# **M.Tech. Computer Science and Engineering 2020-21**

**(Specialization offered in Data Science/ Cyber Security and Forensics)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sem** | **Subject 1** | **Subject 2** | **Subject 3** | **Subject 4** | **Subject 5** | **L** | **T** | **P** | **Weekly Contact Hours** | **Credits** |
| I | CSL501Mathematical Foundations of Computer Science3-0-0 (3) | CSL535Advanced Data Structure2-0-2 (3) | PE-12-0-2 (3) | OE-12-0-2 (3) | PE-22-0-2 (3) | 11 | 0 | 8 | 19 | 15 |
| II | CSL502Advanced Algorithms2-0-2 (3) | CSL534ProgrammingCourse3-0-2 (4) | OE-22-0-2 (3) | MAL606Research Methodology2-1-0 (3) | PE-32-0-2 (3) | 11 | 1 | 8 | 20 | 16 |
| III | PE-42-0-2 (3) | PE-52-0-2 (3) | CSC602Seminar0-0-2 (1) | CSD601Dissertation-I0-0-8 (4) |  | 4 | 0 | 14 | 18 | 11 |
| IV | CSD602Dissertation-II0-0-24 (12) | PE-62-0-2 (3) |  |  |  | 2 | 0 | 26 | 28 | 15 |
| **Total Credits of the Programme: 57** |

\*PE – Programme Elective \* OE – Open Elective

## **Specialization Electives (PE)**

|  |  |
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| Data Science Specialization | Cyber Security Specialization |
| * Analytic Databases
 | * **Applied Cryptography**
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| * Machine Learning for Data Science
 | * **Cyber Security**
 |
| * Cloud Computing
 | * **Intrusion Detection and Prevention System**
 |
| * Text and Web Intelligence Analytics
 | * **Risk Management Policies and Principles**
 |
| * Big Data Analytics
 | * **Digital Forensics**
 |
| * Media Analytics
 | * **Security in Distributed System**
 |
| * Spatial and Temporal Data Analytics
 | * **Secure Coding and Software Vulnerability Lab**
 |
| * Social Media Analytics
 | * **Reverse Engineering and Malware Analysis**
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