a pro-entrepreneurial mindset among students, when they are mostly

interested in placements.

52. Future plans of the department.

- 100% career facilitation and placements with suitable remuneration package.
- Global accreditations and tie-ups to facilitate – student & faculty exchange programmes, collaborative/joint research, with credible institutions of India & the World.
- Introduce relevant multi-disciplinary courses of value to the society/nation.
- Executive MBA programme for working executives.
- More active consultancy and management development programs for industry.

Evaluative Report of the Department

- 1 Name of the Department : **Department of Hotel Management**
- 2 Year of establishment : 2004
- 3 Is the Department part of a School/Faculty of the university?: Yes, School of Management & Hospitality
- 4 Names of programmes offered UG, Ph.D
UG : Bachelor of Hotel Management(BHM)
Ph.D in Hotel Management
- 5 Interdisciplinary programmes and departments involved:
 - Food & Nutrition : Dept. of Biotechnology
 - Intergradations of Information Technology : Dept. of CS/IT
 - Principles & Practices of Management : Faculty of Management (aspect of H.R., Marketing & Finance)
- 6 Courses in collaboration with other universities, industries, foreign institutions, etc.
Short Term Certificate courses in association with reputed organisations of Dehradun for the youth of hill district of Uttarakhand to train them in Hospitality Services and Culinary Craftsmanship (fusion of mainland Indian & Garhwali/ Kumaoni Cuisine)
- 7 Details of programmes discontinued, if any, with reasons : None
- 8 Examination System: Annual/Semester/Trimester/Choice Based Credit System :
: Semester with Choice based Credit System
- 9 Participation of the department in the courses offered by other departments:
H.M. Dept conducts classes for other departments of University to include following subjects
 - Healthy Living
 - Food as Source of Energy
 - Organization of Front Office and Reception
- 10 Number of teaching posts sanctioned, filled and actual (Professors / Associate Professors / Asst. Professors / others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	01	01	01

Associate Professors	02	01	01
Asst. Professors	07	07	07

11 Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance.

S. No.	Name	Qualification	Designation	Specialization	No. of years of experience	Number of Ph.D student guided for the last 4
1	Dr. Neeraj Aggarwal	Ph.D	Professor	Hospitality	24	1 (Ongoing)
2	Mr. Vimal Kumar	MHM/M.Phil	Associate Professor	Hospitality	22	--
3	Mr. Akash Rawat	BHMCT, MBA	Assistant Professor	Front Office	12	---
4	Mr. Ravish Kukreti	MTM, Pursing PhD	Assistant Professor	Hospitality & Tourism	7	--
5	Mr Chandra Mauli	BHM, MBA	Assistant Professor	Management	7	--
6	Mr Vipul Bhandari	BSc HM, MBA	Assistant Professor	F&B Service	9	---
7	Mr. Chirag Singhal	BHM, MBA, Ph.D(P)	Assistant Professor	Management	9	--
8	Mr. A.P. Dabral	MBA	Assistant Professor	Hospitality	7	--
9	Mrs. Sonam Kapoor	BHMCT, MHM(P)	Assistant Professor	F&B Service	8	--

12 List of senior Visiting Fellows, adjunct faculty, emeritus professors :

- Mr. R.C. Pandey: Principal - G.I.H.M. Dehradun.

- Mr. P.K. Sharma : Head Human Resource - J.P. Palace Mussorie

13 Percentage of classes taken by temporary faculty – programme-wise information: N/A

14 Programme-wise Student Teacher Ratio 17:1

15 Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual (from central pool)

Category	Sanctioned	Filled	Actual
Technical staff	6	6	6
Administrative staff	2	2	2

16 Research thrust areas as recognized by major funding agencies –

- Fusion of Garhwali Cuisine with Mainland Indian Cuisine
- Uttrakhand AS Leisure Destination

17 Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. Nil

18 Inter-institutional collaborative projects and associated grants received : Nil

- a) National collaboration b) International collaboration

19 Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received: Nil :

20 Research facility / centre with

- state recognition : Nil
- national recognition : Nil
- international recognition : Nil

21 Special research laboratories sponsored by / created by industry or corporate bodies : Nil

22 Publications:

- Number of papers published in peer reviewed journals (national / international) : 7

- Monographs : Nil
 - Chapters in Book : 02
 - Edited Books : Nil
 - Books with ISBN with details of publishers : 07
 - Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : Nil
 - Citation Index – range / average : Nil
 - SNIP : Nil
 - SJR : Nil
 - Impact Factor – range / average : 0.310 – 3.189
 - h-index : Nil
- 23 Details of patents and income generated : Nil
- 24 Areas of consultancy and income generated : Hospitality & Culinary Guidance
Rs 2,00,000 (approx)
- 25 Faculty selected nationally / internationally to visit other laboratories / institutions /industries in India and abroad :
- Industrial Visit to Sula winery Nasik – Dr. Neeraj Aggarwal & Mrs. Rajkumari Perera in 2010
 - Science Conclave at I.I.I.T Allahabad – Akash Rawat, Ravish Kukreti & Mr. Vipul Bhandari in 2011, 2012, 2013 & 2014.
 - Industrial Visit J.P. Palace Mussorie – Mr. Ravish Kukreti & Mr. Vipul Bhandari in 2011 & 2012.
 - External Examiner – Mr. Akash Rawat at Ram Institute of Hotel Management, Dehradun in 2012
 - External Examiner – Prof. Neeraj Aggarwal at CMTHS, HNBGU, Srinagar in 2013
 - External Examiner – Prof. Neeraj Aggarwal at CMTHS, HNBGU, Srinagar in 2014
 - Industrial Visit Radisson Blu Haridwar – Mr. Vipul Bhandari, Ms. Aditi Bisht & Mr. Devender Rawat in 2014.
 - Chef Competition Bundhelkhand University – Mr. Devender Rawat in 2014
 - External Examiner – Mr. Ravish Kukreti at I.H.M. Dehradun in 2014
 - Aahaar Food Festival Delhi – Mr. Devender Singh & Ms. Aditi Bisht in 2015
 - External Examiner – Mr. Ravish Kukreti at I.H.M. Dehradun in 2015
- 26 Faculty serving in
e) National Committee : Dr. Neeraj Aggarwal- Member of Board of Studies at

Uttarakhand Technical University.

- f) International committees : Nil
- g) Editorial Boards : Nil
- h) any other (please specify) :

27 Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs). Workshops, training, FDP

- Carving workshop done by Chef Tanuj Nayer Jaypee Hotels 2012
- Bartending workshop by Expert Kuldeep Chauhan & Naveen Vyas in 2012 & 2015.
- Workshop on teaching Negotiation Skills by Prof. John C Crott in 2013
- Aahaar Food Festival Delhi in 2015

28 Student projects

- Percentage of students who have done in-house projects including inter-departmental projects - 100% Dissertation/Projects at J.P. Palace , Marriott,Taj, Oberoi, Lalit etc
- Percentage of students doing projects in collaboration with other universities /industry / institute - 100% Industrial training at J.P. Palace , Marriott Taj, Oberoi, Lalit etc

29 Awards / recognitions received at the national and international level by

1. Faculty : Appreciation letter (Hospitality Team) at Utrakhand State Science Congress held at Graphic Era University in 2012
Appreciation letter (Hospitality Team) at Science Conclave of Noble Laureate I.I.I.T Allahabad in 2011, 2012, 2013 & 2014
2. Doctoral / post doctoral fellows : None
3. Students: Certificate from Science Conclave of Noble Laureates from I.I.I.T Allahabad 2011, 2012, 2013 & 2014.
Outdoor Catering Certificate from J.P. Palace Agra in 2013 & 2014.
Second runner up at Chef Competition Bundhelkhand University in 2014.

30 Seminars/ Conferences/Workshops organized and the source of funding (national /International) with details of outstanding participants, if any. 02 (Funded by Graphic era university)

S. No.	Name of the conference	Date	Resource Person	Highlights of events

1.	Operation and management Practices in Indian Hotel industry – Prospect and challenges at Graphic Era University, Dehradun	9- 10 January , 2008	Chef Manjeet Gill Prof SP Singh Vice Chancellor HNBGU	Technical session 1 was on Practices in Indian hotel Industry. Second session was on “Impact of operating practices on organisational performance. Third on “chain and non chain, operating practices. “And fourth on “Hotel operations& Management, and around seventy papers was presented.
2.	International Conference on tourism and Hospitality Industry : Modern state , Problems and Perspectives at Graphic Era University, Dehradun	11-12 May, 2013	Mr. John C Crofts, Full Bright Scholar Prof Manjula Chuadhary	200 plus papers have been presented during that conference. Workshop on “Teaching Negotiation Skills” by Prof. John C Crott was another highlight of this conference.
3.	Food Festival at Graphic Era Hill University, Nainital	23-25 September 2014	Chef Tanuj Nayer , Mr. Nikhil Dutta Training Manager Park Plaza Chandigarh	Multi cuisine dishes were prepared , speciality tandoor dishes . Signature dishes showcased by Chef Tanuj Nayer

31 Code of ethics for research followed by the departments –Following UGC 2009 guidelines for Ph.D

32 Student profile programme-wise:

Name of the Programme (refer to question no. 4)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
BHM (2012)	30	19	00	100%	100%
BHM (2013)	53	41	02	100%	100%
BHM (2014)	79	56	04	100%	100%
BHM (2015)	95	61	05	On going	On going

33 Diversity of students : N/A for UG Students

Name of the Programme (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries

34 How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise : Not Applicable

35 Student progression

Student progression	Percentage against enrolled	
UG to PG	Not Applicable	
PG to M.Phil.		
PG to Ph.D.		
Ph.D. to Post-Doctoral		
Employed		
	2011	95%
	2012	98%
	2013	100%
	2014	100%
	2015	80 %(On going)
Other than campus recruitment	none	
Entrepreneurs	12	

36 Diversity of staff

Percentage of faculty who are graduates	
Of the Same university	30.7%
from other universities within the State	15.3%
from universities from other States	54%
from universities outside the country	Nil

37 Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

: Ph.D (One)
Dr.Neeraj Aggarwal

38 Present details of departmental infrastructural facilities with regard to

- a) Library : Titles 988 Volumes 4773
Magazines 05
- b) Internet facilities for staff and students : YES (Campus fully Wi-Fi)
- i) 24 hours internet facilities are available for both staff and students
- ii) Wi-Fi facilities are also available for faculty members.
- c) Total number of class rooms : Four
- d) Class rooms with ICT facility : One
- e) Students' laboratories : Five
- f) Research laboratories : N/A

39 List of doctoral, post-doctoral students and Research Associates

- a) from the host institution/university : 01
- b) from other institutions/universities : Nil

40 Number of post graduate students getting financial assistance from the university.

: N/A

41 Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

- Input from faculty, alumni, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
- Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.

- Proposal is put up to BOS which constitute of some internal and external expert. Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.

42 Does the department obtain feedback from

- Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
- Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
- Alumni and employers on the programmes offered and how does the department utilize the feedback?
 - Yes. Feedbacks from alumni through regular alumini meet and employers considered for the upgradation of curriculum meeting current/latest need of employers and other industries.

43 List the distinguished alumni of the department (maximum 10)

1	Jitender Singh Chauhan	2008	Restaurant Manager at Jimmy's Restaurants Wimbledon, London
2	Pawan Majila	2008	Continental Chef Royal at Carrebian Cruise
3	Pawan chahar	2008	Assistant manager at The Oberoi Mumbai
4	Daleep Rajwar	2008	Demi Chef De Partie at Hyatt Regency Gurgoan
5	Jitendra Singh	2008	Training Manager at Carlson Hilton Agra
6	Amit Kumar Gaywali	2009	Indian Curry Chef Indian Sumner Limited New Zealand
7	Deeraj Pandita	2009	Assistant Manager Front Office at Grosvenor House Dubai UAE
8	Preeti Chandra	2009	Manager Guest Relation at Starwood Hotel & Resorts

9	Vivek gurung	2009	Floor Manager at The Lodhi Hotel New Delhi
10	Deepak Dandriyal	2010	Grand Millennium al Wahda Hotel, Abu Dhabi UAE

44 Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

- One week Industrial visit to Sula Wineyard Nasik in 2010
- One week outdoor catering to Science Conclave at I.I.I.T Allahabad in 2011, 2012, 2013 & 2014
- One day Industrial visit to J.P. Palace Mussorie 2011, 2012
- Chef Competition at Amarpali Institute Haldwani in 2013
- Flower Competition at Amarpali Institute Haldwani in 2013
- Induction Training Program by ICT in 2013
- Chef Competition at Bundhelkhand University in 2014
- Chart Competition and Rangoli Competition in 2014
- One day Industrial visit to Radisson Blu Haridwar in 2014
- Workshop on Carving by chef Tanuj Nayer Jaypee Group of Hotels in 2012
- Workshop on Bartending in 2012 & 2015
- Workshops on teaching Negotiation Skills organised by Prof John c Crott in 2013
- International Conference on tourism and Hospitality Industry : Modern state , Problems and Perspectives in 2013
- Guest Lecture by Prof. S.K. Gupta, Dean & Head , CMTHS, HNBGU Srinagar , Garhwal in 2013
- Guest Lecture by Mr. Nikhil Dutta, Training Manager, Park Plaza , Chandigarh in 2014
- Guest Lecture by Mr. Ravi Kharasi, Training Manager, ITC Fortune , Mussorie in 2015

45 List the teaching methods adopted by the faculty for different programmes.

- Lectures(regular classes)
- Seminars(By students and faculty members)
- Assignments submission by the Students
- Projects (By students in group /individual for better visualization of their course content.)
- Tutorials.
- Industrial Tours
- Peer Interactions
- Hand on Practical.

- 46 How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- By periodical sessional tests, assignments, Quiz, tutorials and counselling. The assessment methodology followed by the department in its continuous evaluation system is aimed at identifying the strengths and weaknesses of the students. The department encourages its faculties to follow multiple assessment techniques to balance the strengths and weaknesses of the students. The Practicals performed by the students of the department are designed to test their ability to analyze the Product. The projects and sectionals of the department are designed to meet the needs of the students within realistic constraints such as economic, environmental, and social and safety requirements. Students are encouraged to take extra-curricular assignments to increase their 80 ability to function in multi-disciplinary team. Students are encouraged to interact with various sections of industry and society to understand the impact of Hospitality Industry solutions in economic, environmental, societal context. Students are placed at renowned hotels and their outcome are constantly monitored their performance during campus placement
- 47 Highlight the participation of students and faculty in extension activities.
1. The Students serve food & beverage to the Noble Laureates at Science Conclave at I.I.T. Allahabad since 2009 till date.
 2. The Students take part in Grafest in Hospitality Team and serve the food & beverage to the Chief Guest/Guest of Honour and other dignitaries. They also prepare their food stalls.
 3. The Students participate at various Chef Competition outside university – Amity University Noida, Bundhelkhand University Jhansi, Amarpali Institute Haldwani & Aahaar Food Festival Delhi
 4. The Students are motivated to participate in various workshops and Seminars related with hospitality Industry, they are being trained to participate at various chef competitions, Bartending competitions, and flower arrangement competitions
 5. The areas in which our students excel outside the academic curricula include cultural performance, commitment to society, sports (Cricket, football, Chess) and quiz activities, dance and drama performance. Further, our students are also associated with different clubs of university such as music, chess, and photography.
- 48 Give details of “beyond syllabus scholarly activities” of the department.
- Throughout the year, faculties are regularly arranged for special technical lecture meetings/ round table discussions bringing eminent professors, expert from Hotel Industry from abroad and other states from country for the advancement of knowledge in new cutting edge technology research.

- Faculty members are associated with different International/National Conferences of repute through Tutorial presentation, research paper presentation and also through chairing various specialized technical sessions.
 - The Department also organized International conference on Tourism and Hospitality Industry: Modern state, Problems and Perspectives
- 49 State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.
- Yes, ISO 9001:2008
- 50 Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- Innovation of New Recipes, New Content for up gradation in the syllabus , students being sent to various reputed organization for outdoor catering so as to see the recent up gradation in the Hospitality Industry
 - Through job oriented courses in Hotel Management, prepare youths of Hill State of Uttarakhand for jobs in Hospitality Industry globally as also promote entrepreneurship.
- 51 Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.
- Strengths
 - Excellent placement record
 - Faculty Expertise(having degree from Reputed Hospitality Institution)
 - Updated laboratories
 - Updated techniques of Teaching
 - Better Environment for the students to have Innovative Practices
 - Weaknesses
 - Non Availability of 5 Star Hotel(s) in vicinity.
 - Non Availability of shopping malls of standard specially F&B aspect
 - Away from metro (& its allied culture).
 - Lack of adequate opportunity to interact with reputed hotel/clubs/resorts in Dehradun
 - Non availability of certain specific commodities to prepare students for international cuisine.
 - Opportunities
 - Increasing industry liaison through alumni network
 - Neighboring agencies interested in offering soft skill programs

- Up gradation of the department with more facilities can be realized
- Foreign placements.
- Multi disciplinary Placements

➤ Challenges

- To keep quality faculty in position
- Possibility of offering incentive for academic excellence
- To compete with ever growing colleges promoted by various hotel groups
- Putting in place a system for outcome based program implementation
- To meet global requirements and standards.

