# ACADEMIC CURRICULA

# UNDERGRADUATE/ INTEGRATED POST GRADUATE DEGREE PROGRAMMES

**(With exit option of Diploma)**

**(Choice Based Flexible Credit System)**

**Regulations 2021**

**Volume – 1**

**(Revised on July 2024)**



## SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

**(Deemed to be University u/s 3 of UGC Act, 1956)**

Kattankulathur, Chengalpattu District 603203,

Tamil Nadu, India

## 21. B.Tech. in Computer Science and Engineering with Specialization in Blockchain Technology

### 21. (a) Mission of the Department

| | |
|---|---|
| Mission Stmt – 1 | *To impart knowledge in cutting edge Computer Science and Engineering technologies in par with industrial standards.* |
| Mission Stmt – 2 | *To collaborate with renowned academic institutions to uplift innovative research and development in Computer Science and Engineering and its allied fields to serve the needs of society* |
| Mission Stmt – 3 | *To demonstrate strong communication skills and possess the ability to design computing systems individually as well as part of a multidisciplinary teams.* |
| Mission Stmt – 4 | *To instill societal, safety, cultural, environmental, and ethical responsibilities in all professional activities* |
| Mission Stmt – 5 | *To produce successful Computer Science and Engineering with specialization of block chain technology graduates with personal and professional responsibilities and commitment to lifelong learning* |

### 21. (b) Program Educational Objectives (PEO)

| | |
|---|---|
| PEO – 1 | *Graduates will be able to perform in technical/managerial roles ranging from design, development, problem solving to production support in software industries and R&D sectors.* |
| PEO – 2 | *Graduates will be able to successfully pursue higher education in reputed institutions.* |
| PEO – 3 | *Graduates will have the ability to adapt, contribute and innovate new technologies and systems in the key domains of Computer Science and Engineering.* |
| PEO – 4 | *Graduates will be ethically and socially responsible solution providers and entrepreneurs in Computer Science and other engineering disciplines.* |
| PEO – 5 | *Graduates will possess the additional skills in Etherium, hyper ledger, business models and smart contracts* |

### 21. (c) Mission of the Department to Program Educational Objectives (PEO) Mapping

| | Mission Stmt. - 1 | Mission Stmt. - 2 | Mission Stmt. - 3 | Mission Stmt. - 4 | Mission Stmt. - 5 |
|---|---|---|---|---|---|
| PEO - 1 | 3 | - | - | - | - |
| PEO - 2 | - | - | 2 | - | - |
| PEO - 3 | - | 3 | 3 | | - |
| PEO - 4 | - | - | - | 2 | - |
| PEO - 5 | - | - | - | - | 3 |

3 – High Correlation, 2 – Medium Correlation, 1 – Low Correlation

### 21. (d) Mapping Program Educational Objectives (PEO) to Program Outcomes (PO)

| | Program Outcomes (PO) | | | | | | | | | | | | Program Specific Outcomes (PSO) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
| | Engineering Knowledge | Problem Analysis | Design/development of solutions | Conduct investigations of complex problems | Modern Tool Usage | The engineer and society | Environment & Sustainability | Ethics | Individual & Team Work | Communication | Project Mgt. & Finance | Life Long Learning | PSO-1 | PSO-2 | PSO-3 |
| PEO - 1 | 3 | - | - | 1 | - | 2 | - | 3 | 2 | 3 | - | - | 3 | - | - |
| PEO - 2 | - | 2 | 2 | - | 3 | - | 3 | 2 | - | - | - | - | - | 2 | - |
| PEO - 3 | - | 3 | 3 | 2 | - | - | - | - | - | 2 | - | 3 | - | 2 | 3 |
| PEO - 4 | - | 2 | 3 | - | - | 3 | 2 | - | 2 | - | 2 | 2 | - | 2 | 3 |
| PEO - 5 | 2 | - | - | 3 | 3 | 2 | - | - | - | - | - | - | - | - | 3 |

3 – High Correlation, 2 – Medium Correlation, 1 – Low Correlation

### PSO – Program Specific Outcomes (PSO)

| | |
|---|---|
| PSO - 1 | *To understand, analyze, design, and develop computing solutions by applying fundamental concepts of computer science and engineering.* |
| PSO - 2 | *To apply computing principles, skills and practices to develop solutions using logical and reasoning skills, for real-life problems.* |
| PSO - 3 | *To understand the concepts, technology and tools used in blockchain for implementing solutions to real-world problems.* |

