

**M.Tech Programme - CSE (IS) w.e.f. 2018-19 Batch****FIRST SEMESTER**

| SNo | Course     |   | Contact Hours |   |   |       | Credits |
|-----|------------|---|---------------|---|---|-------|---------|
|     | No.        | Title   | L             | T | P | Total |         |
| 1.  | 17M41CS111 | Advanced Data Structures and Algorithms               | 3             | - | - | 3     | 3       |
| 2.  | 17M41CS112 | Computer and Information Security                     | 3             | - | - | 3     | 3       |
| 3.  |            | Elective – I  | 3             | - | - | 3     | 3       |
| 4.  |            | Elective – II   | 3             | - | - | 3     | 3       |
| 5.  |            | Elective – III  | 3             | - | - | 3     | 3       |
| 6.  | 18M11GE111 | Research Methodology and Intellectual Property Rights | 2             |   |   | 2     | 2       |
| 7.  | 17M45CS111 | Secure Programming Lab                                | -             | - | 2 | 2     | 1       |
| 8.  | 17M45CS112 | Advance data structures and algorithms Lab            |               |   | 4 | 4     | 2       |
|     |            | <b>TOTAL</b>  | 17            |   | 6 | 23    | 20      |

**SECOND SEMESTER**

| SNo | Course     |  | Contact Hours |   |   |       | Credits    |
|-----|------------|--|---------------|---|---|-------|------------|
|     | No.        | Title  | L             | T | P | Total |            |
| 1.  | 17M41CS121 | Cryptography and Cryptanalysis                           | 3             | - | - | 3     | 3          |
| 2.  | 17M41CS122 | Network and Mobile Security                              | 3             | - | - | 3     | 3          |
| 3.  |            | Elective – IV  | 3             | - | - | 3     | 3          |
| 4.  |            | Elective – V   | 3             | - | - | 3     | 3          |
| 5.  |            | Audit-I  | 2             |   |   | 2     | Qualifying |
| 6.  | 17M47CS111 | Project Based Learning-I<br>Forensics System Development | -             | - |   | 4     | 2          |
| 7.  | 17M45CS121 | Network and Mobile Security Lab                          | -             | - | 2 | 2     | 1          |
| 8.  | 17M45CS122 | Cryptography and Cryptanalysis Lab                       | -             | - | 4 | 4     | 2          |
|     |            | <b>TOTAL</b>   |               |   |   | 24    | 17         |

**THIRD SEMESTER**

| SNo | Course                                   |   | Contact Hours |   |   |       | Credits        |
|-----|--|---|---------------|---|---|-------|----------------|
|     | No.                                      | Title   | L             | T | P | Total |                |
| 1.  |  | Open Elective   | 3             |   |   | 3     | 3              |
| 2.  | 17M47CS212                               | Seminar & Term Paper<br>or<br>Earn credits by transfer, e.g., MOOCs, Course Work at another Institute, Supervised Study |               |   |   | 4     | 4              |
| 3.  | 17M47CS213/<br>17M47CS214/<br>17M47CS215 | Dissertation /Industrial Project /<br>Entrepreneurial Project   |               |   |   | 8     | 4              |
| 4.  | 17M47CS121                               | Project Based Learning-II,<br>Critical and Secure Infrastructure<br>Development   | -             |   |   | 8     | 4              |
| 5.  |  | Audit-II  | 2             |   |   | 2     | Qualifyin<br>g |
|     |  | <b>TOTAL</b>  |               |   |   | 25    | 15             |

## FOURTH SEMESTER

| SNo | Course                                   |   | Contact Hours |   |   |       | Credits |
|-----|--|---|---------------|---|---|-------|---------|
|     | No.                                      | Title   | L             | T | P | Total |         |
| 1.  | 17M47CS223/<br>17M47CS224/<br>17M47CS225 | Dissertation /Industrial Project/ Entrepreneurial Project |               |   |   | 32    | 16      |
|     |  | TOTAL   |               |   |   | 32    | 16      |

**TOTAL CREDITS : 68**

### Courses for Audit-I and II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through life enlightenment skills

### Subjects for Open Electives:

1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials
6. Waste to Energy

### Electives

1. 18M42CS111 Network and Mobile Security
2. 18M42CS112 Machine Learning Techniques for Big Data)
3. 18M42CS113 Database and On line Social Media Security
4. 18M42CS114 Malware Reverse Engineering
5. 18M42CS115 Big Data system
6. 18M42CS116 Cyber and Digital forensics
7. 18M42CS117 Advanced Network Technologies
8. 18M42CS118 Network Forensics
9. 18M42CS119 Distributed System Security
10. 18M42CS120 Wireless Communication and Networks
11. 18M42CS121 Fundamentals of computer Security