52 Future plans of the department.

- Our department aims to collaborate with renowned universities in India and outside
- International collaboration in terms of teaching, learning and research.
- Inter institutional collaboration for research funding projects
- To start Short term courses related to Hospitality
- Plans to organise continual education programs for working professionals

Evaluative Report of the Department

1. Name of the Department : **Department of Allied sciences**
2. Year of establishment : 2001
3. Is the Department part of a School/Faculty of the university?
: Yes, as a supporting department in the School of Engg & Technology
4. Names of programmes offered: (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) :-
 - Ph.D (Mathematics)
 - Ph.D (Physics)
 - Ph.D (Chemistry)
 - Ph.D (Environmental Science).
5. Interdisciplinary programmes and departments involved.
 - Not Applicable as it supporting Department.
6. Courses in collaboration with other universities, industries, foreign institutions, etc.
 - Campus Connect Programme (Soft-skills) tie-up with Infosys for Professional Communication
7. Details of programmes discontinued, if any, with reasons:
 - Not Applicable as it supporting Department.
8. Examination System: Annual/Semester/Trimester/Choice Based Credit System
 - Semester based CBCS system.
9. Participation of the department in the courses offered by other departments

<ul style="list-style-type: none"> • Engineering Mathematics-I (TMA-101). • Engineering Physics(TPH 101/201) • Engineering Physics Lab (PPH 151/251) • Engineering Mathematics-II (TMA-201). • Environmental Science (TEV 101/201) • Engineering Chemistry (TCH 101/201) • Engineering Chemistry Lab (PCH-151/PCH-251. • Professional Communication (THU101) 	<p>All Branch of Engineering Departments</p>
--	--

• Advanced Professional Communication (THU201)	
• Discrete Mathematics (TMA-306) . • Graph Theory (TMA-305). • CBNST (TMA-402).	Computer Science Department
• Engineering Mathematics-III (TMA-301). • Mathematical Method (MIC-101).	EE Department
• Engineering Mathematics-III (TMA-302). • Applied Mathematics (MSE-105).	Civil Engineering Department
• Engineering Mathematics-III (TMA-303).	Mechanical Engineering Department
• Advance Engineering Mathematics (TMA-304).	Electronic and Communication Department
• Engineering Mathematics-III (TMA-303). • Numerical Methods and Statistics (TMA-403).	Petroleum Department
• Bio-Statistic (MTBT-212). • Bio-Mathematics (MSC-240). • Remedial Mathematics (MAB-101).	Bio Tech Department.
• Environmental Science (TEV 211)	BBA, B.Com (H), BHM
• Environmental Science (TEV 611)	B.Sc. IT
• Career and Life Skills	MBA
• Business Communication	BHM

10. Number of teaching posts sanctioned, filled and actual (Professors / Associate Professors / Asst. Professors/others)

	Sanctioned	Filled	Actual (including CAS & MPS)
Professor	7	7	7
Associate Professors	8	6	6
Asst. Professors	24	18	18
Others	--	--	--

11. Faculty profile with name, qualification, designation, area of specialization, experience and research under guidance

S.N	Name	Qualification	Designation	Specialization	No. of years of Experience	No. of Ph.D./ M.Phil. students guided for the last 4
1.	Dr. Rajendra Sharma	Ph.D	Professor	Applied Engineering Mathematics	20	4 guiding
2.	Dr. Pratibha Naithani	PhD	Professor	Environmental Science	15	4 guiding
3.	Dr. R.P.Tripathi	Ph.D	Professor	Operations Research	17	1 guiding
4.	Dr. Awanish Sharma	M.SC. Ph.D.	Professor	Corrosion Science	15	3 guiding
5.	Dr. R. G. Sharma	MSc Ph.D	Visiting Professor	Physical	29	1 + 2 guiding
6.	Dr. C. K. Saini	MSc D. Phil	Visiting Professor	Inorganic	35	2 thesis submitted + 2 guiding
7.	Dr. Bhawana	MSc Ph.D	Associate Professor	Organic	14	1 + 3 guiding
8.	Dr. Brijbhushan (on study leave)	MSc Ph.D	Associate Professor	Organic	7	1 + 2 guiding
9.	Dr. Arunima Nayak (on study leave)	MSc Ph.D	Associate Professor	Organic	3	1 guiding
10.	Dr. Pradeep Kumar Sharma	PhD	Associate Professor	Environmental Science	12	4 guiding
11.	Dr. Vijay Kumar	Ph.D	Associate Prof	EMT	13.4	4 guiding
12.	Dr. Mukesh Kumar	Ph.D	Associate Professor	Operations Research	11	2 guiding
13.	Dr. Seema Saini	Ph.D	Assistant Professor	Astronomy	10	3 guiding
14.	Dr. Neetu Sharma	MSc Ph.D	Assistant	Organic	8	

			Professor			
15.	Dr. Kiran Sharma	M.SC. Ph.D.	Assistant Professor	Electronics	11	4 guiding
16.	Dr. Fateh Singh Gill	M.SC. Ph.D.	Assistant Professor	Industrial Instrumentation	13	2 guiding
17.	Dr Anand Chauhan	Ph.D	Assistant Professor	Operations Research	7.5	2 guiding
18.	Ms. Rupinder Kaur	M.Phil, M.A. (English Literature)	Assistant Professor	Grammar & Soft-skills	12	
19.	Dr Sunita Bhola	PhD (English Literature)	Assistant Professor	English	12	
20.	Mrs. Shalini Jha	M.Sc.	Assistant Professor	Environmental Science	11	
21.	Dr. Ritu Chandna	Ph.D	Assistant Professor	Fuzzy logic	9	
22.	Dr. Anuraj Singh	Ph.D	Assistant Professor	Mmathematical Modelling	3	
23.	Ms. Neha Sang	M.Phill	Assistant Professor	Operations Research	4.5	
24.	Mr. Anand Kr Sharma	M.Phil	Visiting Prof	Maths	1	
25.	Ms.Jyoti Rawat	M.Tech	Asst Prof	Soft Skills	0.3	
26.	Ms. Gunjan Shukla	MSc Physics	Asst. Prof	Physics	11	
27.	Ms.Neelam Kathait	MA	Asst Prof	Soft Skills	6.4	
28.	Ms.Priyanka Oberoi	M.Com	Asst Prof	Soft Skills	4.5	
29.	Ms.Tripti Pawar	MBA	Asst Prof	Soft Skills	5.3	
30.	Ms.Shweta Bajaj	MBA, PGDSM	Asst Prof	Soft Skills	10.4	
31.	Ms.Neha Johri	MCA	Asst Prof	Computers	2.5	

12. List of senior Visiting Fellows, adjunct faculty, emeritus professors. :

S. N.	Name
1	Prof. V. P. Pandey, HOD, Mathematics, SSJ Campus Almora, Kumaon University, UK
2	Prof. U. N. Shukla Former HOD Chemistry, BSNV Degree collage Lucknow University, Lucknow
3	Prof. Sanjay Pant Department of Physics, DSB Campus, Kumaon University, Nainital UK
4	Dr. Reema Pant Department of Environment Science, Welham Girls School Dehradun
5	Dr. N. S. Bhandari HOD Chemistry, SSJ Campus Almora, Kumaon University, UK

13. Percentage of classes taken by temporary faculty – programme-wise information: zero
14. Programme-wise Student Teacher Ratio. : Not applicable participating as supporting department.
15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual - 06 Lab Technician (provided from the central pool)

	Sanctioned	Filled	Actual
Support Staff (technical)	07	07	07

16. Research thrust areas as recognized by major funding agencies
- Waste water Purification, Department of Biotechnology, Govt. of India, New Delhi
17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

- National: 01

Name of PI	Funding agency	Total Grant received (Rs.)	Project Title
Dr. Pradeep Kumar Sharma	Department of Biotechnology, Govt. of India, New Delhi	14.56 Lakhs	“Design up-gradation of vertical sub-surface constructed wetland unit for treatment of dairy waste water”

18. Inter-institutional collaborative projects and associated grants received.
 a) National collaboration: None. b) International collaboration: None.
19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. –
- Project entitled “Development of Photoacoustic Spectroscopy for the detection of Thyrotropin in Blood Serum” has been completed by Dr. Seema Nainwal (The PI was in the rolls of the university when the project was done) of Rs. 3 lakhs funded by Uttarakhand State Biotechnology Department (USBD) Uttarakhand.
 Project No.: 03/Seema.N/GEU/NRIB/R&D Project-1/2011/108
 Amount: Rs. 3 lakhs
 Date of Sanctioned: Jan. 9, 2012
 Duration: 1 year duration & 6 months extension
20. Research facility / centre with
- state recognition : None
 - national recognition : None
 - international recognition : None
21. Special research laboratories sponsored by / created by industry or corporate bodies.
 : None.
22. Publications:
- Number of papers published in peer reviewed journals (national / international) : 239
 - Monographs : None
 - Chapters in Books : 04
 - Edited Books : None

Books with ISBN with details of publishers

S.No	Name of Faculty Member	Name of the Book	Publication Name	Year of Publication
1	Dr. Mukesh Kumar	Mathematical Foundation of Computer Science (ISBN: 978-93-5006-671-7)	Pragati Prakashan Publication.	2013
2	Dr. Anand Chauhan	Engineering Mathematics-I ISBN:978-93-82975-39-7	Anand Publication	2013
3	Dr. Anand Chauhan	An Introduction of Calculus of Variations And Its	Academic Publication,	2014

		Application, ISBN:978-81-922439-8-6	Meerut, India.	
4	Dr. Mukesh Kumar	Engineering Mathematics for Semesters I and II (Print Edition-ISBN 13: 978-93-392-1964-2, ISBN 10: 93-392-1964-3and EBook Edition ISBN 13: 978-93-392-1965-9, ISBN 10: 93-392-1965-1).	Mc Graw-Hill publication	2015
5	Dr. Vijay Kumar	Effects of electromagnetic waves on biological tissues. (ISBN: 978-3-8383-2089-2)	Lambert Academic Publication (LAP) Germany.	2010
6	Dr. Vijay Kumar	Mobile telephony dangerous for adult and children both ISBN: 978-3-659-20542-2	Lambert Academic Publication (LAP) Germany	2011
7	Dr. Vijay Kumar	Synthesis & Structural Characterisation (of multiwalled Carbonano Tube Dopped Barium Titanate Ceramic for capacitor Application) (ISBN: 978-3-659-22000-5).	Lambert Academic Publication (LAP) Germany	2012
8	Dr. Vijay Kumar & Dr. Awanish Sharma	Engineering Physics, ISBN No. 978-93-81771-06-8	Savera Publishing House New Delhi, India	2013
9	Dr. Vijay Kumar & Dr. Awanish Sharma	Engineering Physics part-1, ISBN No. 978-93-81771-43	Savera Publishing House New Delhi, India	2013
10	Dr. Vijay Kumar & Dr. Awanish Sharma	Engineering Physics part-2, ISBN No. 978-93-81771-06-5	Savera Publishing House New Delhi, India	2013

➤ Number listed in International Database (For e.g. Web of Science, Scopus,

- Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc. : 239
 - Citation Index (Range) : 0-40
 - SNIP : 0-2.065
 - SJR : 0-1.247
 - Impact Factor – Range : 0.1-3.0
 - h-index- Range : 0-25
23. Details of patents and income generated : None.
24. Areas of consultancy and income generated : None.
25. Faculty selected nationally / internationally to visit other laboratories / institutions /industries in India and abroad :
- Dr. Brijbhushan and Dr. Arunima Nayak
For Madam Curie scholarship in Spain
26. Faculty serving in
- a) National committees : 6
 - b) International committees : 8
 - c) Editorial Boards. : 5
27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).
- Periodic conduction of FDP
 - Faculties are encouraged to attend workshop, Seminar in the related field.
28. Student projects : Not applicable participating as supporting department.
- percentage of students who have done in-house projects including inter-departmental projects
 - percentage of students doing projects in collaboration with other universities /industry / institute
29. Awards / recognitions received at the national and international level by: None
- Faculty
 - Doctoral / post doctoral fellows
 - Students
30. Seminars/ Conferences/Workshops organized and the source of funding (national

/international) with details of outstanding participants, if any.

S. No.	Name of the Seminars/ Conferences/Workshops	Date	Resource Person	Sponsored by
1	National seminar “Recent Trends in mathematical Techniques and Their Application”	April 11, 2011	<ul style="list-style-type: none"> • Prof. S. G. Sharma, Former Professor IIT Roorkee. • Prof. S. B. Singh, GB Pant University, Pantnagar. • Prof. S. L. Singh, Rishikesh. Prof. Ravi Gowri, GEU Dehradun	DST
2	International Satellite Seminar “Role of Mathematics in Science and Engineering (ISSRMSE-11)”	May 13, 2011 to May 14, 2011	<ul style="list-style-type: none"> • S G Dani, President, ISHM, TIFR, Mumbai • Sunder Lal, Vice Chancellor, VBS Purvanchal University, Jaunpur. • Kripasindhu Chaudhuri, Emeritus Fellow, UGC, Kolkata. • Spasoje Mucibabic, University of Defense, Belgrade, Serbia. • R S Kaushal, Delhi University. • Vinod Mishra, Sant Longowal Inst. of Engg. & Tech., Longowal (Punjab). • Anupum Jain, Indore • L. M. Saha, MSF, New Delhi. • Sunil Datta, Lucknow University. • Oscar João Abdounur, Universidade de São Paulo, Brazil. • K Ramsubramanian, IIT Mumbai. • R. N. Mukherjee, Burdwan University, Burdwan. • Rajendra Pant, Walter Sisulu 	DST, CSIR and UCOST

			<p>University, Mthatha, South Africa.</p> <ul style="list-style-type: none"> • Vitali Milman, Tel Aviv University, Israel. • Ajit Iqbal Singh, ISI, Delhi. 	
3	International conference “Mathematical technique in Engineering Applications (ICMTEA-2013)”	Oct 24, 2013 to Oct 25, 2013	<ul style="list-style-type: none"> • David D Hanagal, Fellow of Royal Statistical Society, London, UK, University of Pune. • Prasun Das, Indian Statistical Institute, Kolkata • Madhu Jain, Indian Institute of Technology Roorkee, Roorkee. • Raghvendra Gupta, Institute of High Performance Computing, Singapore. • S L Singh, President, Vijnana Parisada (Science Academy) of India 	DST and UCOST
4	National Seminar on "Natural product Chemistry and Sustainable Development"	4 - 5 June 2011	<ul style="list-style-type: none"> • Dr. Archana Bacheti 	UCOST
5	National Collaboratory on Soft-skills and Deep Dive Faculty Enablement program on Soft-Skills in association with Infosys (2 Nos. – Self funded)	6-8 th August 2014	<ul style="list-style-type: none"> • Manas Tyagi (senior member soft skill, Infosys, Chandigarh) • Begimargret (Senior member soft skill Infosys, Mysore) • Miss Vindya (Principal professional skill development, Infosys, Mysore) 	Conducted in association with Infosys & GEU
6.	Deep dive faculty enablement programm(DDFEP) on soft skill	6-20 th Decem ber, 2013	<ul style="list-style-type: none"> • Manas Tyagi (senior member soft skill, Infosys, Chandigarh) 	Conducted by Infosys & organised and hosted by GEU

31. Code of ethics for research followed by the departments: As per UGC Guidelines

32. Student profile programme-wise:

Name of the Programme	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
Ph.D					
2011	21	10	07	47.61	33.33
2012	25	0	0	0	0
2013	19	02	04	10.52	21.05
2014	12	0	03	0	25.0
2015	06	02	03	33.33	50.0

33. Diversity of students

Name of the Programme/Year (refer to question no. 4)	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
Ph.D 2011	None	31.25	68.75	0
2012	None	0	0	0
2013	None	83.33	16.66	0
2014	None	100	0	0
2015	None	100	0	0

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Not Applicable (participating as supporting department).