**21. (e) Program Structure: B.Tech. in Computer Science and Engineering with Specialization in Blockchain Technology**

## Humanities & Social Sciences including Management Courses (H)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21LEH101T | Communicative English | 2 | 1 | 0 | 3 |
| 21LEH102T | Chinese | | | | |
| 21LEH103T | French | | | | |
| 21LEH104T | German | | | | |
| 21LEH105T | Japanese | 2 | 1 | 0 | 3 |
| 21LEH106T | Korean | | | | |
| 21LEH107T | Spanish | | | | |
| 21LEH108T | Russian | | | | |
| 21GNH101J | Philosophy of Engineering | 1 | 0 | 2 | 2 |
| 21PDH209T [1] | Social Engineering | 2 | 0 | 0 | 2 |
| 21GNH401T | Behavioral Psychology | 2 | 1 | 0 | 3 |
| | **Total Credits** | | | | **13** |

## Basic Science Courses (B)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21MAB101T | Calculus and Linear Algebra | 3 | 1 | 0 | 4 |
| 21BTB102T | Introduction to Computational Biology | 2 | 0 | 0 | 2 |
| 21MAB102T | Advanced Calculus and Complex Analysis | 3 | 1 | 0 | 4 |
| 21MAB201T | Transforms and Boundary Value Problems | 3 | 1 | 0 | 4 |
| 21CYB101J | Chemistry | 3 | 1 | 2 | 5 |
| 21PYB102J | Semiconductor Physics and Computational Methods | 3 | 1 | 2 | 5 |
| 21MAB204T | Probability and Queueing Theory | 3 | 1 | 0 | 4 |
| 21MAB302T | Discrete Mathematics | 3 | 1 | 0 | 4 |
| | **Total Credits** | | | | **32** |

## Engineering Science Courses (S)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21EES101T | Electrical and Electronics Engineering | 3 | 1 | 0 | 4 |
| 21MES101L [1] | Basic Civil and Mechanical Workshop | 0 | 0 | 4 | 2 |
| 21MES102L [1] | Engineering Graphics and Design | 0 | 0 | 4 | 2 |
| 21CSS101J | Programming for Problem Solving | 3 | 0 | 2 | 4 |
| 21CSS201T | Computer Organization and Architecture | 3 | 1 | 0 | 4 |
| 21DCS201P [1] | Design Thinking and Methodology | 1 | 2 | 0 | 3 |
| 21CSS303T | Data Science | 2 | 0 | 0 | 2 |
| | **Total Credits** | | | | **21** |

## Professional Core Courses (C)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21CSC101T | Object Oriented Design and Programming | 2 | 1 | 0 | 3 |
| 21CSC201J | Data Structures and Algorithms | 3 | 0 | 2 | 4 |
| 21CSC202J | Operating Systems | 3 | 0 | 2 | 4 |
| 21CSC203P [1] | Advanced Programming Practice | 3 | 1 | 0 | 4 |
| 21CSC204J | Design and Analysis of Algorithms | 3 | 0 | 2 | 4 |
| 21CSC205P [1] | Database Management Systems | 3 | 1 | 0 | 4 |
| 21CSC206T | Artificial Intelligence | 2 | 1 | 0 | 3 |
| 21CSC301T | Formal Language and Automata | 3 | 0 | 0 | 3 |
| 21CSC302J | Computer Networks | 3 | 0 | 2 | 4 |
| 21CSC303J | Software Engineering and Project Management | 2 | 0 | 2 | 3 |
| 21CSC304J | Compiler Design | 2 | 0 | 2 | 3 |
| 21CSC305T | Blockchain using Cryptography | 3 | 0 | 0 | 3 |
| | **Total Credits** | | | | **42** |

## Open Elective Courses (O)
### (Any 3 courses)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21CSO351T | Web Programming | 2 | 1 | 0 | 3 |
| 21CSO352T | Python Programming | 2 | 1 | 0 | 3 |
| 21CSO353T | Mobile Application Development | 2 | 1 | 0 | 3 |
| 21CSO354T | Data Analytics | 2 | 1 | 0 | 3 |
| | **Total Credits** | | | | **09** |

