**Master of Computer Science**

**Road Map + List of Courses (Fall-18 & onward)**

No. of Courses = 20x3 = 60 credit hours

Final Project = 06 credit hours

Total Credit hours = 66

|  |  |  |
| --- | --- | --- |
| **Sr. No** | **Title of the Course** | **Credit Hours** |
| **Semester 1** | | |
| XC-350 | Introduction to Computer Programming | 3 |
| XC-355 | Database Systems | 3 |
| XC-360 | Computer Networks | 3 |
| XC-370 | Digital Logic Design | 3 |
| XC-375 | English Comprehension | 3 |
| **Semester II** | | |
| XC-421 | Object Oriented Programming | 3 |
| XC-365 | Software Engineering | 3 |
| XC-435 | Computer Organization and Architecture | 3 |
| XC-380 | Algorithm Analysis and Design | 3 |
| XC-385 | Web Programming | 3 |
| **Semester III** | | |
| XC-475 | Advance Web Programming (Elective) | 3 |
| XC-445 | Data and File Structure | 3 |
| XC-451 | Theory of Automata | 3 |
| XC-460 | Software Quality Assurance (Elective) | 3 |
| XC-430 | Operating Systems | 3 |
| **Semester IV** | | |
|  | (Elective) | 3 |
|  | (Elective) | 3 |
|  | (Elective) | 3 |
|  | (Elective) | 3 |
|  | (Elective) | 3 |
| XI-499 | Final Project | 6 |

**Electives**

* Information and Network Security
* Advance Database Systems
* Data Ware House and Analytics
* Advance Computer Networks
* Management Information System
* Advance Software Development Techniques
* Distributed Database Systems
* Android Application Development
* Data Mining
* Software Project Management
* Advance Software Development Techniques
* Advance Object Oriented Programming
* Information Retrieval
* Artificial Intelligence
* Machine Learning
* IT Infrastructure
* Human Computer Interaction
* Programming Language Concepts