

B.Tech (Computer Science and Engineering-Core)

SEMESTER: IV

| COURSE MODULE | | | |
|----------------------|---|------------------|----------------|
| COURSE | | | Credits |
| Code | Title | Component | |
| TCS-408 | Programming in Java | DSC | 3 |
| TCS-402 | Finite Automata and Formal Languages | DSC | 3 |
| TCS-403 | Microprocessors | DSC | 3 |
| TCS-409 | Design and Analysis of Algorithms | DSE | 3 |
| | Discipline Specific Elective-I | DSC | 3 |
| PCS-408 | Java Programming Lab | DSC | 1 |
| PCS-403 | Microprocessors Lab | DSC | 1 |
| PCS-409 | DAA Lab | DSC | 1 |
| XCS-401 | Career Skills | SEC | 1 |
| PESE 400 | Practical for Employability Skill Enhancement | SEC | 1 |
| SCS-401 | MOOCS Seminar | VAC | 1 |
| GP-401 | General Proficiency | SEC | 1 |
| | | | |
| | Indian Constitution(Non Graded) | MNG | 2 |

DISCIPLINE SPECIFIC ELECTIVE-I

| COURSE CODE | COURSE NAME |
|-------------|--|
| TCS-451 | Virtualization and Cloud Computing |
| TCS-471 | Statistical Data Analysis with R |
| TCS-495 | Foundation of Cyber Security |
| TCS-421 | Fundamentals of Statistics and AI |
| TCS-433 | Blockchain and its Applications (Through Swayam) |
| TCS-465 | Linear Algebra (Through Swayam) |
| | |

SEMESTER: VI

| COURSE MODULE | | | |
|----------------------|---|------------------|----------------|
| COURSE | | | Credits |
| Code | Title | Component | |
| TCS-601 | Compiler Design | DC | 3 |
| TCS-611 | Software Engineering | DC | 3 |
| TCS-604 | Computer Networks-I | DC | 3 |
| TCS-693 | Full Stack Web Development | DC | 3 |
| | Discipline Specific Elective-III | DE/GE | 3 |
| PCS-601 | Compiler Design Lab | DC | 2 |
| PCS-604 | Computer Networks Lab | DC | 2 |
| PCS-693 | Web Development Lab | DC | 2 |
| XCS-601 | Career Skills | VA | 1 |
| PESE 600 | Practical for Employability Skill Enhancement | SEC | 1 |
| SCS-601 | MOOCS Seminar | VA | 1 |
| GP-601 | General Proficiency | SE | 1 |

DISCIPLINE SPECIFIC ELECTIVE-III

| COURSE CODE | COURSE NAME |
|--------------------|---|
| TCS-692 | Large Language Models and Generative AI |
| TCS-651 | Devops on cloud |
| TCS-675 | Introduction to Virtual Reality |
| TCS-619 | Network and system security |
| TCS-695 | Security and Auditing |
| TCS-671 | Bigdata Storage and Processing |
| TCS-684 | Information Retrieval |
| TCS-671 | Bigdata Storage and Processing |

SEMESTER: VIII

| COURSE DETAILS | | | |
|-----------------------|-------------------------|------------------|----------------|
| COURSE | | | Credits |
| Course | Title | Component | |
| | Open Elective | OEC | 3 |
| TDM-881 | Disaster Management | HSMC | 2 |
| | Program Elective-VI | PEC | 3 |
| CSC-801 | Comprehensive Viva-Voce | CM | 2 |
| SCS 801 | Seminar | SM | 1 |
| CSP-801 | Project Phase-II | PJ | 4 |
| GP-801 | General Proficiency | GP | 1 |
| | Total | | 16 |

Program Elective - VI

| Course Code | Course name |
|--------------------|-------------------------------------|
| TCS851 | Storage Networks |
| TCS855 | Agile Software Engineering |
| TCS 822 | Mobile Application Development |
| TCS 859 | Service Oriented Cloud Architecture |
| TCS 821 | Soft Computing |

Open Elective

| Course Code | Course Name |
|--------------------|-------------------------------|
| TOE-811 | Mobile Computing |
| TOE-803 | Corporate Leadership |
| TOE-805 | Wind and Solar Energy Systems |
| TOE-806 | Mobile Adhoc Networks |