## Project Work, Seminar, Internship in Industry / Higher Technical Institutions (P)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21GNP301L [1] | Community Connect | 0 | 0 | 2 | 1 |
| 21CSP302L [1] | Project | 0 | 0 | 6 | 3 |
| 21CSP303T [1] | MOOC | 3 | 0 | 0 | |
| 21CSP401L | Major Project | 0 | 0 | 30 | 15 |
| 21CSP402L | Major Project | 0 | 0 | 20 | 10 |
| 21CSP403L | Internship# | 0 | 0 | 10 | 5 |
| | **Total Credits** | | | | **19** |

## Non Credit Courses (M)

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21PDM101L [1] | Professional Skills and Practices | 0 | 0 | 2 | |
| 21PDM102L [1] | General Aptitude | 0 | 0 | 2 | |
| 21PDM201L [1] | Verbal Reasoning | 0 | 0 | 2 | |
| 21PDM202L [1] | Critical and Creative Thinking Skills | 0 | 0 | 2 | 0 |
| 21PDM301L [1] | Analytical and Logical Thinking Skills | 0 | 0 | 2 | |
| 21PDM302L [1] | Employability Skills and Practices | 0 | 0 | 2 | |
| 21CYM101T [1] | Environmental Science | 1 | 0 | 0 | 0 |
| 21LEM101T [1] | Constitution of India | 1 | 0 | 0 | 0 |
| 21LEM102T [1] | Universal Human Values – Introduction | 1 | 0 | 0 | 0 |
| 21LEM201T [1] | Professional Ethics | 1 | 0 | 0 | 0 |
| 21LEM202T [1] | Universal Human Values-II: Understanding Harmony and Ethical Human Conduct | 2 | 1 | 0 | 3 |
| 21LEM301T [1] | Indian Art Form | 1 | 0 | 0 | 0 |
| 21LEM302T [1] | Indian Traditional Knowledge | 1 | 0 | 0 | 0 |
| 21GNM101L [1] | Physical and Mental Health using Yoga | 0 | 0 | 2 | 0 |
| 21GNM102L [1] | National Service Scheme | | | | |
| 21GNM103L [1] | National Cadet Corps | | | | |
| 21GNM104L [1] | National Sports Organization | | | | |
| | **Total Credits** | | | | **03** |

| Professional Elective Courses (E) *(Any 8 Courses)* | | Hours / Week | | | | Professional Elective Courses (E) | | Hours / Week | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Course Code | Course Title | L | T | P | C | Course Code | Course Title | L | T | P | C |
| 21CSE231T | Fundamentals of Blockchain | 3 | 0 | 0 | 3 | 21CSE338T | Trust based computing | 3 | 0 | 0 | 3 |
| 21CSE232T | IoT and Blockchain | 3 | 0 | 0 | 3 | 21CSE431T | Building Private Blockchain | 3 | 0 | 0 | 3 |
| 21CSE233T | Distributed Systems and Applications | 3 | 0 | 0 | 3 | 21CSE432T | Blockchain Technology with Hyperledger | 3 | 0 | 0 | 3 |
| 21CSE234T | Principles of Cryptography | 3 | 0 | 0 | 3 | 21CSE433T | Blockchain Business Models | 3 | 0 | 0 | 3 |
| 21CSE331T | Cryptocurrencies and Blockchain Technology | 3 | 0 | 0 | 3 | 21CSE434T | Distributed Ledger Technology | 3 | 0 | 0 | 3 |
| 21CSE332T | Fundamentals of Ethereum | 3 | 0 | 0 | 3 | 21CSE435T | Smart Contracts and Application Development | 3 | 0 | 0 | 3 |
| 21CSE333T | AI and Blockchain | 3 | 0 | 0 | 3 | 21CSE436T | Bitcoin Essentials and Use Cases | 3 | 0 | 0 | 3 |
| 21CSE334T | Container Management | 3 | 0 | 0 | 3 | 21CSE437T | Decentralized Applications on Blockchain | 3 | 0 | 0 | 3 |
| 21CSE335T | Advanced Cryptography | 3 | 0 | 0 | 3 | 21CSE438T | Web Security | 3 | 0 | 0 | 3 |
| 21CSE336T | Cloud Computing with Blockchain | 3 | 0 | 0 | 3 | | Total Credits | | | | 24 |
| 21CSE337T | Web3 Development | 3 | 0 | 0 | 3 | | | | | | |

