



Online MCA in Cyber Security

Syllabus

- **Semester 1**

- Mathematical Foundation for Computer Application
- Operating System and Unix Shell Programming*
- Data Communication and Computer Networks
- Data Structures with Algorithms*
- Computer Organization and Architecture

- **Semester 2**

- Relational Database Management System*
- Design and Analysis of Algorithms*
- Cyber Security: Concepts and Practices
- Cyber Laws and Ethics
- Fundamentals of Cloud Computing*

- **Semester 3**

- Application Development using Python*
- Advanced Web Technologies*
- Cryptography*
- Network and Systems Security*
- Fundamentals of Cloud Security*
- Open Elective Course

- **Semester 4**

- Cyber Threat Intelligence*
- Defensive Cyber Security Technologies
- Vulnerability Analysis*
- Penetration Testing*
- Cross-Functional Elective Course
- Project**

Note:

* Courses which include Practicals (Lab Programs and Exercise)

** Project will be carried out between Sem 3 and Sem 4, but evaluation will reflect in Sem 4