35. Student progression

Student progression	Percentage against enrolled
UG to PG	NA
PG to M.Phil.	NA

PG to Ph.D.	NA
Ph.D. to Post-Doctoral	-
Employed On Campus : NA Off Campus: 01	
Entrepreneurs	Zero

36. Diversity of staff

Percentage of faculty who are graduates /Ph.D	
of the same university	0
from other universities within the State	56
from universities from other States from	36
universities outside the country	8

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period.

Dr.Anand Chauhan	2010
Dr.Ritu Chandana	2012
Dr.Anuraj Singh	2013
Dr .Kiran Sharma	2010
Dr.Deepak	2012

38. Present details of departmental infrastructural facilities with regard to

- a) Library : Yes, 168 Books
b) Internet facilities for staff and students : Yes
c) Total number of class rooms. : Not Applicable participating as supporting department
d) Class rooms with ICT facility : Not Applicable
e) Students' laboratories : 04
f) Research laboratories : 03

39. List of doctoral, post-doctoral students and Research Associates

- from the host institution/university

Year	2009	2010	2011	2013	2014	2015
No. Of Students enrolled	15	13	14	05	02	03

- from other institutions/universities : None
40. Number of post graduate students getting financial assistance from the university.
: Not Applicable
41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.
- Input from faculty, domain experts (Institutes of academic excellence, national and international trends in technological developments and industrial needs.
 - Department committee is constituted to modify the existing syllabi or add new courses in emerging/thrust areas time to time.
 - Proposal is put up to BOS which constitute of some internal and external expert.
 - Recommendation of BOS is sent to Academic Council and through planning & monitoring Board finally to Board of Management for approval.
42. Does the department obtain feedback from
- a) Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?
 - Yes, Periodically Feedback received from faculty is placed before the Departmental Committee to consider the modifications and improvements in curriculum and teaching learning evaluation process.
 - b) Students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?
 - Yes. The feedback details from students are given to the HOD confidentially. HOD appraises to the concerned faculty member for necessary corrective action if required. Students academic performance are analysed by faculty concerned for their respective subjects taught and HOD will analyse the overall department result and make necessary action as deemed fit.
 - c) Alumni and employers on the programmes offered and how does the department utilize the feedback?
 - Yes, the feedback from Industry and recruiters is obtained (informally) from time to time, and accordingly the syllabus is improved as passed through BOS and AC. Ex: The Syllabus of PC and APC are designed in association with Infosys, keeping in view the Industry and Market requirements.
43. List the distinguished alumni of the department (maximum 10)
- Not applicable, as it supporting department

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
- Guest lectures are organised at UG courses every semester in Environmental science course.
 - World AIDS day was celebrated on 30th November 2013.
 - World Environment day is celebrated on 5th June everyday year
 - National conference on Advances in natural products chemistry and sustainable development was organised in 4-5th June 2011
 - Experimental Demonstration of Physics experiments was organised on 26th & 27th April 2014
 - Awareness Talk for Trinity by Ajay Mehta from Lifexpress
 - Mock Press Exercise for Communication by Shweta Vij on Radio Zindagee
 - Talk on English Language Skills by Dr.HS Randhawa from DAV PG
 - Student Interaction by Manas Tyagi from Infosys
45. List the teaching methods adopted by the faculty for different programmes.
- Lectures (regular classes): Face to face mode
 - Seminars: Through self study and guided seminar
 - Projects: By students in group /individual for better visualization of their course content in the form of mini project and final year project.
 - Tutorials
 - Industrial Visit
 - Guest Lectures
 - Hands on practical experience and specialised training courses.
 - Interactive classes, Role plays, Group Discussions, Extempore, Webinars and practice exercises.
46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?
- Periodical reviews through tests, quiz, and tutorial, feedback from students, faculty, and employers are made and corrective actions are taken.
 - Experiences learnt through their performance in exams, results and employability goal us to take necessary actions.
 - The faculty members meet toward the close of each semester to follow up - the performance against plan, challenges faced and evaluate the general feedback from students. The faculty conducts viva-voice or other such exercises like GDs as part of continual assessment to gauge the improvement level among the students.
47. Highlight the participation of students and faculty in extension activities.

- Faculties actively involve themselves in research through publications and paper presentation in conferences.
 - Ph.D. students are encouraged to publish the papers in International and National Conferences with the supporting financial grant of Rs. 10000/- per year by the university.
 - Students and faculties are engaged in innovative research work on waste water purification. Students are encouraged to present their innovative ideas related to eco-friendly technologies during university tech festivals.
 - Both the faculty and students of this department actively participate in workshop, seminar and various technical quizzes.
 - The areas in which our students excel outside the academic curricula include cultural performance, commitment to society, sports and quiz activities, dance and drama performance.
 - Students are also associated with different clubs of university such as music, chess, science, photography
48. Give details of “beyond syllabus scholarly activities” of the department.
- Special technical lectures, discussions with eminent professors, scientists, technologist from various institutions/organizations for the advancement of knowledge in new cutting edge technological research.
 - Presentation in national and international conferences; knowledge gained through review of recent developments in the areas of their expertise.
 - Organization of conferences/ workshop/ seminar on thrust areas which provide an opportunity to interact with eminent experts.
 - Regular Career Counselling
 - GDs and Mock Interviews
 - English language classes
 - Extempore and Debating events
49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. : Not applicable as it is a supporting department
50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.
- In the interactive sessions the latest technologies and applications are discussed with the students.
 - Ph.D. based research outcome and new research thrust areas discussed with the students.
 - Assertiveness
 - Eco-consciousness through Literature

- Developmental pedagogy to broaden Human Rights Education
- Imparting Human Values through role play
- Interference of Ethic language in acquiring second language
- Departmental students and faculties are engaged in developing waste water treatment technologies.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

➤ STRENGTHS.

- Diverse knowledge of faculty and experience
- Contemporary and career oriented curriculum
- Industry collaboration (with Infosys)
- The research publications by the faculties in various National and International Journals.
- Grant received from DBT for conducting research on waste water purification.

➤ WEAKNESSES

- The department doesn't have any independent course
- Mel down in industrial sector
- Better industry-academia interaction is needed.
- Shinking industrial hub
- Due to non-availability of high degree of industry interface continous intervention is amiss.

➤ OPPORTUNITIES

- To collaborate with IRDE and DEAL (DRDO_ laboratory in near future.
- International collaboration
- Upgradation of the department with more facilities can be realized by UGC/AICTE and DST funding
- Good opportunity to conduct inter-disciplinary research.
- Great opportunity for consultancy work.

➤ CHALLENGES

- To start courses in collaboration with other universities, industries and foreign institutions.
- To start collaborative research with foreign institutions.
- To upgrade research facility for national recognition
- Retention and availability of good quality students for continual research activity
- To attract consultancy projects through industry linkages.

52. Future plans of the department.

- Plan to Start PG courses.
- To enhance Ph.D Programme.
- Steps to get Departmental Project from Govt. Funding Agencies.
- Inter institutional collaboration for research funding projects/consultancy.
- Transforming from faculty centric to students centric learning.
- To collaborate with the renowned institutions within/ outside the country.

UPDATED
50 Point Questionnaire
Along with Annexures

Submitted to
NATIONAL ASSESSMENT & ACCREDITATION COUNCIL
(NAAC)



by



GraphicEra
UNIVERSITY

Deemed University under section 3 of UGC Act, 1956

566/6, Bell Road, Clement, Town, Dehradun -248002.
(September 28, 2015)

Graphic Era University

Dehradun, Uttarakhand

S.No	A. Core Indicators	
1	Percentage of Courses where major syllabus restructuring was carried out during last 3 years	About 30% Required changes are made periodically to stay in synchronization with industry and environment requirement through structured process of Department Advisory Committee, Board of Studies and Academic Council.
2.	Temporal plan is more than 50% of programmes (CBCS/Semester/Annual)	All programs are semester based. CBCS has been adopted w.e.f the session 2015-16 following the guidelines provided by UGC.
3.	Percentage of faculties with Ph.D qualification (i)General Courses (ii) Professional Courses(For ex. MD/DM for medicine and ME/MS for Engg)	Faculty with Ph.D degree: 31% (101 out of 325) A. Faculty with Ph.D in General Courses: 42.57% B. Faculty with Ph.D in Professional Courses: 57.43% (Details/supporting documents are attached as Annexure 1)
4.	Student Computer ratio	1. The University provides state-of-the-art computing facilities with total no. of 2002 computers in campus 2. The student computer ratio is 4:1 for UG, 2:1 for PG & 1:1 for Ph.D scholars.
5.	Number of departments with UGC/ SAP/CAS/DST/FIST etc in University	1. DST (Govt. of India) has recognized the University as a premier research center and has sanctioned a Technology Business Incubation (TBI) Centre with an amount of Rs. 294.20 lakhs. 2. This is the only TBI Center in Uttarakhand. (Details/supporting documents are attached as Annexure 2)
6.	Number of Post Doctoral fellows/Research Associates working (a) Locals b) Outsiders	The University has 06 Post Doctoral Fellow working: 1. Locals: 01 2. Outsiders: 05
7.	Number of Ongoing Projects/teacher	Presently, there are 101 Ph.D. faculty members and there are 25 ongoing projects in the University with a total sanctioned grant of Rs. 645.35 Lakhs . $25/101 = 0.247$ List is mentioned below and complete details along with the

		10	2013	Elucidation of possible vaccine candidates and drug targets for Encephalitis using reverse vaccinology approach.	Uttarakhand State Council of Science and Technology
		11	2013	Screening medicinal plants of Uttarakhand for modulation of secretase enzyme activity: Prospect for treatment of Alzheimer	Uttarakhand State Council of Science and Technology
		12	2013	Investigating the Source of the Spoofed Emails	Uttarakhand Council for Science and Technology (UCOST)
		13	2013	Automated surveillance system for traffic volume estimation and redirection	Uttarakhand Council for Science and Technology UCOST
		14	2013	Science & Technology Entrepreneur's Park	UCOST
		15	2014	Design Upgradation of Vertical Sub Surface Constructed Wetland Unit For Treatment of Dairy Waste Water	Dept of Biotechnology, Ministry of Science and Technology, Govt. of India.
		16	2014	TBI	DST, New Delhi
		17	2014	Printed Document Security Using Intrinsic Characteristics of Imaging Devices.	Government of India Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS)
		18	2011	Rural Informatics (<i>Design and implementation of village empowerment model through leveraging ICT and associated technologies</i>).	University Funded Project
		19	2010	Development of dairy, animal cell culture and molecular diagnostic facility	University Funded Project

		20	2014	Mobile Bomb Detector	University Funded Project																
		21	2013	Renewable Energy Project On Paper Recycling	University Funded Project																
		22	2015	Formula Racing Car	University Funded Project																
		23	2015	Gocart Racing Car	University Funded Project																
		24	2015	ATV Championship Racing Car	University Funded Project																
		25	2015	EcoCart Racing Car	University Funded Project																
8.	Number of Completed Research projects/teacher (Funded by National/ International Agencies)	<p>20 funded research projects with a total grant of Rs. 161.67 Lakhs have been completed.</p> <p>$20/101 = 0.198$</p> <p>List is mentioned below and complete details along with the supporting documents are attached as Annexure 3b</p> <table border="1"> <thead> <tr> <th>SN</th> <th>Title</th> <th>Sanctioning Dept</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Ka band Propagation Studies using GSAT-4</td> <td>Indian Space Research Organization, Department of Space, Govt. of India, Bangalore.</td> <td>2013</td> </tr> <tr> <td>2</td> <td>Test and Measurement Laboratory at S and C Band Frequencies</td> <td>AICTE, New Delhi</td> <td>2011</td> </tr> <tr> <td>3</td> <td>Research services on Scheduling Algorithms for Tactical Multihop Ad-Hoc network., Department of Electronics and Communication Engineering. Funding Agency,</td> <td>DEAL DRDO, Dehradun</td> <td>2012</td> </tr> </tbody> </table>				SN	Title	Sanctioning Dept	Year	1	Ka band Propagation Studies using GSAT-4	Indian Space Research Organization, Department of Space, Govt. of India, Bangalore.	2013	2	Test and Measurement Laboratory at S and C Band Frequencies	AICTE, New Delhi	2011	3	Research services on Scheduling Algorithms for Tactical Multihop Ad-Hoc network., Department of Electronics and Communication Engineering. Funding Agency,	DEAL DRDO, Dehradun	2012
SN	Title	Sanctioning Dept	Year																		
1	Ka band Propagation Studies using GSAT-4	Indian Space Research Organization, Department of Space, Govt. of India, Bangalore.	2013																		
2	Test and Measurement Laboratory at S and C Band Frequencies	AICTE, New Delhi	2011																		
3	Research services on Scheduling Algorithms for Tactical Multihop Ad-Hoc network., Department of Electronics and Communication Engineering. Funding Agency,	DEAL DRDO, Dehradun	2012																		

		4	Development of Photoacoustic Spectroscopy (PAS) for the detection of Thyrotropin in blood serum	Uttarakhand State Biotechnology Department (U.S.B.D)	2013
		5	Studies on Deposition and Characterization of Thermal Barrier Coating	Institution of Engineers India	2013
		6	Studies of Effect of PVD Coating on the Corrosion Behavior of Magnesium	Institution of Engineers India,	2013
		7	Development of Robust Control Algorithm for Inertially Stabilized Platform	IRDE-DRDO, Dehradun	2013
		8	C.V Raman International fellowship Mr. Denis Ndanguza Rusatsi, HOD in the Department of Applied Mathematics at University of Rwanda, Rwanda. Bayesian Analysis of SEIR epidemic models	Ministry of Science & Technology (FICCI), Government of India	2013
		9	C.V Raman International fellowship Mr. Sam Kaisiromwe Scientist, Uganda bureau of statistics	Ministry of Science & Technology (FICCI), Government of India	2014
		10	Baseline survey to assess Science & IT awareness in Uttarakhand	University Funded Project	2011
		11	Solar Energy Light Project	University Funded Project	2012
		12	Establishing private cloud computing facility for offering infrastructure and storage as service	University Funded Project	2013
		13	Developing infrastructure for storage and analysis of big data	University Funded Project	2013

		14	Alumni Website development	University Funded Project	2014																				
		15	Mobile application for Women safety	University Funded Project	2013																				
		16	Android based software projects	University Funded Project	2014																				
		17	Admission Counseling software development	University Funded Project	2014																				
		18	MIS based software for Library management	University Funded Project	2013																				
		19	EcoCart/ Gocart Racing Car	University Funded Project	2014																				
		20	EcoCart/ Gocart Racing Car	University Funded Project	2014																				
9.	Coordinated /Collaborative Projects(National & International)	<p>A total of 10 collaborative projects (DRDO, ISRO, BARC, DBT, DST & AICTE) have been undertaken.</p> <p>List is mentioned below and complete details along with the supporting documents are attached as Annexure 3c</p> <table border="1"> <thead> <tr> <th></th> <th>Year</th> <th>Title of the Project</th> <th>Funding Agency</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2013</td> <td>Seismic behaviour of large pile groups in liquefying soils using parallel processing methods.</td> <td>Government of India Department of Atomic Energy BRNS Secretariat</td> </tr> <tr> <td>2</td> <td>2013</td> <td>Investigation of channel equalization and diversity combining scheme for up surging digital troposcatter communication system</td> <td>DRDO, New Delhi</td> </tr> <tr> <td>3</td> <td>2013</td> <td>Development of Simulation Tool for Vibration Based Electromechanical Omega Type Mass Flow Sensor</td> <td>DST, New Delhi</td> </tr> <tr> <td>4</td> <td>2013</td> <td>Rain Fade Mitigation for Ka Band Communication Satellites</td> <td>ISRO, Bangalore</td> </tr> </tbody> </table>					Year	Title of the Project	Funding Agency	1	2013	Seismic behaviour of large pile groups in liquefying soils using parallel processing methods.	Government of India Department of Atomic Energy BRNS Secretariat	2	2013	Investigation of channel equalization and diversity combining scheme for up surging digital troposcatter communication system	DRDO, New Delhi	3	2013	Development of Simulation Tool for Vibration Based Electromechanical Omega Type Mass Flow Sensor	DST, New Delhi	4	2013	Rain Fade Mitigation for Ka Band Communication Satellites	ISRO, Bangalore
	Year	Title of the Project	Funding Agency																						
1	2013	Seismic behaviour of large pile groups in liquefying soils using parallel processing methods.	Government of India Department of Atomic Energy BRNS Secretariat																						
2	2013	Investigation of channel equalization and diversity combining scheme for up surging digital troposcatter communication system	DRDO, New Delhi																						
3	2013	Development of Simulation Tool for Vibration Based Electromechanical Omega Type Mass Flow Sensor	DST, New Delhi																						
4	2013	Rain Fade Mitigation for Ka Band Communication Satellites	ISRO, Bangalore																						