**21. (f)    Programme Articulation: B.Tech. in Computer Science and Engineering with Specialization in Blockchain Technology**

| Course Code | Course Name | Program Outcomes (PO) | | | | | | | | | | | | PSO | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 |
| | | Engineering Knowledge | Problem Analysis | Design/development of solutions | Conduct investigations of complex problems | Modern Tool Usage | The engineer and society | Environment & Sustainability | Ethics | Individual & Team Work | Communication | Project Mgt. & Finance | Life Long Learning | PSO-1 | PSO-2 | PSO-3 |
| 21CSS101J | Programming for Problem Solving | 2 | 3 | - | - | - | - | - | - | - | - | - | 2 | - | 3 | - |
| 21CSS303T | Data Science | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 | - |
| 21CSS201T | Computer Organization and Architecture | 3 | 2 | - | - | - | - | - | - | - | - | - | - | 1 | 2 | 1 |
| 21CSC201J | Data Structures and Algorithms | 2 | 3 | 3 | 1 | - | - | - | - | - | - | - | - | 1 | 1 | 2 |
| 21CSC101T | Object Oriented Design and Programming | - | 2 | 2 | - | 2 | - | - | - | - | - | - | 3 | - | 2 | 2 |
| 21CSC204J | Design and Analysis of Algorithms | 2 | 1 | 2 | 1 | - | - | - | - | - | 3 | - | 3 | 3 | 1 | - |
| 21CSC202J | Operating Systems | 3 | 3 | 3 | 2 | - | - | - | - | - | - | - | 3 | 2 | - | - |
| 21CSC303J | Software Engineering and Project Management | - | 3 | 2 | - | - | - | - | - | 2 | - | 2 | - | 3 | - | - |
| 21CSC203P | Advanced Programming Practice | 3 | 2 | 2 | 1 | 2 | - | - | - | 1 | - | - | - | 2 | - | - |
| 21CSC301T | Formal Language and Automata | 2 | 2 | 2 | - | - | - | - | - | - | - | - | - | - | 3 | - |
| 21CSC302J | Computer Networks | 3 | - | - | 2 | 3 | - | - | - | - | - | - | - | 1 | - | - |
| 21CSC205P | Database Management Systems | 3 | 2 | 2 | - | - | - | - | - | - | - | - | - | 2 | 1 | - |
| 21CSC304J | Compiler Design | 3 | 3 | 2 | 3 | 2 | - | - | - | - | - | - | - | - | 1 | - |
| 21CSC206T | Artificial Intelligence | 1 | 2 | 3 | - | - | - | - | - | - | - | - | - | 1 | 2 | - |
| 21CSC305T | Blockchain using Cryptography | 2 | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| 21CSE231T | Fundamentals of Blockchain | 3 | 3 | - | - | 2 | - | - | 2 | - | - | - | - | - | - | - |
| 21CSE232T | IoT and Blockchain | 3 | 3 | 2 | 2 | 1 | - | - | - | - | - | - | - | - | - | - |
| 21CSE233T | Distributed Systems and Applications | 2 | 1 | 2 | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 21CSE234T | Principles of Cryptography | 3 | 3 | - | - | 3 | - | - | 2 | - | - | - | - | - | - | -- |
| 21CSE331T | Cryptocurrencies and Blockchain Technology | 2 | 2 | 2 | - | 3 | - | - | - | - | - | - | - | - | - | - |
| 21CSE332T | Fundamentals of Ethereum | 2 | 1 | 2 | 1 | 1 | - | - | - | - | - | - | - | - | - | - |
| 21CSE333T | AI and Blockchain | 2 | 2 | 2 | - | 2 | - | - | - | - | - | - | - | - | - | - |
| 21CSE334T | Container Management | - | 2 | - | - | 2 | - | - | - | - | - | - | - | - | - | - |
| 21CSE335T | Advanced Cryptography | - | 3 | 2 | 1 | 2 | - | - | - | - | - | - | - | - | - | - |
| 21CSE336T | Cloud Computing with Blockchain | 1 | 2 | 3 | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 21CSE337T | Web3 Development | 2 | 1 | 3 | - | 2 | - | - | - | - | - | - | - | - | - | 1 |
| 21CSE338T | Trust based Computing | 3 | 3 | - | 2 | - | - | - | - | - | - | - | - | 2 | - | - |
| 21CSE431T | Building Private Blockchain | - | 2 | 0 | - | 2 | - | - | - | - | - | - | - | 1 | - | - |
| 21CSE432T | Blockchain Technology with Hyperledger | 3 | 3 | 2 | - | 3 | - | - | - | - | - | - | - | 1 | - | - |
| 21CSE433T | Blockchain Business Models | 3 | 3 | - | 2 | - | 1 | - | - | - | 2 | - | - | 2 | - | - |
| 21CSE434T | Distributed Ledger Technology | 3 | 3 | - | - | 2 | - | - | - | - | - | - | - | 2 | - | - |
| 21CSE435T | Smart Contracts and Application Development | 2 | 2 | 2 | 2 | - | - | - | - | - | - | - | - | - | - | - |
| 21CSE436T | Bitcoin Essentials and Use Cases | 1 | 3 | - | - | 2 | - | - | - | - | - | - | - | - | - | - |
| 21CSE437T | Decentralized Applications on Blockchain | 3 | 3 | 2 | - | 2 | - | - | - | - | - | - | - | 2 | - | - |
| 21CSE438T | Web security | 3 | 3 | 3 | 3 | 3 | - | 2 | 2 | - | 2 | - | - | - | - | - |
| 21CSP302L | Project | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21CSP303T | MOOC | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21CSP401L | Major Project | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 21CSP402L | Major Project | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 21CSP403L | Internship | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| | Program Average | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

