Curriculum

**Semester 1**

**Core Subjects (Theory)**
Language I  
English I  
Fundamentals of Mathematics  
Computer Fundamentals & Organization  
Programming in C  
Introduction to Linux

**Practical**
C Programming Lab  
Linux Lab  
Soft Skills-I

**Semester 2**

**Core Subjects (Theory)**
Language II  
English II  
Operating System  
OOPS with C++  
Data Structures Using C  
System Configuration and Maintenance

**Practical**
OOPS with C++ Lab  
Data Structures Lab  
Life and Career Skills

**Semester 3**

**Core Subjects (Theory)**
Introduction to RDBMS  
Object Oriented Programming with Java  
Basics of Server Operating System  
Introduction to Web Technology

**Departmental Elective (Theory/ Practical)**
Information Security Fundamentals  
Software Engineering

**Practical**
RDBMS - Lab  
OOPS with Java – Lab  
Soft Skills-II

**Project/Seminar**
Technical Seminar
Semester 4
Core Subjects (Theory)
Designing Enterprise Networks
Ethical Hacking Fundamentals
Fundamentals of Datacenter
Introduction to Cloud Technology
Departmental Elective (Theory)
Server Network Infrastructure / Cryptography Fundamentals
Practical
DEN – Lab
Ethical Hacking – Lab
Soft Skills-III
Project/Seminar
Mini Project

Semester 5
Core Subjects (Theory)
Linux Administration
Principles of Virtualization
Introduction to Windows Azure
Private Cloud Architecture
Departmental Elective (Theory)
Fundamentals of IT Infrastructure Library / Virtualization & Cloud Security
Practical
Linux Administration – Lab
Windows Azure – Lab
Project/Seminar
Practical Training Seminar (PTS)

Semester 6
Core Subjects (Theory)
Amazon Web Services (AWS)
Mobile, Wireless and VOIP Security
Departmental Elective (Theory)
Business Organization Basics / Professional Development Skills
Practical
AWS - Lab
Mobile, Wireless and VOIP Security - Lab Project/Seminar
Major Project

*Subject to changes made by University