		5	2012	Development of Inelastic Design Curves For Seismic Design of Concrete Piles And Pile Groups	DST (SERB, Fast Track Scheme)
		6	2014	Design Upgradation of Vertical Sub Surface Constructed Wetland Unit For Treatment of Dairy Waste Water	Dept of Biotechnology, Ministry of Science and Technology, Govt. of India.
		7	2014	TBI	DST, New Delhi
		8	2014	Printed Document Security Using Intrinsic Characteristics of Imaging Devices.	Government of India Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences (BRNS)
		9	2013	Ka band Propagation Studies using GSAT-4	Indian Space Research Organization, Department of Space, Govt. of India, Bangalore.
		10	2012	Research services on Scheduling Algorithms for Tactical Multihop Ad-Hoc network., Department of Electronics and Communication Engineering. Funding Agency,	DEAL DRDO, Dehradun
10	National recognitions for faculty for Teaching/Research/Consultancy/ Extension(Reputed/recognized bodies)	<ol style="list-style-type: none"> 1. Prof. Gautam Das, Department of Petroleum Engineering, has won the CSIR Technology Award 2015 for Technology Development of a Novel Catalyst for Sweetening of LPG and Lighter Petroleum Fractions. 2. Mr. Arvind Mishra, Dept. of Mechanical Engg., has set new Guinness World Record of Longest Marathon Lecture in March 2014. 3. Prof. Pravin Patil, Dept. of Mechanical Engg., and Prof. Pawan Kumar Emani, Dept. of Civil Engg., have received DST Young Scientist Award. 4. Dr. Mangey Ram, Dr. Ritu Chandna, Ms. Payal Gupta, Mr. Ravi Kumar, Dr. Navin Kumar have received Young Scientist Awards from Uttarakhand Council for Science and Technology (UCOST) 			

		<p>5. Prof. (Dr.) Kamal Ghanshala, received Award for contribution in the domain of IT initiative in Uttarakhand</p> <p>6. Prof. L.M.S. Palni, Dean, Dept. of Biotechnology, has received Research and Technology Excellence Award from UCOST.</p> <p>7. Dr. Deepak Joshi is a visiting research scientist at AFT Lab, Department of Physiology, All India Institute of Medical Sciences (AIIMS), New Delhi</p> <p>8. Prof. (Dr.) R.C. Joshi, Prof. (Dr.) V.K. Tewari, Prof. (Dr.) A.K. Awasthi, Prof. (Dr.) B.S. Jassal, Prof. (Dr.) R. Gowri, Dr. Rajesh Kumar are members of Selection Committee of various institutions, organizations of National & International repute, members of various accreditation committees (like AICTE, UGC), members of Project Review Committees in DRDO, NCSTC (DST) and Special Panel on FS&B.</p> <p>9. Prof. (Dr.) R.C. Joshi, Prof. (Dr.) V.K. Tewari and Prof. (Dr.) L.M.S. Palni are Fellows of prominent Science & Technology Academies/Societies.</p>
11.	Number of Patents (last 5 years)	<p>13 Patents have been filed (including 4 in foreign countries). The details are as follows:</p> <p>a) US Patent Application 14/809746: A System and Method for Security Enhancement Priority date - 07/Aug/2014 Filed Complete on 27/Jul/2015 Inventors: Puneet Goyal, Nitin Khanna</p> <p>b) Canada Patent Application 2899803 : A System and Method for Security Enhancement Priority date - 07/Aug/2014 Filed Complete on 06/Aug/2015 Inventors: Puneet Goyal, Nitin Khanna</p> <p>c) Canada Patent Application (Appln. No. yet to receive) : A System and Method for Security Enhancement Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015 Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan</p> <p>d) Nepal Patent Application 1786: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2015 Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly</p>

		<p>e) Indian Patent Application 1447/DEL/2014: A Synergistic Camellia Sinensis Based Anticandidal Composition Priority date - 31/May/2014 Filed Complete on 29/May/2015 Inventors - Jigisha Anand, Nishant Rai, Ashish Thapliyal</p> <p>f) Indian Patent Application 1500/DEL/2014: Primers Probes And Test Kit For The Detection Of Salmonella Priority date - 05/Jun/2014 Filed Complete on 04/Jun/2015 Inventors - Pankaj Gautam, Navin Kumar, Nishant Rai, Ashish Thapliyal Also filed PCT on 05/Jun/2015 - PCT/IB2015/000859 (ISA - IN).</p> <p>g) Indian Patent Application 1625/DEL/2014: A Phytochemical Rich Herbal Extract And Process Of Extraction Thereof Priority date - 16/Jun/2014 Filed Complete on 16/Jun/2014 Inventors - Navin Kumar, Pankaj Gautam, Kshipra Misra, Raj Kumar Tulswani, Payal Gupta, Swati Joshi, Sakshi Painuly Also filed PCT on 16/Jun/2015 - PCT/IB2015/000950 (ISA - IN).</p> <p>h) Indian Patent Application 2247/DEL/2014: A System and Method for Security Enhancement Priority date - 07/Aug/2014 Filed Complete on 07/Aug/2014 Inventors: Puneet Goyal, Nitin Khanna Also filed PCT on 28/Apr/2015 - PCT/IB2015/053080 (ISA - EP).</p> <p>i) Indian Patent Application 2646/DEL/2014: Secure Authentication using dynamic passcodes Priority date - 15/Sep/2014 Filed Complete on 15/Sep/2015 Inventors: Puneet Goyal, Nitin Khanna, Radheyshyam, Joochi Chauhan Also filed PCT on 15/Sep/2015 - PCT/IB2015/057079 (ISA - IN).</p> <p>j) Indian Patent Application 728/KOL/2015 filed on 7/08/2015: Semi Rigid Joint By Somjit Mondal</p> <p>k) Indian Patent Application 729/KOL/2015 filed on 7/08/2015: AFS Automatic Flow Stopper by Using Negative tensile spring By Somjit Mondal</p> <p>l) Indian Patent Application 730/KOL/2015 filed on</p>
--	--	---

		7/08/2015: Self Stabilizing Parallel Shaft Gears By Somjit Mondal m) Indian Patent Application by Abhilash Semwal filed in 2014: Mobile Bomb Detector																																
12.	Output of M.Phil & Ph.D per faculty	<p>16 Ph.D degrees are already awarded in the span of last 5 years</p> <p>There are 101 Ph.D. faculty members in the University.</p> <p>Output per faculty: (16/101=.158)</p> <p>06 Theses have been submitted. 150 scholars are pursuing doctoral research.</p> <p>Ph.Ds Awarded:</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Name</th> <th>Department</th> <th>Date of Ph.D. Viva Voce Exam/ Ph. D Topic</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Som Aditya Juyal</td> <td>Dept of Management studies</td> <td>17/4/2012 An Empirical Study On Factors Influencing Store Image, Satisfaction And Loyalty In Department Stores</td> </tr> <tr> <td>2.</td> <td>Nitin Bilgi</td> <td>Dept of CSE</td> <td>8/12/2012 Knowledge Based System For Indian Legal Domain With Specific Reference To Transfer Of Property Act</td> </tr> <tr> <td>3.</td> <td>Shahnawaz Husain</td> <td>Dept of CSE</td> <td>9/08/2013 An Efficient Framework For Intrusion Detection System For Mobile Adhoc Networks</td> </tr> <tr> <td>4.</td> <td>Meenu Sharma</td> <td>Dept of Allied Sciences</td> <td>22/10/2013 Chemical Study of Andrographics Paniculata For Pharmaceutical Potential</td> </tr> <tr> <td>5.</td> <td>Neetu Sharma</td> <td>Dept of Allied Sciences</td> <td>20/3/2014 Chemical Investigation of Swertia Chirayita For Resourceful Application In Pharmaceutical Industry.</td> </tr> <tr> <td>6.</td> <td>Shrinivasra o B. Kulkarni</td> <td>Dept of CSE</td> <td>21/3/2014 Efficient Human Recognition Techniques Using Iris Biometric Features.</td> </tr> <tr> <td>7.</td> <td>Sunil F. Rodd</td> <td>Dept of CSE</td> <td>22/3/2014 Adaptive Techniques For Performance Tuning of Database Systems</td> </tr> </tbody> </table>	S. No	Name	Department	Date of Ph.D. Viva Voce Exam/ Ph. D Topic	1.	Som Aditya Juyal	Dept of Management studies	17/4/2012 An Empirical Study On Factors Influencing Store Image, Satisfaction And Loyalty In Department Stores	2.	Nitin Bilgi	Dept of CSE	8/12/2012 Knowledge Based System For Indian Legal Domain With Specific Reference To Transfer Of Property Act	3.	Shahnawaz Husain	Dept of CSE	9/08/2013 An Efficient Framework For Intrusion Detection System For Mobile Adhoc Networks	4.	Meenu Sharma	Dept of Allied Sciences	22/10/2013 Chemical Study of Andrographics Paniculata For Pharmaceutical Potential	5.	Neetu Sharma	Dept of Allied Sciences	20/3/2014 Chemical Investigation of Swertia Chirayita For Resourceful Application In Pharmaceutical Industry.	6.	Shrinivasra o B. Kulkarni	Dept of CSE	21/3/2014 Efficient Human Recognition Techniques Using Iris Biometric Features.	7.	Sunil F. Rodd	Dept of CSE	22/3/2014 Adaptive Techniques For Performance Tuning of Database Systems
S. No	Name	Department	Date of Ph.D. Viva Voce Exam/ Ph. D Topic																															
1.	Som Aditya Juyal	Dept of Management studies	17/4/2012 An Empirical Study On Factors Influencing Store Image, Satisfaction And Loyalty In Department Stores																															
2.	Nitin Bilgi	Dept of CSE	8/12/2012 Knowledge Based System For Indian Legal Domain With Specific Reference To Transfer Of Property Act																															
3.	Shahnawaz Husain	Dept of CSE	9/08/2013 An Efficient Framework For Intrusion Detection System For Mobile Adhoc Networks																															
4.	Meenu Sharma	Dept of Allied Sciences	22/10/2013 Chemical Study of Andrographics Paniculata For Pharmaceutical Potential																															
5.	Neetu Sharma	Dept of Allied Sciences	20/3/2014 Chemical Investigation of Swertia Chirayita For Resourceful Application In Pharmaceutical Industry.																															
6.	Shrinivasra o B. Kulkarni	Dept of CSE	21/3/2014 Efficient Human Recognition Techniques Using Iris Biometric Features.																															
7.	Sunil F. Rodd	Dept of CSE	22/3/2014 Adaptive Techniques For Performance Tuning of Database Systems																															

		8.	M M Math	Dept of CSE	22/3/2014 Enhancing Self Management Capabilities for Software Systems
		9.	Anurag Vidyarthi	Dept of ECE	June 10,2014 Development of Rain Attenuation And Dsd Models for Indian Region Using Disdrometer Data
		10.	Mukesh Chand	Dept of CSE	13/09/2014 A Methodology for IP Address Configuration In Manet
		11.	Monika Manglik	Dept of Allied Sciences	22/11/2014 Reliability Analysis for Complex Systems Under Operating Conditions and Coverage Factor
		12.	Mahesh Chandra	Dept of Allied Sciences	21/3/2015 Characterization And Pharmacological Activity of Essential Oil of Some Indigenous Medicinal Plants of Uttarakhand
		13.	Sanjay Sharma	Dept of Allied Sciences	24/04/2015 Development of Mathematical Models for Persihable Products With Tarde Credits
		14.	Sarika	Dept of Allied Sciences	14/08/2015 Development of Electroless Ni-P-Zno Nanocomposite Coatings
		15.	Devsh pratap Singh	Dept of CSE	Proposed Date Of Viva: 10/09/2015 A Framework for Energy Efficient Wireless Sensor Network
		16.	Shilpy Tayal	Dept of Allied Sciences	Date Of Viva: 14/09/2015 Optimal Decisions for Deteriorating Items with Expiration Date and Uncertain Lead Time

Theses Submitted:

S. No	Name	Department	Date of Ph.D. Viva Voce Exam/ Ph. D Topic
1.	Seema Singh	Dept of Management Studies	Date Of Viva: 21/09/2015 Work Life Balance Among Employees in Private and Public Sector Banks of Uttarakhand
2.	Shweta Kohli	Dept of Biotechnology	Date Of Viva:24/09/2015 Early Diagnosis of Blood Protozoans by Polymerase Chain Reaction in Crossbred Cows in Dehradun, Uttarakhand
3.	Indra Rai	Dept of Allied Sciences	May 2015 Physico-Chemical Properties of Some Non-Cultivated Oil Bearing Seeds of Garhwal Region
4.	Arvind Kumar	Dept of Allied Sciences	July 2015 Effects of Nonionizing Electromagnetic Energy of Intermediate Frequency Range on Human Body
5.	M Bhat	Dept of Allied Sciences	July 2015 Effects of Mobile Phone Waves on Human Body
6.	K K Gupta	Dept of Civil Engg.	Sept 2015 Experimental Investigation of Flow Characteristics of Various Planform Labyrinth Weirs

13	Revenue generated from consultancy per year	<p>The University Departments are actively engaged in Training and Consultancy assignments. In last two years a revenue of Rs. 32 lakhs has already been generated. The list of ongoing Consultancy assignments is given below:</p> <p>Major & Minor Consultancy Projects are listed below (Details/supporting documents are attached as Annexure 4):</p> <table border="1"> <thead> <tr> <th>Sr. No</th> <th>Name of the consultancy project</th> <th>Sponsors/Funding Agency</th> <th>Grants Sanctioned in Rs. Lakhs</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works</td> <td>M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Kamal, Haryana.</td> <td>309.25</td> </tr> <tr> <td>2</td> <td>Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,</td> <td>Nainital, Uttarakhand. (a UNDP Project)</td> <td>2.10</td> </tr> <tr> <td>3</td> <td>Running Operation & Maintenance of Effluent treatment plant (ETP)</td> <td>M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar, Tonk Road, Jaipur, Rajasthan for a period of 3 years.</td> <td>27.90</td> </tr> <tr> <td>4</td> <td>Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of uttarakhand</td> <td>Hydel Projects in different locations of uttarakhand</td> <td>75.00</td> </tr> <tr> <td>5</td> <td>Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand</td> <td>Micro Hydro Power Project on the Canal Network in the state of Uttarakhand</td> <td>23.94</td> </tr> <tr> <td>6</td> <td>Provision of expertise service on Testing of Material Strength for</td> <td>Ashmeet Associates Engineers and Contractors (at three projects sites in UP and Uttarakhand)</td> <td>2.00</td> </tr> <tr> <td>7</td> <td>Training for Fabrication and pipe design (practical teaching and on the site training program)</td> <td>Uttaranchal Construction Company</td> <td>1.00</td> </tr> <tr> <td>8</td> <td>Provision of expertise service on Testing of</td> <td>Alankrta Constructions</td> <td>2.00</td> </tr> </tbody> </table>	Sr. No	Name of the consultancy project	Sponsors/Funding Agency	Grants Sanctioned in Rs. Lakhs	1	Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works	M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Kamal, Haryana.	309.25	2	Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,	Nainital, Uttarakhand. (a UNDP Project)	2.10	3	Running Operation & Maintenance of Effluent treatment plant (ETP)	M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar, Tonk Road, Jaipur, Rajasthan for a period of 3 years.	27.90	4	Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of uttarakhand	Hydel Projects in different locations of uttarakhand	75.00	5	Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	23.94	6	Provision of expertise service on Testing of Material Strength for	Ashmeet Associates Engineers and Contractors (at three projects sites in UP and Uttarakhand)	2.00	7	Training for Fabrication and pipe design (practical teaching and on the site training program)	Uttaranchal Construction Company	1.00	8	Provision of expertise service on Testing of	Alankrta Constructions	2.00
Sr. No	Name of the consultancy project	Sponsors/Funding Agency	Grants Sanctioned in Rs. Lakhs																																			
1	Zero liquid discharge Effluent Treatment Plant on turn-key basis except civil works	M/s Shakti Bhog Food Ltd. GT Road, Vill-Samana Bahu, Dist Kamal, Haryana.	309.25																																			
2	Monitoring and quality assurance for Civil Works Modifications at Roorkee Watermill,	Nainital, Uttarakhand. (a UNDP Project)	2.10																																			
3	Running Operation & Maintenance of Effluent treatment plant (ETP)	M/s Sawaria Sweets Pvt. Ltd., J-6 Himmat Nagar, Tonk Road, Jaipur, Rajasthan for a period of 3 years.	27.90																																			
4	Detailed survey Investigation and preparation of detailed project report for micro/mini Hydel Projects in different locations of uttarakhand	Hydel Projects in different locations of uttarakhand	75.00																																			
5	Preparation of Master plan for the development of ultra low head Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	Micro Hydro Power Project on the Canal Network in the state of Uttarakhand	23.94																																			
6	Provision of expertise service on Testing of Material Strength for	Ashmeet Associates Engineers and Contractors (at three projects sites in UP and Uttarakhand)	2.00																																			
7	Training for Fabrication and pipe design (practical teaching and on the site training program)	Uttaranchal Construction Company	1.00																																			
8	Provision of expertise service on Testing of	Alankrta Constructions	2.00																																			