## 21. (g) Implementation Plan: B.Tech. in Computer Science and Engineering with Specialization in Blockchain Technology

### Semester – I

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21LEH102T | Chinese | | | | |
| 21LEH103T | French | | | | |
| 21LEH104T | German | | | | |
| 21LEH105T | Japanese | 2 | 1 | 0 | 3 |
| 21LEH106T | Korean | | | | |
| 21LEH107T | Spanish | | | | |
| 21LEH108T | Russian | | | | |
| 21GNH101J | Philosophy of Engineering | 1 | 0 | 2 | 2 |
| 21MAB101T | Calculus and Linear Algebra | 3 | 1 | 0 | 4 |
| 21CYB101J | Chemistry | 3 | 1 | 2 | 5 |
| 21BTB102T | Introduction to Computational Biology | 2 | 0 | 0 | 2 |
| 21CSS101J | Programming for Problem Solving | 3 | 0 | 2 | 4 |
| 21MES101L [1] | Basic Civil and Mechanical Workshop | 0 | 0 | 4 | 2 |
| 21PDM101L [1] | Professional Skills and Practices | 0 | 0 | 2 | 0 |
| 21GNM101L [1] | Physical and Mental Health using Yoga | | | | |
| 21GNM102L [1] | National Service Scheme | 0 | 0 | 2 | 0 |
| 21GNM103L [1] | National Cadet Corps | | | | |
| 21GNM104L [1] | National Sports Organization | | | | |
| | **Total Credits** | | | | **22** |

### Semester – II

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21LEH101T | Communicative English | 2 | 1 | 0 | 3 |
| 21MAB102T | Advanced Calculus and Complex Analysis | 3 | 1 | 0 | 4 |
| 21PYB102J | Semiconductor Physics and Computational Methods | 3 | 1 | 2 | 5 |
| 21MES102L [1] | Engineering Graphics and Design | 0 | 0 | 4 | 2 |
| 21EES101T | Electrical and Electronics Engineering | 3 | 1 | 0 | 4 |
| 21CSC101T | Object Oriented Design and Programming | 2 | 1 | 0 | 3 |
| 21CYM101T [1] | Environmental Science* | 1 | 0 | 0 | 0 |
| 21PDM102L [1] | General Aptitude* | 0 | 0 | 2 | 0 |
| 21LEM101T [1] | Constitution of India | 1 | 0 | 0 | 0 |
| | **Total Credits** | | | | **21** |

