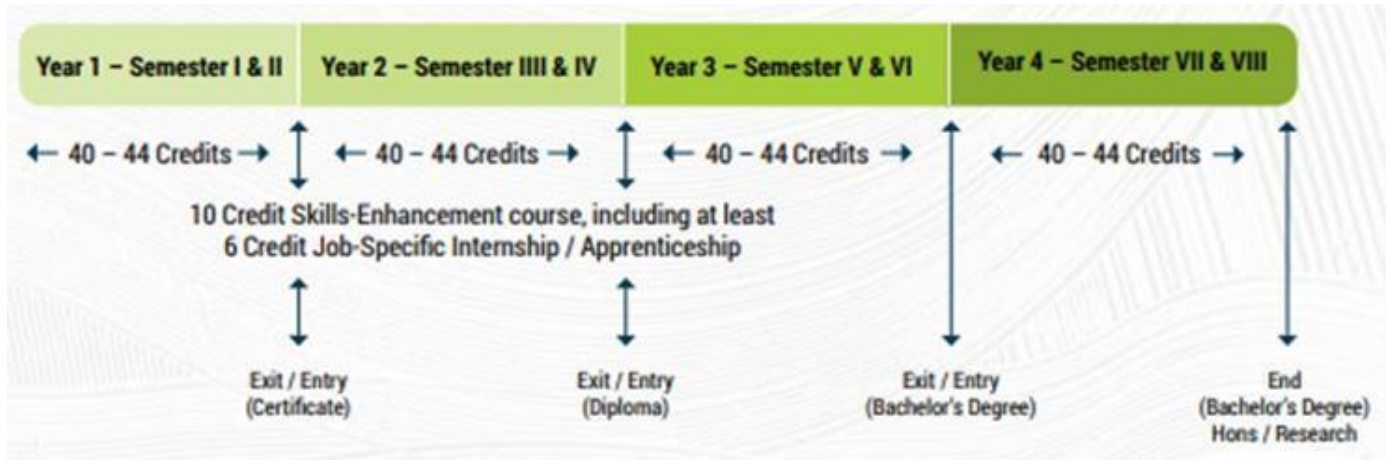


## B. Tech Artificial Intelligence & Data Science

(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 Computations / 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**

- Artificial Intelligence
- DBMS
- Elective-2: Business Intelligence and Analysis / 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
- Data Warehouse
- Research Methodology
- Computer Networks
- VU Level-Ethics & Values
- Elective-4: Machine Learning / Application Security

**Year III – Semester VI**

- Data Analytics
- Software Engg
- Project Stage-1
- Data Mining & Predictive Modeling
- VU Level-Soft Skills
- Deep learning 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