			Material Strength and Soil Testing		
		9	Training programme for sales and promotion team for Business Development	AMOGEO ITES	1.5
		10	Training for Software Development and testing	AMOGEO ITES	2.0
		11	Market sensitization for publications	Savera Educational and Book Suppliers Meerut	1.00
		12	Training programme for marketing and sales team for market outreach Savera Educational and Book Suppliers Meerut		1.00
		13	Skill Enhancement program for Pipe design and modelling	Prakash Pipe Industry, Bijnor , UP	2.00
		14	Academic / New Courses function	Bharatam Institute, Selaqui, Dehradun	0.17
		15	Academic and Research	Gautam Buddha University, Noida	0.20
		16	Acad. and Res.	Amity University, Noida	0.08
		17	Academic and Research	Maharishi Markandeshwar Univ., Mullana, Ambala	0.4
		18	Short term training(STS) in plant tissue culture and transformation studies(June-July2014)	Farmers of Disaster-hit areas of Uttarakhand	0.965
		19	Hands on Training on Gene Cloning and Related Techniques	Professionals and students from Agriculture Study and Research Centers of Uttarakhand and UP-West	0.20
		20	Short term training(STS) in Bioinformatics	Working Professionals from Pharma Industry and pharmacy students	0.465
14	Number of MOUs with International Recognized	The University has signed Memorendum of Understanding (MoU) with following foreign universities and institutions of			

	bodies	<p>international repute.</p> <ul style="list-style-type: none"> a) California State University, San Bernardino, California (CSUSB), USA b) Birmingham City University, West Midlands, United Kingdom (UK) c) Polytech Nantes, the Graduate School of Engineering of the University of Nantes, France d) University of Worcester, UK e) Sheffield Hallam, University UK f) UFA State Petroleum Technological University, Russia g) UFA State Aviation Technological University, Russia h) Universite De Haute-Alsace, France i) Hochschule Fulda, University of Applied Sciences, Germany j) Iraqi Cultural Attaché, Embassy of Iraq k) Alliance Francaise to provide French language classes l) Taiwanese Embassy to provide Mandarin (Chinese) language classes conducted by native Chinese teacher from Republic of China. m) Defence Electronics Applications Laboratory, Instruments Research Establishment Lab (IRDE) –DRDO labs, National Research & Development Corporation(NRDC), USAC, USERC. n) Industry Association of Uttarakhand (IAU), CII (Confederation of Indian Industries), AIU. o) Industry Interconnect with Infosys, WIPRO & IBM and several other industries.
15	<p>a. Publications per faculty</p> <p>Total Number of Publications of the University</p>	<p>Faculty members of the University are actively engaged in research and publication.</p> <p>Total Publications: 1139</p> <ul style="list-style-type: none"> - Journal Publications: 610 - Conference Publications: 529 <p>Publication per faculty: $1139/325 = 3.5$</p> <p>(Details/supporting documents are attached as Annexure 5)</p>

	b. Percentage of Papers published in journals listed in well known international databases	<p>Total No. of journal publications listed in International databases: 100% (Details presented in the table below)</p> <table border="1"> <thead> <tr> <th>Indexing Database</th> <th>No. of papers</th> </tr> </thead> <tbody> <tr> <td>Scopus/Web of Science</td> <td>218</td> </tr> <tr> <td>EBSCOhost</td> <td>67</td> </tr> <tr> <td>Index Copernicus</td> <td>47</td> </tr> <tr> <td>Google Scholar</td> <td>117</td> </tr> <tr> <td>ProQuest</td> <td>51</td> </tr> <tr> <td>Ulrich's</td> <td>22</td> </tr> <tr> <td>Cite Seer</td> <td>26</td> </tr> <tr> <td>SCI-E</td> <td>03</td> </tr> <tr> <td>DOAJ</td> <td>16</td> </tr> <tr> <td>INSPEC</td> <td>15</td> </tr> <tr> <td>Scirus</td> <td>18</td> </tr> <tr> <td>Zentralblatt Math</td> <td>07</td> </tr> <tr> <td>DBLP</td> <td>03</td> </tr> <tr> <td>Total</td> <td>610</td> </tr> </tbody> </table>	Indexing Database	No. of papers	Scopus/Web of Science	218	EBSCOhost	67	Index Copernicus	47	Google Scholar	117	ProQuest	51	Ulrich's	22	Cite Seer	26	SCI-E	03	DOAJ	16	INSPEC	15	Scirus	18	Zentralblatt Math	07	DBLP	03	Total	610
Indexing Database	No. of papers																															
Scopus/Web of Science	218																															
EBSCOhost	67																															
Index Copernicus	47																															
Google Scholar	117																															
ProQuest	51																															
Ulrich's	22																															
Cite Seer	26																															
SCI-E	03																															
DOAJ	16																															
INSPEC	15																															
Scirus	18																															
Zentralblatt Math	07																															
DBLP	03																															
Total	610																															
16	Average Impact factor of publications	<p>(i) $94.749 / 62 = 1.528$ (considering Scopus indexed Journals having Thomson Reuters Impact Factor). Research work on “Ganga and Himalayan Sedimentary Tectonism” is published in Earth Science Review, an Elsevier journal with the impact factor of 7.885</p> <p>(ii) $94.749 / 610 = 0.155$ (considering all Journal publications)</p>																														
17	Number of Papers with more than 10 citations(i_{10} index)	<p>Total papers with citations more than 10 (i_{10} index) = 30</p> <ul style="list-style-type: none"> - In Scopus =8 - In Google Scholar =22 																														
18	Number of book titles per student in the central library excluding book bank	<p>Total No. of Titles: 10030 Total No. of Volumes: 107761</p> <p>No. Book titles per student: 2 (approx.) No. Book volumes per student: 20 (approx.)</p>																														
19.	Percentage of annual allocation for library spent on purchase of journals (National & International) and other library resources (CD, Cassettes etc)	23.27% of the total amount allocated for library																														
20	Number of National, International Conference, workshops, seminar conducted per year and names of experts participated	<p>International Conference / Seminar = 07</p> <table border="1"> <thead> <tr> <th>S. No</th> <th>Title/theme of the International Conferences/Seminars</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>International Conference on Environment and Energy Conversion</td> <td>2009</td> </tr> </tbody> </table>	S. No	Title/theme of the International Conferences/Seminars	Year	1.	International Conference on Environment and Energy Conversion	2009																								
S. No	Title/theme of the International Conferences/Seminars	Year																														
1.	International Conference on Environment and Energy Conversion	2009																														

		<table border="1"> <tr> <td>2.</td> <td>International Satellite Seminar on Role of Mathematics in Science and Engineering</td> <td>2011</td> </tr> <tr> <td>3.</td> <td>International Conference on Tourism & Hospitality Industry: Modern state, Problems and Perspectives</td> <td>2013</td> </tr> <tr> <td>4.</td> <td>International Conference on Mathematical Technique in Engineering Applications</td> <td>2013</td> </tr> <tr> <td>5.</td> <td>International Conference on Translating Use of Vendor Resources into Employability</td> <td>2014</td> </tr> <tr> <td>6.</td> <td>International Conference on Soft Computing Techniques for Engineering and Technology ICSTET - 14</td> <td>2014</td> </tr> <tr> <td>7.</td> <td>YITCON 2014, Canberra, Australia, organized by Australian Computer Society (through live streaming)</td> <td>2014</td> </tr> </table> <p>National Conference/Seminar = 23 Workshop/Short time course/FDP =82 Invited Lectures =61</p> <p>(Details/list of experts/supporting documents are attached as Annexure 6)</p>	2.	International Satellite Seminar on Role of Mathematics in Science and Engineering	2011	3.	International Conference on Tourism & Hospitality Industry: Modern state, Problems and Perspectives	2013	4.	International Conference on Mathematical Technique in Engineering Applications	2013	5.	International Conference on Translating Use of Vendor Resources into Employability	2014	6.	International Conference on Soft Computing Techniques for Engineering and Technology ICSTET - 14	2014	7.	YITCON 2014, Canberra, Australia, organized by Australian Computer Society (through live streaming)	2014
2.	International Satellite Seminar on Role of Mathematics in Science and Engineering	2011																		
3.	International Conference on Tourism & Hospitality Industry: Modern state, Problems and Perspectives	2013																		
4.	International Conference on Mathematical Technique in Engineering Applications	2013																		
5.	International Conference on Translating Use of Vendor Resources into Employability	2014																		
6.	International Conference on Soft Computing Techniques for Engineering and Technology ICSTET - 14	2014																		
7.	YITCON 2014, Canberra, Australia, organized by Australian Computer Society (through live streaming)	2014																		
21	Student performance in national/international level examinations(ET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services etc)	<ul style="list-style-type: none"> • 275 students scored above 90 percentile in GATE in last 4 years (including AIR 14, 70, 99, 112). • 10 students cleared CAT, 29 Defense Services, 17 Banking Services & 57 were selected in Central and State Public Services. • Gaurav S. Chuphal (B.Tech-ME) secured 99.68 percentile in GATE (ME) in 2015, and he preferred to serve Indian Army • Out of total 15 students selected from all over India in BARC in Computer Science in 2014, two of them were GEU students, Subodh Kumar (B.Tech-CSE) secured rank first. • Sugam Gupta, Payal Gupta & Ravi Saini each won “Young Scientist Award” in 8th Uttarakhand State Science and Technology Congress 2013 for their research contributions. • Tushar Gupta (B.Tech-ME, Batch 2012) awarded scholarship of over Rs. 40 lacs by the University of Texas at San Antonio, USA for MS programme. • Kalyani Kumar (B.Tech-CE, Batch 2014) awarded scholarship of Rs. 35 lacs by the Aalto University, Finland. She also received admissions offer from Imperial College of London - UK, Univ. of Illinois Urbana Champaign-USA. 																		

		<ul style="list-style-type: none"> • Nihar Gupta (B.Tech-ME, Batch 2014) awarded scholarship of over Rs. 22 lacs by the University of Texas at San Antonio, USA for MS programme. • Rohit Joshi (Batch 2012) got admission for higher studies in New Zealand University. • Skand K. Sharma (Batch 2012) got admission in Nanyang Technological Univ., Singapore. • Shivam Gupta was awarded UTSA COE Valero Competitive research Scholarship by the University of Texas at San Antonio, USA for MS programme (2013). • Rakesh Biswas (B.Tech-BioTech) received a financial grant of Rs 23.89 lacs from Youth Time Intl. Movement at Rhodes youth forum 2013, Prague, Czech Republic • Payal Gupta (M.Sc.- BioTech) received DST INSPIRE research Fellowship of around Rs. 12 lacs for research on anti fungal drug development. • Tanya Kukreja (B.Tech-CSE) participated in 2014 Summer Workshop on Design & Innovation at IIT Delhi, receiving stipend of Rs 10000 per month. (There were only 25 students selected from all across the country). • Thirteen GEU students were offered international internship through AIESEC at Russia, Poland, Morocco, Turkey etc. • Abhilash Semwal (B.Tech-CSE) awarded cash prize of Rs. 5 lacs by Hon'ble Chief Minister, Uttarakhand for his breakthrough innovation - Portable handheld explosive detector. He also won the award at IIT Kharagpur for his innovation. • B.Tech-CSE 3rd year students' team (S. M. Ali, V. Pande and S. Kumar) won the 3rd prize in National Finals of Microsoft Imagine Cup 2014 under World Citizenship category, receiving prizes worth more than Rs. 1 Lacs (60000+ teams from India had participated in this contest). • Ankit and Amit Rawat (B.Tech-CSE) won the Infosys Aspirations 20-20 Chandigarh DC competition 2013 beating 300+ teams coming from 41 different institutes of North India. • Megha Saraswat (B.Tech-CSE) received Special Jury Award during Regional finals of prestigious IET India Scholarship Regional Finals 2014. She came within top 0.8% amongst around 4000 nationwide applicants. • Several GEU students had received 100+ online course certifications from world reputed Universities (like Univ. of London, Stanford, Princeton, MIT, Duke University, IEEE, Hong Kong Univ. of Science & Technology) via Coursera, edX, NPTEL, etc.
--	--	--

		<ul style="list-style-type: none"> • GEU rated as one of the top performing institution in India by IBM in The Great Mind Challenge (IBM-TGMC) in 2009, 2011
22.	Student teacher Ratio (average across all disciplines)	(5381/325)=16.5:1
23.	University has the following: IQAC, Accreditation by national body, International Accreditation, ISO certification, AAA	<ol style="list-style-type: none"> 1. The Quality Management System of the University is ISO 9001:2008 certified. 2. IQAC has been constituted. 3. Accredited by NBA for MCA (2006), MBA (2007), B.Tech – CSE, IT and ECE (2007). <p>(Details/supporting documents are attached as Annexure 7)</p>
24	Outstanding Achievements / recognition by faculty/ alumni both at national and international level	<p>Faculty Achievements/Recognition:</p> <ul style="list-style-type: none"> • Dr. Deepak Joshi (EEE) received Winner of invention prize of USD 2000 from Intellectual Ventures Asia in 2009. • Dr. Pawan K. Emani (CE) received the Young Scientist Award from DST in 2012. • Dr. Pravin Patil (ME) received the Young Scientist Award from DST in 2013 • Dr. P. K. Emani got ISET B.K. Maheshwari Award for Best Ph.D. Thesis in “Soil Structure Interaction in India” for the year 2014. • Graphic Era staff, Mr. Arvind Mishra has set new Guinness World Record of Longest Marathon Reading Loud in May 2015. • Best paper presentation awards to several faculty members in reputed International conferences held abroad. • Member of Executive bodies, professional societies and reputed National Academies like AICTE, NBA, etc. • Several faculty members are serving as reviewer or member of editorial committee for many reputed Journal publications. • GEU faculty has published books with publishers like Springer-Germany, Taylor and Francis, Pearson, etc. <p>Alumni Achievements/Recognition:</p> <ul style="list-style-type: none"> • Atul Joshi (B.Tech-ECE 2014 batch) - ranked 1st in ISRO Scientist Selection Examination 2015. He also secured AIR 34 in Indian Engineering Services (IES) 2015. • Anurag Butola (B.Tech-ME 2014 batch) selected as Scientist-B in ISRO 2015 . • Several alumni members serving in top positions in top MNCs

- Out of total 15 students selected from all over India in BARC in Computer Science in 2015, three of them were GEU alumni B.Tech-CSE 2014 batch students.
- Several GEU alumni are currently serving in Indian organizations like DRDO, IOCL, India Meteorological department, Hindustan Aeronautics, Indian Air Force, Indian Military Army, etc.
- Prakhar Gairola (B.Tech-CSE 2013 batch) & Vishesh Parshav (B.Tech-CSE 2014 batch) placed in Amazon-India with pay packages of Rs 25 lacs per annum.
- Prachi Sharma (B.Tech-CSE 2014 batch) is serving in United Nations, Geneva.
- Several B.Tech CSE 2010 batch alumni are now working in top MNCs like Dell-USA, Yahoo-USA, Symantec, Goldman Sachs etc.
- Ramashish Yadav from 2011 batch qualified IES with AIR 159.
- Ishank Sachdeva (B.Tech-ME, 2013 batch) and Shivam Batra (B.Tech-ME, 2014 batch) placed in Olam International Pvt. Ltd. at Gabon, South Africa with pay package of Rs 22 lacs per annum.

