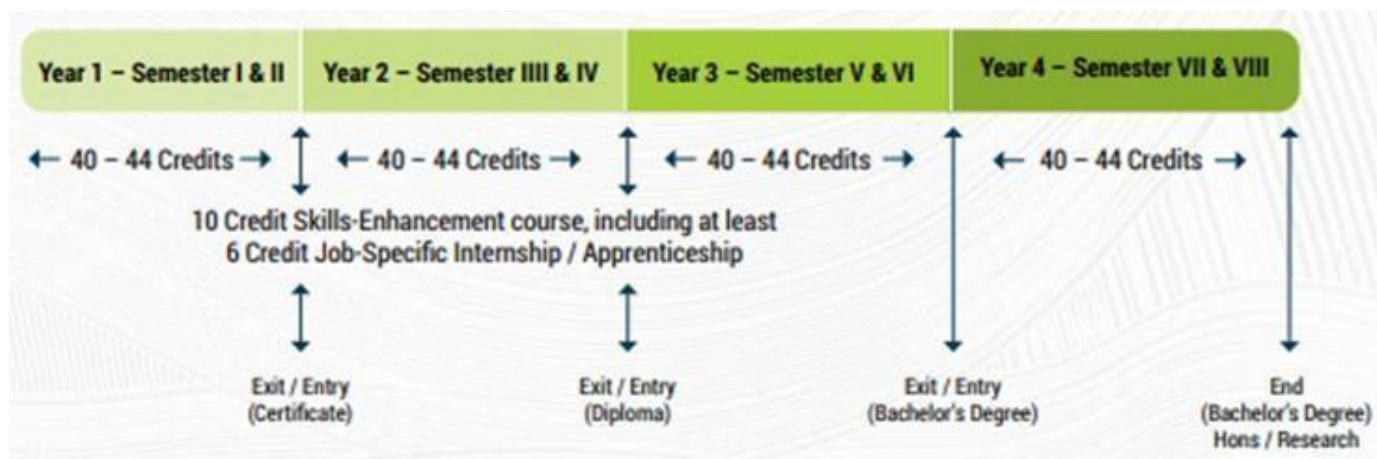# B. Tech Artificial Intelligence & Machine Learning

(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: Fundamental of data science and Business Analytics / Intro to Cyber Security
- Applied Statistical Analysis
- TSDL (Python)
- Engg. Informatics
- VU Level-Constitutional Values, Gender, Diversity and Inclusion
- Field Project using C, C++, Python

Year II : Semester IV
- Artificial Intelligence
- DBMS
- Elective-2: Data Visualization / System Security
- Elective-3: CG and Gaming / Data Engg.
- TSDL (Java)
- Constitution of India
- VU Level - Project Management
- DBMS and Java Project

Year III – Semester V
- Operating Systems
- Machine Learning
- Research Methodology
- Computer Networks
- VU Level-Ethics & Values
- Elective-4: Image Processing / Application Security

Year III – Semester VI
- Data Analytics
- Software Engg
- Project Stage-1
- Computational Intelligence and Fuzzy Logic
- VU Level-Soft Skills
- Data Engg and field project

Year IV – Semester VII – Honor
- Cluster Computing
- 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