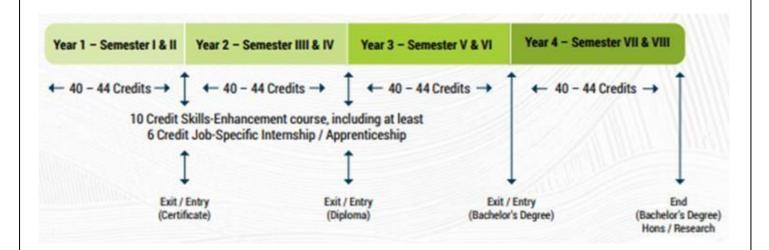
# **B.** Tech Computer Engineering

# (4 Years Undergraduate Degree Programme as per NEP 2020)

#### **Tentative Semester wise Course List**



#### Year I: Semester I

- Introduction to Computer Programming
- Applied Mathematics
- Computer Organization and Architecture.
- Web Technology
- Corporate Communication
- Fundamental of Electronics
- Emerging Technologies
- Capstone Project

#### Year I: Semester II

- Linear Algebra and Statistics
- Logic Development and Programming
- Processor Architecture
- Mobile Application Development
- Programming Paradigms (C++)
- Environmental Studies
- Hardware and Software Workshop
- Capstone Project

#### Year II: Semester III

- Discrete Mathematics
- Data Structures
- Elective-1: Fundamentals of Data Sci. & Business Analytics / Intro to Cyber Security
- Statistical Data Analysis
- TSDL (Python)
- Engg. Informatics
- VU Level-Constitutional Values, Gender, Diversity and Inclusion
- Field Project using C, C++, Python

## Year II: Semester IV

- Theory of Computation
- DBMS
- Elective-2: AI / System Security
- Elective-3: CG and Gaming / Complier Design
- TSDL (Java)
- Constitution of India
- VU Level Project Management
- DBMS and Java Project

### Year III - Semester V

- Operating Systems
- Computer Networks
- Research Methodology
- TSDL (Full Stack development)
- VU Level-Ethics & Values
- Elective-4: Machine Learning / Application Security

# Year III – Semester VI

- Software Engg
- Cloud Computing
- Project Stage-1
- Big Data Analytics
- VU Level-Soft Skills
- Blockchain and Field project

## Year IV - Semester VII - Honor

- EHPT
- NLP and Text analysis
- Elective-4: SWMA / Technical Writing OR Industry Internship
- Project Stage-2

# Year IV – Semester VII – Research

- Research Seminar
- Research Project OR Industry Research Internship

# Year IV - Semester VIII - Honor

Internship

## Year IV - Semester VIII - Research

Research internship