### Semester – III

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21MAB201T | Transforms and Boundary Value Problems | 3 | 1 | 0 | 4 |
| 21DCS201P [1] | Design Thinking and Methodology | 1 | 2 | 0 | 3 |
| 21CSS201T | Computer Organization and Architecture | 3 | 1 | 0 | 4 |
| 21CSC201J | Data Structures and Algorithms | 3 | 0 | 2 | 4 |
| 21CSC202J | Operating Systems | 3 | 0 | 2 | 4 |
| 21CSC203P [1] | Advanced Programming Practice | 3 | 1 | 0 | 4 |
| 21LEM201T [1] | Professional Ethics | 1 | 0 | 0 | 0 |
| 21PDM201L [1] | Verbal Reasoning | 0 | 0 | 2 | 0 |
| | **Total Credits** | | | | **23** |

### Semester – IV

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21MAB204T | Probability and Queueing Theory | 3 | 1 | 0 | 4 |
| 21CSC204J | Design and Analysis of Algorithms | 3 | 0 | 2 | 4 |
| 21CSC205P [1] | Database Management Systems | 3 | 1 | 0 | 4 |
| 21CSC206T | Artificial Intelligence | 2 | 1 | 0 | 3 |
| E | Professional Elective-I | | | | 3 |
| 21PDH209T [1] | Social Engineering | 2 | 0 | 0 | 2 |
| 21PDM202L [1] | Critical and Creative Thinking Skills | 0 | 0 | 2 | 0 |
| 21LEM202T [1] | Universal Human Values-II: Understanding Harmony and Ethical Human Conduct | 2 | 1 | 0 | 3 |
| | **Total Credits** | | | | **23** |

### Semester – V

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21MAB302T | Discrete Mathematics | 3 | 1 | 0 | 4 |
| 21CSC301T | Formal Language and Automata | 3 | 0 | 0 | 3 |
| 21CSC302J | Computer Networks | 3 | 0 | 2 | 4 |
| 21CSC305T | Blockchain using Cryptography | 3 | 0 | 0 | 3 |
| E | Professional Elective – II | | | | 3 |
| O | Open Elective – I | | | | 3 |
| 21GNP301L [1] | Community Connect | 0 | 0 | 2 | 1 |
| 21PDM301L [1] | Analytical and Logical Thinking Skills | 0 | 0 | 2 | 0 |
| 21LEM301T [1] | Indian Art Form | 1 | 0 | 0 | 0 |
| | **Total Credits** | | | | **21** |

### Semester – VI

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21CSS303T | Data Science | 2 | 0 | 0 | 2 |
| 21CSC303J | Software Engineering and Project Management | 2 | 0 | 2 | 3 |
| 21CSC304J | Compiler Design | 2 | 0 | 2 | 3 |
| E | Professional Elective – III | | | | 3 |
| E | Professional Elective – IV | | | | 3 |
| O | Open Elective – II | | | | 3 |
| 21CSP302L [1] | Project | 0 | 0 | 6 | 3 |
| 21CSP303T [1] | MOOC | 3 | 0 | 0 | |
| 21PDM302L [1] | Employability Skills and Practices | 0 | 0 | 2 | 0 |
| 21LEM302T [1] | Indian Traditional Knowledge | 1 | 0 | 0 | 0 |
| | **Total Credits** | | | | **20** |

### Semester – VII

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21GNH401T | Behavioral Psychology | 2 | 1 | 0 | 3 |
| E | Professional Elective – V | | | | 3 |
| E | Professional Elective – VI | | | | 3 |
| E | Professional Elective – VII | | | | 3 |
| E | Professional Elective – VIII | | | | 3 |
| O | Open Elective –III | | | | 3 |
| | **Total Credits** | | | | **18** |

### Semester - VIII

| Course Code | Course Title | L | T | P | C |
|---|---|---|---|---|---|
| 21CSP401L | Major Project | 0 | 0 | 30 | 15 |
| 21CSP402L | Major Project | 0 | 0 | 20 | 10 |
| 21CSP403L | Internship# | 0 | 0 | 10 | 5 |
| | **Total Credits** | | | | **15** |

#Students have to register either 21CSP401L or 21CSP402L and 21CSP403L both in eighth semester

# SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

**(Deemed to be University u/s 3 of UGC Act, 1956)**

Kattankulathur, Chengalpattu District 603203, Tamil Nadu, India