



Online MCA in Artificial Intelligence

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*
 - Java Programming*
 - Foundations of Machine Learning*
 - Prediction using Machine Learning*
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - Big Data Management and Analytics*
 - Recommendation Systems*
 - Advanced Machine Learning*
 - Open Elective Course
- **Semester 4**
 - Model Deployment and AI in practice
 - Neural Networks and Deep Learning*
 - Computer Vision*
 - Natural Language Processing and AI*
 - 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



Online MCA in Cloud Computing

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*
 - Java Programming*
 - Cloud Foundations
 - Cloud Computing with AWS*
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - Cloud Managed Services*
 - Containers and Microservices*
 - Big Data Management and Analytics
 - Open Elective Course
- **Semester 4**
 - CI/CD and DevOps*
 - Cloud Security and Migration
 - Microsoft Azure Essentials*
 - Google Cloud Platform Essentials*
 - 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



Online MCA in Computer Science and IT

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*
 - Java Programming*
 - Network Security and Cryptography
 - Object Oriented Modeling and Design Patterns
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - Advanced Software Engineering
 - Cloud Infrastructure and Services
 - Advanced Data Management Techniques*
 - Open Elective Course
- **Semester 4**
 - IT Project Management
 - Artificial Intelligence and Machine Learning*
 - Big Data Analytics
 - Internet of Things
 - 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



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



Online MCA in Data Analytics

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*
 - R Programming*
 - Python Programming*
 - Structured Query Language*
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - Machine Learning*
 - Natural Language Processing*
 - Internet of Things*
 - Open Elective Course
- **Semester 4**
 - Big Data - Hadoop*
 - Artificial Intelligence*
 - Deep Learning*
 - Computer Vision*
 - 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



Online MCA in Data Science

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*
 - Java Programming*
 - Python for Data Science*
 - Statistical Methods in Decision Making
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - Data Visualization*
 - SQL for Data Science*
 - Predictive Analytics using Machine Learning*
 - Open Elective Course
- **Semester 4**
 - Data Mining*
 - Time series Analytics*
 - Text Mining*
 - Applied Analytics - Marketing, Web, Social Media
 - 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



Online MCA in Full Stack Development

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*
 - Java Programming*
 - Web Development using HTML and CSS
 - Dynamic Web Applications Using JavaScript
- **Semester 3**
 - Application Development using Python*
 - Advanced Web Technologies*
 - React JS*
 - Advanced Database Systems*
 - Front-End Development Project
 - Open Elective Course
- **Semester 4**
 - Software Engineering
 - Web APIs
 - Software Testing
 - CI/CD and DevOps
 - 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