Alumni Name	Course	Batch	Organization	Position	Location
Anuj Choudhary	B.Tech ICE	2006	Apple Inc	Software Engineer	California, USA
Vikas Gurung	BCA	2001	J.P Morgan Chase	Vice President, Enirn & Release Management	Glasgow, United Kingdom
Rahul Aggrawal	MCA	2005	Droisys Inc	Delivery Head	Las Vegas, USA
Varun Vikram Singh	MCA	2006	CISCO Systems	Technical Lead	California, USA
Shipra Singhal	B.Tech ICE	2006	Nielson Company	Senior System Analyst	San Francisco, USA
Smita Pande	B.Tech CSE	2006	Telco Systems	Senior Specialist - Networks	Greater Boston Area, USA
Ankur Kashyap	MCA	2006	J.P Morgan Chase	Vice President	New York , USA
Harneet Virk	MCA	2007	Microsoft	Senior Software Engineer	San Francisco, USA
Vasu Dev Yadav	B.Tech IT	2006	Polaris Consulting	Senior Software Engineer	Singapore
Amardeep Virk	MCA	2007	General Electric	Senior System Analyst	New York, USA

		<table border="1"> <tbody> <tr> <td>Lalit Chimmwal</td> <td>B.Tech CSE</td> <td>2005</td> <td>Toyota Bahrain</td> <td>Sr. Oracle Apps DBA</td> <td>Bahrain, UAE</td> </tr> <tr> <td>Deepak Mittal</td> <td>MBA</td> <td>2005</td> <td>CRISIL Ltd.</td> <td>Associate Director</td> <td>Mumbai, India</td> </tr> <tr> <td>Charu Gulati Mathpal</td> <td>MCA</td> <td>2009</td> <td>Scotiabank</td> <td>Technical Lead</td> <td>Toronto, Canada</td> </tr> <tr> <td>Kulwinder Choudhary</td> <td>MBA</td> <td>2008</td> <td>Royal Bank of Scotland</td> <td>Senior Executive</td> <td>United Kingdom</td> </tr> <tr> <td>Ankush Dhall</td> <td>MCA</td> <td>2004</td> <td>American Express</td> <td>Service Delivery Manager</td> <td>Gurgaon, India</td> </tr> </tbody> </table>	Lalit Chimmwal	B.Tech CSE	2005	Toyota Bahrain	Sr. Oracle Apps DBA	Bahrain, UAE	Deepak Mittal	MBA	2005	CRISIL Ltd.	Associate Director	Mumbai, India	Charu Gulati Mathpal	MCA	2009	Scotiabank	Technical Lead	Toronto, Canada	Kulwinder Choudhary	MBA	2008	Royal Bank of Scotland	Senior Executive	United Kingdom	Ankush Dhall	MCA	2004	American Express	Service Delivery Manager	Gurgaon, India
Lalit Chimmwal	B.Tech CSE	2005	Toyota Bahrain	Sr. Oracle Apps DBA	Bahrain, UAE																											
Deepak Mittal	MBA	2005	CRISIL Ltd.	Associate Director	Mumbai, India																											
Charu Gulati Mathpal	MCA	2009	Scotiabank	Technical Lead	Toronto, Canada																											
Kulwinder Choudhary	MBA	2008	Royal Bank of Scotland	Senior Executive	United Kingdom																											
Ankush Dhall	MCA	2004	American Express	Service Delivery Manager	Gurgaon, India																											
25	Outstanding Performance of students in Sports/Cultural activities at National level	<ul style="list-style-type: none"> ➤ 293 NCC cadets cleared B level and 179 C level certificates in 2 years. ➤ Two girl cadets attended the camp at Officers' Training Academy (OTA), Chennai in 2015 ➤ 271 NSS students cleared B level and 137 C level in last 4 years. ➤ Akash Gupta, Ruchi Rawat and Asif Ali won Gold medal each in 2nd Open National Club Taekwondo at Delhi in 2014 ➤ Mr. Akshay Anand, student of Petroleum Engineering won Gold, Silver and Bronze in the 13th Utrakhand state Shooting Championship <ul style="list-style-type: none"> ○ Team Gold Medal .22 open sight rifle (junior men category) ○ Silver Medal individual .22 open sight rifle (junior men category) ○ Bronze medal 10m air rifle (senior men category) ➤ Mohd. Aasif student of Civil Engg won gold, silver and bronze medal in state level shooting competition ➤ Megha Saraswat (B.Tech-CSE) awarded UP State Rani Laxmibai Award (Rs. 50,000 cash, Bronze Statue of Rani Laxmi Bai and a citation). She has represented India in International Soft Tennis competition. ➤ Aashwarya Goel was placed in top 12 in Femina Miss India 2014. ➤ GEU Boys' Relay Team won third prize in Maharana Pratap Sports Meet-2013. ➤ Ms. Aprajita Verma student of Civil Engg won the Miss North India Title, 2015. ➤ Lokendra Pal is runners up in Solo Dance competition in India Got Talent of Colors TV channel in 2015. ➤ D K Joshi won first prize at Pantnagar University in Solo Dance and also reached third round in Chak Dhoom Dhoom TV Show 2015. 																														

		<ul style="list-style-type: none"> ➤ Zeal Group won first prize in THOMSO at IIT Roorkee. ➤ University cultural team won first prize in Uttarakhand Technical University Cultural Fest, 2008 ➤ Overall winner in SPARDHA'10 (Basketball and Football), 2nd Annual Inter-college sports fest, College of Technology, G.B. Pant University of Agriculture, Research & Technology, Pantnagar. ➤ Winner of Inter-collegiate Cricket Tournament 2009-10 at Uttarakhand Technical University, Dehradun ➤ University cultural team was overall winner in Rajiv Gandhi Inter-University Youth Festival. ➤ Aman Joshi placed among top 12 in Zee Cine Star. ➤ Aparna Uniyal participated in Commonwealth Games Opening Ceremony in 2010
26	<p>Feedback received from different stake holders on syllabi etc.</p> <p>(i) Students (ii) Alumni (iii) Parents (iv) Employers (v)Peers</p>	<p>Feedback is received from the students about the faculty teaching and current ongoing syllabi. Achiever's Meet is organized every semester wherein the Vice Chancellor interacts with meritorious students and takes the feedback on curriculum and other aspects. Based on the feedback, corrective measures are duly taken as and when required.</p> <p>Feedback is received from employers during their placement visit and their suggestions are incorporated while framing the syllabus.</p> <p>Feedback is received from alumni during alumni meet, alumni campus visit which are held atleast once in year in any of the alumni centres. The University has official alumni portal duly linked with official website and alumni centers are available in Pune, Bangalore, Dehradun etc.</p> <p>Feedback is received from the professionals from organizations of national & international importance, Professors from IIT, NIT, IIMs, Central universities during the meeting of Board of Studies and Academic Council.</p>
27	Percentage of recommendations of stakeholders implemented	80-85% of the recommendations of stake holders are implemented, keeping in mind their conformity with rules & regulation which are not detrimental to quality of education.
28	No. of Interdisciplinary course combinations introduced during last five years as percentage of total programmes.	<p>In each programme there are some inter-disciplinary components. However, following programmes (6.5% of the total programmes) are completely inter-disciplinary:</p> <p style="text-align: center;">- B.Tech Biotech + MBA</p>

		<ul style="list-style-type: none"> - M.Tech CAD/CAM & Robotics - M.Tech Geo-Informatics
29	Percentage of Departments conducting tutorial classes	All Departments lay equal emphasis on conducting theory, tutorial and practical classes. 100% Departments include tutorial classes in their regular time-table.
30	Number of courses where continuous assessment of student performance is structured into the system	All the courses (100%) offered by the University have a mandatory component of continuous assessment duly approved by Board of Studies and Academic Council
31	Percentage of faculty availing international fellowship for advance studies	<p>1.8% (6 out of 325)</p> <p>Faculty Members availing International Fellowship</p> <ol style="list-style-type: none"> 1. Dr. R.K. Bachetti, Dept. of Allied Sciences – United Nations Organization (Academic Exchange Programme) 2. Dr. Archana Bachetti, Dept. of Allied Sciences - United Nations Organization (Academic Exchange Programme) 3. Dr. Deepak Joshi, Dept. of Electrical Engg. – University of Oregon, USA 4. Dr. Arunima Nayak, Dept. of Allied Sciences – IRIS, Barcelona, Spain 5. Dr. Brij Bhushan, Dept. of Allied Sciences - IRIS, Barcelona, Spain 6. Dr. A.K. Arya, Dept. of Electronic & Comm. Engg. – KAIST, Daejeon (South Korea)
32	Percentage of courses/programmes that formally integrate e-learning resources from NPTEL digital library	60% of all professional courses use NPTEL. Also the University has the access to e-learning sources for labs provided by IIT Bombay and other international premier Universities. The provision is made in the time table itself.
33	Percentage of annual budget allocated for augmentation of infrastructure facilities (average of last 3 years)	<p>Average 21.63 Crores (25.03% of total Annual Budget is allocated for augmentation of infrastructure facilities)</p> <p>(Details/supporting documents are attached as Annexure 8)</p>
34	Total number of class rooms, seminar halls with LCD/OHP etc.	<p>75 lecture theatres, 13 multi-media lecture theatres with computers for every student, 03 state-of-the-art seminar halls & 4 conference halls. All these facilities are equipped with LCD projectors.</p> <p>The University also has two auditoriums with a seating capacity of 500 and 800 students.</p>

35	Declaration of results within	Within one month from the last date of examination																
36	Average pass percentage of students	<p>The average pass percentage of students for last two years is ~70% (presented in the table below)</p> <table border="1"> <thead> <tr> <th>Year</th> <th>No. of Students Appeared (All Courses)</th> <th>No. of Students Passed (All Courses)</th> <th>Pass Percentage</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>2260</td> <td>1776</td> <td>78.58%</td> </tr> <tr> <td>2015</td> <td>1733</td> <td>1161</td> <td>66.99%</td> </tr> <tr> <td>Total</td> <td>3993</td> <td>2937</td> <td>73.55%</td> </tr> </tbody> </table>	Year	No. of Students Appeared (All Courses)	No. of Students Passed (All Courses)	Pass Percentage	2014	2260	1776	78.58%	2015	1733	1161	66.99%	Total	3993	2937	73.55%
Year	No. of Students Appeared (All Courses)	No. of Students Passed (All Courses)	Pass Percentage															
2014	2260	1776	78.58%															
2015	1733	1161	66.99%															
Total	3993	2937	73.55%															
37	Students placement percentage average per year	<p>The University provides 100% placement assistance to all the students. Reputed MNCs visit the University and select the University students in bulk. University also encourages students to become entrepreneurs.</p> <p>The details for last two years is presented below:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Total Students</th> <th>Students placed through Campus drive</th> <th>%</th> <th>Major Campus Recruiters</th> </tr> </thead> <tbody> <tr> <td>2014</td> <td>1808</td> <td>1233</td> <td>68.20</td> <td>Wipro Technologies(185), Infosys(69), Aon Hewitt(46), Cognizant Technologies(86), TCS(13), HCL Technologies(34), Genpact(100)</td> </tr> <tr> <td>2015</td> <td>1484</td> <td>924</td> <td>62.26</td> <td>Infosys(210), Wipro Technologies(249), CSC(28), TCS(15), Accenture(30), Genpact(27), US Technology(23).</td> </tr> </tbody> </table>	Year	Total Students	Students placed through Campus drive	%	Major Campus Recruiters	2014	1808	1233	68.20	Wipro Technologies(185), Infosys(69), Aon Hewitt(46), Cognizant Technologies(86), TCS(13), HCL Technologies(34), Genpact(100)	2015	1484	924	62.26	Infosys(210), Wipro Technologies(249), CSC(28), TCS(15), Accenture(30), Genpact(27), US Technology(23).	
Year	Total Students	Students placed through Campus drive	%	Major Campus Recruiters														
2014	1808	1233	68.20	Wipro Technologies(185), Infosys(69), Aon Hewitt(46), Cognizant Technologies(86), TCS(13), HCL Technologies(34), Genpact(100)														
2015	1484	924	62.26	Infosys(210), Wipro Technologies(249), CSC(28), TCS(15), Accenture(30), Genpact(27), US Technology(23).														
38	Students progression to higher education	10% (UG to PG within the University – presented in table below). This percentage would certainly go higher if the other institutions in India and abroad are included.																

		<table border="1"> <thead> <tr> <th>Year</th> <th>Total Students in UG</th> <th>Progression to PG</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>589</td> <td>94</td> <td>15.96%</td> </tr> <tr> <td>2012</td> <td>1449</td> <td>118</td> <td>8.14%</td> </tr> <tr> <td>2013</td> <td>1169</td> <td>110</td> <td>9.41%</td> </tr> <tr> <td>2014</td> <td>1393</td> <td>147</td> <td>10.55%</td> </tr> <tr> <td>2015</td> <td>892</td> <td>84</td> <td>9.42%</td> </tr> <tr> <td>Total</td> <td>5492</td> <td>553</td> <td>10.07%</td> </tr> </tbody> </table>	Year	Total Students in UG	Progression to PG	Percentage	2011	589	94	15.96%	2012	1449	118	8.14%	2013	1169	110	9.41%	2014	1393	147	10.55%	2015	892	84	9.42%	Total	5492	553	10.07%
Year	Total Students in UG	Progression to PG	Percentage																											
2011	589	94	15.96%																											
2012	1449	118	8.14%																											
2013	1169	110	9.41%																											
2014	1393	147	10.55%																											
2015	892	84	9.42%																											
Total	5492	553	10.07%																											
39	Average drop out percentage of students	<p>The average dropout percentage for last five year is 1.37%</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Session</th> <th>No of Students</th> <th>Drop Out Students</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2010-11</td> <td>2382</td> <td>35</td> </tr> <tr> <td>2</td> <td>2011-12</td> <td>2196</td> <td>32</td> </tr> <tr> <td>3</td> <td>2012-13</td> <td>1560</td> <td>41</td> </tr> <tr> <td>4</td> <td>2013-14</td> <td>1304</td> <td>9</td> </tr> <tr> <td>5</td> <td>2014-15</td> <td>1403</td> <td>4</td> </tr> <tr> <td></td> <td>Total</td> <td>8845</td> <td>121</td> </tr> </tbody> </table> <p>Average drop-out percentage: 1.37%</p>	S. No.	Session	No of Students	Drop Out Students	1	2010-11	2382	35	2	2011-12	2196	32	3	2012-13	1560	41	4	2013-14	1304	9	5	2014-15	1403	4		Total	8845	121
S. No.	Session	No of Students	Drop Out Students																											
1	2010-11	2382	35																											
2	2011-12	2196	32																											
3	2012-13	1560	41																											
4	2013-14	1304	9																											
5	2014-15	1403	4																											
	Total	8845	121																											
40	Unit cost of education(excluding salary)	<p>Rs. 83,959 /- for the year ended 31.03.2013 Rs. 1,14,438 /- for the year ended 31.03.2014</p> <p>(Details/supporting documents are attached as Annexure 8)</p>																												
41	Aggregate percentage of seats filled against seats reserved for categories as per applicable reservation policies	Filled seats = 37.22%																												
42	Number of differently abled person on roll: teaching/non teaching/students	<p>Teaching : 01 Non teaching : Nil Students: 05</p>																												
43	Percentage of representation of staff	100% (University staff is represented in all statutory bodies of the University)																												

	(teaching/non teaching) in decision making bodies																																	
44	Percentage of autonomous colleges to the total number of colleges	Not Applicable as GEU is in Unitary category																																
45	Percentage of teachers from other states	60% of the faculty members are from other state.																																
46	Donations received from institutions of chairs, endowments, seminars, and lecture series in crores of INR in last 5 years	<p>University organizes national and international conferences, and seminars sponsored by Govt. funding agencies like DST, UCOST, DRDO etc. Also, University contributes 50% of the total cost of organizing the conferences.</p> <p>Particulars of seminar, conference and workshop endowments received are given below:</p> <p>For Year 2010-11</p> <table border="1"> <thead> <tr> <th>S.N O</th> <th>Date</th> <th>Particulars</th> <th>Amount in Rs.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15.06.2010</td> <td>Ch.No. 111453 from the Uttarakhand State Governmet Science & Technology for the Seminar purpose</td> <td>51000</td> </tr> <tr> <td>2</td> <td>05.08.2010</td> <td>Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology</td> <td>50000</td> </tr> <tr> <td>3</td> <td>05.08.2010</td> <td>Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology</td> <td>50000</td> </tr> <tr> <td>4</td> <td>13.09.2010</td> <td>Ch. No. 733270 Under the Seminar & workshop through the Institute of Engineers</td> <td>40000</td> </tr> <tr> <td>5</td> <td>01.10.2010</td> <td>Ch. No. 000272 for under seminar & workshop through Agilent Techno</td> <td>20000</td> </tr> <tr> <td>6</td> <td>06.10.2010</td> <td>Ch. No. 010259 for under national confrence through Uttarakhand Science & Technolgy</td> <td>20000</td> </tr> <tr> <td>7</td> <td>08.10.2010</td> <td>Ch. No. 744947 for under seminar & workshop through Microwave Research & Development corporation</td> <td>10000</td> </tr> </tbody> </table>	S.N O	Date	Particulars	Amount in Rs.	1	15.06.2010	Ch.No. 111453 from the Uttarakhand State Governmet Science & Technology for the Seminar purpose	51000	2	05.08.2010	Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology	50000	3	05.08.2010	Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology	50000	4	13.09.2010	Ch. No. 733270 Under the Seminar & workshop through the Institute of Engineers	40000	5	01.10.2010	Ch. No. 000272 for under seminar & workshop through Agilent Techno	20000	6	06.10.2010	Ch. No. 010259 for under national confrence through Uttarakhand Science & Technolgy	20000	7	08.10.2010	Ch. No. 744947 for under seminar & workshop through Microwave Research & Development corporation	10000
S.N O	Date	Particulars	Amount in Rs.																															
1	15.06.2010	Ch.No. 111453 from the Uttarakhand State Governmet Science & Technology for the Seminar purpose	51000																															
2	05.08.2010	Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology	50000																															
3	05.08.2010	Ch.No. 752052 for the National Seminar SERC Division from ministry of Science & Technology	50000																															
4	13.09.2010	Ch. No. 733270 Under the Seminar & workshop through the Institute of Engineers	40000																															
5	01.10.2010	Ch. No. 000272 for under seminar & workshop through Agilent Techno	20000																															
6	06.10.2010	Ch. No. 010259 for under national confrence through Uttarakhand Science & Technolgy	20000																															
7	08.10.2010	Ch. No. 744947 for under seminar & workshop through Microwave Research & Development corporation	10000																															

8	14.10.2010	Ch. No. 733278 for the Seminar & Workshop through the Institute of Engineers	29172
9	22.12.2010	Ch. No. 021738 from Uttarakhand Science Education and Research Center for the Seminar for Global Warming	20000
10	16.03.2011	Ch. No. 989504 Microwave Research & Development corporation for seminar	5000

For Year 2011-12

S.N O	Date	Particulars	Amount in Rs.
1	13.04.2011	Ch. No. 021260 from Uttarakhand State Council for Science & Technology for Seminar	30000
2	13.04.2011	Ch. No. 021259 from Uttarakhand State Council for Science & Technology for Seminar	20000
3	18.04.2011	Ch. No. 639257 from Uttarakhand State Council for Science & Technology for seminar	30000
4	23.07.2011	Ch. No. 000206 Uttarakhand State council for Science & Technology	23170
5	24.10.2011	Ch. No. 000298 UCOST for Seminar	10000
6	24.10.2011	Ch. No. 000297 UCOST for Seminar	5000
7	12.11.2011	Ch. No. 934226 Director State Bio Technology Prog. For training programme on advance technigac in biotech	350000
8	25.01.2012	Ch. No. 669892 (Indian Nation SCI Academy) for international seminar	40000
9	23.02.2012	Ch. No. 958778 from Science & Engineering Board Govt of India for the on Project A/c AR/SS/1133	50000

10	23.02.2012	Ch. No. 029170 from Uttarakhand Science Education & Research Centre for national seminar on Global Warming and its effects	5000
11	15.03.2012	Ch. No. 001634 from Uttarakhand State Council for Science & Technology for Annual Meeting of American fisheries Society	25000

For Year 2012-13

S.N O	Date	Particulars	Amount in Rs.
1	09.04.2012	Ch. No. 571105 Uttarakhand State Biotechnology Deptt. For Remaining amount of expenditure for workshop training	6990
2	09.04.2012	Ch. No. 57110 Uttarakhand State Biotechnology Deptt. For Remaining amount of expenditure for HRD training	99156
3	19.07.2012	Ch. No. 051263 UCOST Govt. Of india for workshop on wireless sensor Networks	76000
4	06.11.2012	Ch. No. 050511 UK State council for science & Technology for seminar (USSTC)	3000000
5	22.12.2012	Ch. No. 058907 SERB Govt of India	64496
6	14.01.2013	Ch. No. 062819 from Uttarakhand State Council for Science & Technology	17000
7	11.03.2013	Ch. No. 083480 UCOST for USSTC	925000
8	11.03.2013	Ch. No. 077535 UCOST for USSTC	300000
9	11.03.2013	Ch. No. 067654 UCOST for USSTC	375000
10		Registration fee	100500

		For Year 2013-14																																																
		<table border="1"> <thead> <tr> <th>S.N O</th> <th>Date</th> <th>Particulars</th> <th>Amount in Rs.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>19.07.2013</td> <td>Ch. No. 062653 Conference on "Matemtical Techniques in engineering application" ICMTEA 2013</td> <td>75000</td> </tr> <tr> <td>2</td> <td>21.10.2013</td> <td>Ch. No. 100176 UCOST (International conference on Mathematical Tech in Engg. Appl)</td> <td>80000</td> </tr> <tr> <td>3</td> <td></td> <td>Registration fee</td> <td>299000</td> </tr> </tbody> </table>	S.N O	Date	Particulars	Amount in Rs.	1	19.07.2013	Ch. No. 062653 Conference on "Matemtical Techniques in engineering application" ICMTEA 2013	75000	2	21.10.2013	Ch. No. 100176 UCOST (International conference on Mathematical Tech in Engg. Appl)	80000	3		Registration fee	299000																																
S.N O	Date	Particulars	Amount in Rs.																																															
1	19.07.2013	Ch. No. 062653 Conference on "Matemtical Techniques in engineering application" ICMTEA 2013	75000																																															
2	21.10.2013	Ch. No. 100176 UCOST (International conference on Mathematical Tech in Engg. Appl)	80000																																															
3		Registration fee	299000																																															
		For Year 2014-15																																																
		<table border="1"> <thead> <tr> <th>S.N O</th> <th>Date</th> <th>Particulars</th> <th>Amount in Rs.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20.06.2014</td> <td>Ch. No. 089729</td> <td>10000</td> </tr> <tr> <td>2</td> <td>20.06.2014</td> <td>ch. No. 001853 (Federation on Indian Chambers of Commerce & Industry for followship for research</td> <td>160000</td> </tr> <tr> <td>3</td> <td>25.11.2014</td> <td>Ch No. 089855 UCOST for Conference</td> <td>20000</td> </tr> <tr> <td>4</td> <td>25.11.2014</td> <td>ch. No. 089858 UCOST for Conference</td> <td>10000</td> </tr> <tr> <td>5</td> <td>10.01.2015</td> <td>Ch. No. 382050 UCOST for Workshop</td> <td>50000</td> </tr> <tr> <td>6</td> <td>03.03.2015</td> <td>Ch. No. 036310</td> <td>500000</td> </tr> <tr> <td>7</td> <td>12.02.2015</td> <td>Ch. No. 036301 UCOST 9th USTC</td> <td>1000000</td> </tr> <tr> <td>8</td> <td>27.02.2015</td> <td>Ch. No. 036310 UCOST 9th USTC</td> <td>500000</td> </tr> <tr> <td>9</td> <td>30.03.2015</td> <td>Ch. No. 091951 UCOST 9th USTC</td> <td>567874</td> </tr> <tr> <td>10</td> <td>30.03.2015</td> <td>Ch. No. 032669 UCOST 9th USTC</td> <td>1000000</td> </tr> <tr> <td>11</td> <td></td> <td>Registration fee</td> <td>179500</td> </tr> </tbody> </table>	S.N O	Date	Particulars	Amount in Rs.	1	20.06.2014	Ch. No. 089729	10000	2	20.06.2014	ch. No. 001853 (Federation on Indian Chambers of Commerce & Industry for followship for research	160000	3	25.11.2014	Ch No. 089855 UCOST for Conference	20000	4	25.11.2014	ch. No. 089858 UCOST for Conference	10000	5	10.01.2015	Ch. No. 382050 UCOST for Workshop	50000	6	03.03.2015	Ch. No. 036310	500000	7	12.02.2015	Ch. No. 036301 UCOST 9th USTC	1000000	8	27.02.2015	Ch. No. 036310 UCOST 9th USTC	500000	9	30.03.2015	Ch. No. 091951 UCOST 9th USTC	567874	10	30.03.2015	Ch. No. 032669 UCOST 9th USTC	1000000	11		Registration fee	179500
S.N O	Date	Particulars	Amount in Rs.																																															
1	20.06.2014	Ch. No. 089729	10000																																															
2	20.06.2014	ch. No. 001853 (Federation on Indian Chambers of Commerce & Industry for followship for research	160000																																															
3	25.11.2014	Ch No. 089855 UCOST for Conference	20000																																															
4	25.11.2014	ch. No. 089858 UCOST for Conference	10000																																															
5	10.01.2015	Ch. No. 382050 UCOST for Workshop	50000																																															
6	03.03.2015	Ch. No. 036310	500000																																															
7	12.02.2015	Ch. No. 036301 UCOST 9th USTC	1000000																																															
8	27.02.2015	Ch. No. 036310 UCOST 9th USTC	500000																																															
9	30.03.2015	Ch. No. 091951 UCOST 9th USTC	567874																																															
10	30.03.2015	Ch. No. 032669 UCOST 9th USTC	1000000																																															
11		Registration fee	179500																																															
		Total endowments received in last five years: 1.029 Crores																																																
47	Contribution of Alumni / parents (average last 5 years) for the development of university in Lakhs.	Total Contribution: 51.85 Lakhs Average for Last five years: Rs. 10.37 Lakhs per annum																																																

48	Percentage of female students	<table border="1"> <thead> <tr> <th>S. No</th> <th>Session</th> <th>Total No of Students Admitted (All Courses)</th> <th colspan="2">Female Students (All Courses)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2013-14</td> <td>1309</td> <td>356</td> <td>27.20%</td> </tr> <tr> <td>2</td> <td>2014-15</td> <td>1424</td> <td>438</td> <td>30.76%</td> </tr> <tr> <td>3</td> <td>2015-16</td> <td>1815</td> <td>581</td> <td>32.00%</td> </tr> <tr> <td></td> <td>Total</td> <td>4548</td> <td>1375</td> <td>30.23%</td> </tr> </tbody> </table> <p>Average percentage since 2013: 30.23%</p>	S. No	Session	Total No of Students Admitted (All Courses)	Female Students (All Courses)		1	2013-14	1309	356	27.20%	2	2014-15	1424	438	30.76%	3	2015-16	1815	581	32.00%		Total	4548	1375	30.23%																																			
S. No	Session	Total No of Students Admitted (All Courses)	Female Students (All Courses)																																																											
1	2013-14	1309	356	27.20%																																																										
2	2014-15	1424	438	30.76%																																																										
3	2015-16	1815	581	32.00%																																																										
	Total	4548	1375	30.23%																																																										
49	Programme for professional development of staff per year	<p>Faculty members are facilitated to upgrade their academic qualifications from premier institutions. Following faculty members have been sponsored by the University to pursue higher education under QIP/CAS/Sponsored category:</p> <table border="1"> <thead> <tr> <th>S.No</th> <th>Name</th> <th>From</th> <th>To</th> <th>Course and University</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Anuraj Singh</td> <td>18-Sep-12</td> <td>15-Sep-13</td> <td>PDF, Atomic Energy Dept.</td> </tr> <tr> <td>2</td> <td>Dr. Arunima Nayak</td> <td>23-May-15</td> <td>22-May-17</td> <td>PDF at IRIS Barcelona Spain</td> </tr> <tr> <td>3</td> <td>Deepak Joshi</td> <td>10-Apr-13</td> <td>16-Mar-14</td> <td>PDC University of Oregon, USA</td> </tr> <tr> <td>4</td> <td>Dr. Brij Bhushan</td> <td>23-May-15</td> <td>22-May-17</td> <td>PDF at IRIS Barcelona Spain</td> </tr> <tr> <td>5</td> <td>Arunima Nayak</td> <td>01-Feb-13</td> <td>31-Jan-14</td> <td>PDF, IITR</td> </tr> <tr> <td>6</td> <td>Mr. D. R. Gangodkar</td> <td>01-Jul-09</td> <td>12-Apr-12</td> <td>Ph.D, QIP IIT Roorkee</td> </tr> <tr> <td>7</td> <td>Afzal Sikender</td> <td>12-Jul-13</td> <td>13-Jul-16</td> <td>Ph.D IITR (QIP)</td> </tr> <tr> <td>8</td> <td>Prateek Kala,</td> <td>20-Jul-10</td> <td>13-Jun-13</td> <td>Ph.D IIT Delhi</td> </tr> <tr> <td>9</td> <td>Munendra Singh</td> <td>28-Jul-14</td> <td>15-Jul-16</td> <td>Ph.D, IIT, BHU</td> </tr> <tr> <td>10</td> <td>Mr. Manoj Badoni</td> <td>31-Dec-11</td> <td>30-Dec-12</td> <td>Ph.D, DTU</td> </tr> <tr> <td>11</td> <td>Pranav Kumar Shrivastava</td> <td>17-Jan-15</td> <td>16-Jan-18</td> <td>Ph.D, IIT Delhi</td> </tr> </tbody> </table>	S.No	Name	From	To	Course and University	1	Anuraj Singh	18-Sep-12	15-Sep-13	PDF, Atomic Energy Dept.	2	Dr. Arunima Nayak	23-May-15	22-May-17	PDF at IRIS Barcelona Spain	3	Deepak Joshi	10-Apr-13	16-Mar-14	PDC University of Oregon, USA	4	Dr. Brij Bhushan	23-May-15	22-May-17	PDF at IRIS Barcelona Spain	5	Arunima Nayak	01-Feb-13	31-Jan-14	PDF, IITR	6	Mr. D. R. Gangodkar	01-Jul-09	12-Apr-12	Ph.D, QIP IIT Roorkee	7	Afzal Sikender	12-Jul-13	13-Jul-16	Ph.D IITR (QIP)	8	Prateek Kala,	20-Jul-10	13-Jun-13	Ph.D IIT Delhi	9	Munendra Singh	28-Jul-14	15-Jul-16	Ph.D, IIT, BHU	10	Mr. Manoj Badoni	31-Dec-11	30-Dec-12	Ph.D, DTU	11	Pranav Kumar Shrivastava	17-Jan-15	16-Jan-18	Ph.D, IIT Delhi
S.No	Name	From	To	Course and University																																																										
1	Anuraj Singh	18-Sep-12	15-Sep-13	PDF, Atomic Energy Dept.																																																										
2	Dr. Arunima Nayak	23-May-15	22-May-17	PDF at IRIS Barcelona Spain																																																										
3	Deepak Joshi	10-Apr-13	16-Mar-14	PDC University of Oregon, USA																																																										
4	Dr. Brij Bhushan	23-May-15	22-May-17	PDF at IRIS Barcelona Spain																																																										
5	Arunima Nayak	01-Feb-13	31-Jan-14	PDF, IITR																																																										
6	Mr. D. R. Gangodkar	01-Jul-09	12-Apr-12	Ph.D, QIP IIT Roorkee																																																										
7	Afzal Sikender	12-Jul-13	13-Jul-16	Ph.D IITR (QIP)																																																										
8	Prateek Kala,	20-Jul-10	13-Jun-13	Ph.D IIT Delhi																																																										
9	Munendra Singh	28-Jul-14	15-Jul-16	Ph.D, IIT, BHU																																																										
10	Mr. Manoj Badoni	31-Dec-11	30-Dec-12	Ph.D, DTU																																																										
11	Pranav Kumar Shrivastava	17-Jan-15	16-Jan-18	Ph.D, IIT Delhi																																																										

		12	Sushil Kumar Himanshu	25-Jul-13	13-Jul-16	Ph.D IITR Ph.D
		13	Aditya Harbola	26-Aug-13	16-Jul-16	Ph.D GBPEC, Gaudouri Pauri
		14	Deepti Negi	26-Aug-13	16-Jul-16	Ph.D GBPEC, Gaudouri Pauri
		15	Upendra Mohan Bhatt	09-Jul-14	15-Jul-17	Ph.D IIT Roorkee
		16	Lata Nautiyal	01-Nov-12	22-Jul-13	PhD Kanya Gurukul Kangri Vishvavidyalay
		17	Krishna Pal Sharma	12-Feb-13	11-Feb-16	NIT Hamirpur, Ph.D
		18	Om Prakash Verma	11-Jul-13	13-Jul-16	Ph.D IITR Ph.D
		19	Mr. Irfaan Ul Hasan	14-Feb-12	13-Feb-15	Ph.D, BITS, Ranchi
		20	Nimika Aggarwal	12-Jul-13	30-Jun-15	M.Tech IIT Delhi (QIP) M.Tech
		21	Disha Saxena	29-Jun-13	30-Jun-15	M.Tech IIT Roorkee (QIP) M.Tech
		22	Harsh Rathore	29-Jun-13	30-Jun-15	M.Tech IIT Roorkee (QIP) M.Tech
		23	Sarita Mishra	18-Jul-11	14-Jun-13	M.Tech IIT Roorkee (QIP)
		24	Ankit Bhat	20-Jul-12	14-Jun-14	M.Tech IIT Roorkee (QIP)
		25	Ashish Bhardwaj	15-Jul-14	15-Jul-16	M.Tech IITR QIP
		26	Sakshi Gupta	15-Jul-14	15-Jul-16	M.Tech IITR QIP
		27	Pranav Kumar Shrivastava	17-Jul-12	14-Jun-14	M.Tech IIT Kharagpur (QIP)
		28	Harshita Joshi	18-Jul-11	14-Jun-13	M.Tech MNIIT, Allahabad, QIP
		29	Mr. Puneet Manocha	22-Jul-08	21-Jul-11	M.Tech, IIT Kharagpur

		30	Mrs. Geetanjali Manocha	22-Jul-08	21-Jul-11	M.Tech, IIT Kharagpur
		31	Mr. Kshitz Gaur	20-Jul-11	14-Jun-13	M.Tech NIT Hamirpur
		32	Mr. Kireet Joshi	26-Sep-11	14-Jun-13	M.Tech, BCT Kumaon Enigneering College,
		33	Swati Negi	28-Jul-12	14-Jun-14	M.Tech NIIITR Chandigarh
		34	Abhishek Aggarwal	16-Aug-12	14-Jul-14	M.Tech GB Pant
		35	Mridul Gupta	19-Jul-13	15-Jun-15	MNNIT, Allahabad, M.Tech
		36	Kaushal Kumar	23-Jul-13	15-Jun-15	NIT Hamirpur, M.Tech
		37	Praveen Kalura	15-Jul-14	15-Jul-16	M.Tech , NIT, Warangal
		38	Kumar Govind	17-Jul-14	15-Jul-16	M.Tech, IIT Delhi
		39	Ashutosh Dixit	26-Jul-14	15-Jul-16	M.Tech , NITTTR, Chandigarh
		40	Gagan Bansal	31-Jul-14	15-Jul-16	M.Tech , G.B. Pant University

- Faculty members are also encouraged to attend FDP's, guest lectures on recent topics/ emerging fields.
- Encouraged to undergo the certified course through Massive Open Online Courseware.

University facilitates Teaching and Non-teaching staff members to pursue higher education by fees waiver/discount.

Teaching staff members

- 73 nos. of teaching staff members have been provided with an opportunity to pursue higher degrees like M. Tech., MCA, Ph.D. etc. from the

		<p>university</p> <p>Non-teaching staff members</p> <ul style="list-style-type: none"> • 30 nos. of Non-teaching staff members have been identified to provide training on various open-source technologies like C, C++, Libreoffice, Scilab, Blender, Oscad, etc. in collaboration with IIT Bombay. • 25 nos. of non-teaching staff members have been provided an opportunity to pursue higher education from the university as well as from other universities
50	Projection of successful innovative practices	<p>Following innovative practices are implemented.</p> <ul style="list-style-type: none"> • Learning Management System (LMS) moodle is followed for student teacher interaction. • Innovative/new experiments are added as value added in all labs. • Students are provided with research facilities so that they can participate in competitions. • Students are encouraged to register and complete online courses offered by Premier foreign Universities. <p><u>Future Plans:</u></p> <ul style="list-style-type: none"> • Develop industry oriented programmes. • Increase the number of sponsored projects/consultancy • International links up in emerging & thrust areas. • Impetus to convert innovative ideas to practical shape. • Move from lab/market & society.



Prof. (Dr.) V.K. Tewari

Date: 28.9.2015
Place: Dehradun

Vice Chancellor
Graphic Era University
566/8-Bell Road, Dehradun

Vice Chancellor
Graphic Era University
Dehradun

List of Annexure

S.No.	Annexure No.	Contents
1	Annexure 1	List of faculty with Ph.D Qualification
2	Annexure 2	Departments with DST sponsored centre
3	Annexure 3a Annexure 3b Annexure 3c	List of Ongoing Projects List of Completed Projects List of Collaborative Projects
4	Annexure 4	Details of Consultancy
5	Annexure 5	List of Research Publications
6	Annexure 6	List of Sponsored Conference/seminars/Workshops/Experts
7	Annexure 7	NBA Accreditation/ISO Certification
8	Annexure 8	Income & Expenditure Statement

(TO BE PUBLISHED IN THE GAZETTE OF INDIA PART-I SECTION-1)

No. F. 9-48/2007-U.3(A)
Government of India
Ministry of Human Resource Development
(Department of Higher Education)
...

Shastri Bhawan, New Delhi,
Dated the 14th August, 2008.

NOTIFICATION

Whereas the Central Government is empowered under Section 3 of the University Grants Commission (UGC) Act, 1956 to declare, on the advice of the UGC, an Institution of Higher Learning as a deemed-to-be-university.

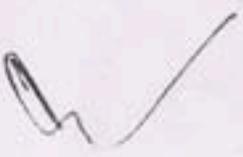
2. And whereas, an application was received in August, 2004 from Graphic Era University, Dehradun, Uttarakhand seeking status of 'deemed-to-be-university' under Section 3 of the UGC Act, 1956;

3. And whereas, the University Grants Commission has examined the said proposal and vide its communication bearing No.43-2/2007(CPP-I) dated the 8th July, 2008 has recommended conferment of status of 'deemed-to-be-university' to Graphic Era University, Dehradun, Uttarakhand comprising of Graphic Era Institute of Technology with a condition that performance will be reviewed after a period of five years of conferment of status.

4. Now, therefore, in exercise of the powers conferred by Section 3 of the UGC Act, 1956, the Central Government, on the advice of the University Grants Commission (UGC), hereby declare that Graphic Era University, Dehradun, Uttarakhand comprising of Graphic Era Institute of Technology, shall be a "deemed-to-be-university" for the purposes of the aforesaid Act, for a period of five years, with effect from the date of its disaffiliation from its affiliating universities, viz., Uttarakhand Technical University and HNB Garhwal University subject to a review at the end of five years by the UGC with the help of an Expert Committee.

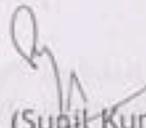
5. The status conferred on Graphic Era University, Dehradun, Uttarakhand shall be confirmed after a period of five years only on the basis of the aforesaid reviews by an Expert Committee of the UGC and recommendations of the Commission thereof;

6. The declaration as made in para 4 above is subject to fulfillment / compliance of further conditions mentioned at Sr. No.4 of the endorsement to this Notification;



6. The declaration as made in para 4 above is subject to fulfillment / compliance of further conditions mentioned at Sr. No.4 of the endorsement to this Notification;

7. Neither the Government of India nor the UGC shall provide any Plan or Non-Plan grant-in-aid to the Graphic Era University.


(Supil Kumar)
Joint Secretary to the Government of India

The Manager,
Government of India Press,
Faridabad (Haryana).

Copy forwarded to: -

1. The Secretary, University Grants Commission, Bahadurshah Zafar Marg, New Delhi - 110002. UGC shall take appropriate action to carry out the review of the institution concerned with help of an Expert Committee in accordance with the procedure prescribed by it for the purpose of such 'reviews'.
2. The Member Secretary, All India Council for Technical Education (AICTE), 7th Floor, Chanderlok Building, Janpath, New Delhi - 110001.
3. Director, Distance Education Council, Indira Gandhi National Open University, Maidan Garhi, New Delhi - 110068.
4. The Secretary, Graphic Era University, 566/6 Bell Road, Clement Town Deheradhun, Uttarakhand. The declaration as made in para 4 of this Notification shall be further subject to fulfillment/compliance of the following conditions:-
 - (i) The management of Graphic Era University should legally vest with the Trust created for the purpose of obtaining status of 'deemed-to-be-university', i.e. Graphic Era University Trust, Dehradun.
 - (ii) All the movable and immovable assets and properties of Graphic Era Education Society should be legally transferred from the Graphic Era Education Society and vested with the 'Graphic Era University' Trust formed to manage the 'deemed-to-be-university' institution, and registered as such in the interest of future of students, members of faculty, employees and for maintaining the standards of higher education.

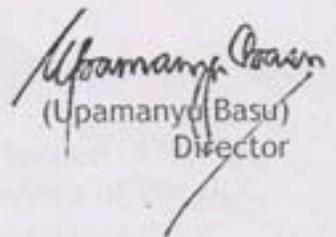
- (iv) The accounts of the Graphic Era University shall be open to inspection by the UGC.
- (v) The Trust concerned should continue to maintain the corpus fund as per the norms of the UGC and the said fund should be irrevocable in nature. The Trust shall accordingly take necessary action in consultation with the UGC to ensure irrevocability of the corpus fund.
- (vi) The objectives of the Trust / 'deemed-to-be-university' institution should confine to educational and related social and charitable activities. The Trust as well as the institution concerned should not undertake or engage in any activities that are of commercial and profit making nature.
- (vii) Graphic Era University shall provide reservation to state quota in all the existing courses to the tune of upto 50 percent in first year ,forty percent in second year and 30 percent in subsequent years .
- (viii) It is not permissible for Graphic Era University to affiliate teaching institutions.
- (ix) The Graphic Era University Trust should submit a legal undertaking to cover the issues pertaining to earmarking of assets, non-diversion of assets without prior approval of the UGC and for providing powers/authority to the UGC to take control of assets, etc. of the 'deemed-to-be-university' institution concerned in the event of winding up of or dissolution of the said Institution.
- (x) The Memorandum of Association (MoA) and Rules / Regulations of the Graphic Era University should be in accordance and in line with the model MoA/Rules prescribed by the UGC, and they should also be approved by the UGC.
- (xi) As and when necessary, the Trust concerned shall update or revise or modify the MoA / Rules of Graphic Era University with the approval of the UGC. Further, specific changes/amendments, if any, suggested by the Government of India or UGC shall also be carried out in the MoA/Rules with the approval of the UGC.
- (xii) The MoA/Rules/Regulations/Bye-laws of the Trust concerned should reflect the name of the teaching institution that forms part the deemed-to-be-university institution concerned.
- (xiii) The Graphic Era University, as a deemed-to-be-university, shall offer only those academic courses that conform to the norms and standards prescribed by the relevant Statutory Bodies such as the UGC, AICTE;

NCTE, Bar Council of India, etc. The professional courses it offers should also have the approval of the respective Statutory Regulatory Councils.

- (xiv) The Graphic Era University shall not award any degrees that are not specified by the UGC. It shall also ensure that the nomenclatures of the degrees, etc. to be awarded by it are specified by the UGC under Section 22 of the UGC Act, 1956.
- (xv) The Graphic Era University should take immediate steps to start doctoral programmes and innovative courses and also to strengthen/augment its research programmes/activities.
- (xvi) The Graphic Era University shall start new academic courses only as per the norms prescribed by the UGC, AICTE and other Statutory Councils concerned, as the case may be.
- (xvii) The Graphic Era University, as a deemed-to-be-university, shall award degrees in respect of its approved academic courses / programmes, only to those students who are admitted to the College subsequent to the date of this notification.
- (xviii) As for the students who were already admitted and enrolled to Graphic Era University prior to the date of this notification, they shall continue to pursue their courses of study under enrolment and affiliation to the affiliating university concerned, viz., Uttarakhand Technical University, Dehradun and HNB Garhwal University which shall conduct examinations for them and award degrees to them upon successful completion of the courses/programmes of study they are pursuing at the said college presently.
- (xix) The Graphic Era University / the Trust concerned shall not conduct any distance education programmes without prior approval of the UGC and the Distance Education Council (DEC). The guidelines issued by both the DEC and the UGC from time to time in the matter of imparting education through distance mode shall have to be complied with by it.
- (xx) The Graphic Era University / the Trust concerned shall not start and run any study centre / extension centre / *off-campus* centre / *off-shore* campus without obtaining the requisite prior approval of the UGC/ Government of India, as the case may be.
- (xxi) All the prescribed norms and procedures of the relevant Statutory Councils, such as UGC, AICTE, etc. and other authorities concerned in the matter of admission of students, intake capacity of students, starting of new courses/ programmes, renewal of approval to the courses, etc. will continue to be in force, and shall be adhered to by Graphic Era University.

- (xxii) The Trust concerned and 'deemed-to-be-university' institution shall follow and abide by all the undertakings they have already submitted or are going to submit in future to the UGC in connection with and for the purpose of obtaining status under Section 3 of the UGC Act, 1956.
- (xxiii) The Graphic Era University, Dehradun Uttarakhand should take immediate steps to rectify the shortcomings/deficiencies observed by the AICTE's Expert Team in relation to research contributions of faculty members; the necessity for more faculties with Ph.D qualification, so as bring about the recommended improvement.
- (xxiv) Suggestions and recommendations of the UGC's Expert Committee including that of the representative of the AICTE should be complied with by the Graphic Era University so as to bring about the recommended improvement.
- (xxv) The Graphic Era University, Dehradun, Uttarkhand shall abide by all the norms and guidelines as laid down by the UGC, AICTE and other Statutory Councils concerned from time to time, as are applicable to institutions notified as 'Deemed-to-be-Universities'.
- (xxvi) The Graphic Era University, Dehradun, Uttarakhand shall not create an impression in the mind of the general public that the 'deemed-to-be-university' Institution has been 'established' under a Central Act. In order to ensure this, Graphic Era University, in all its advertisements, public notices, communications, etc., shall distinctly mention under its nomenclature by inserting (within brackets) a line, which shall read: "*Declared as Deemed-to-be-University' under Section 3 of the UGC Act, 1956*".
5. The Registrar, Uttarakhand Technical University, Dehradun, Uttarakhand. The University is expected to take action in accordance with endorsement 4(xviii) regarding the students on the rolls of Graphic Era Institute of Technology, Dehradun, who are presently under its enrollment, as per its letter dated 15.10.2007, addressed to the Secretary, Graphic Era Education Society.
6. The Registrar, HNB Garhwal University, Srinagar, Uttarakhand. The University is expected to take action in accordance with endorsement 4(xviii) regarding the students on the rolls of Graphic Era Institute of Technology, Dehradun, who are presently under its enrollment, as per its letter No. Manyata/2007/383 dated 04.10.2007, addressed to the Secretary, Graphic Era Education Society.
7. The Principal Secretary to the Government of Uttarakhand, Higher Education Department, Government of Uttarakhand, Uttarakhand Govt. Secretariat, Subhash Road, Dehradun, Uttarakhand.
8. The President, Graphic Era University, Dehradun, Uttarakhand.

9. ✓ The Secretary, Graphic Era University , Dehradun, Uttarakhand
10. Press Information Bureau, Room No.103-B, "A" Wing, Shastri Bhawan, New Delhi-110001.
11. The Secretary-General, Association of Indian Universities, A.I.U. House, 16 Kotla Marg, New Delhi - 110002.
12. Director (Administration) & Web Master, Department of Higher Education, Shastri Bhawan, New Delhi with the request to issue necessary instructions to the CMIS Unit to display this notification on the website of Department of Higher Education. A soft copy of this notification is being e-mailed to the CMIS unit for this purpose.
13. Guard file / Notification file.


(Upamanyu Basu)
Director