

Structure of B Tech AI program

First Year:

Semester I	Semester II
Applied Calculus	Applied Vector and Linear Algebra
Basic Electrical and Electronics Engineering	Intelligence of biological systems
Object Oriented Programming	Workshop (Electronics and Computer Hardware assembly)
Computer Aided Design & Drafting	Introduction to Python Programming
Presentation and Communication Techniques	Introduction to Artificial Intelligence
Physics	Critical Thinking
Constitution of India	Statistical Method - I
	Environmental Studies

Second Year:

Semester III	Semester IV
Probability and random processes	Discrete structures
Statistical Method - II	Statistical Method - III
Data Structures and Algorithms	Principles of Operating System
Introduction to Machine Learning	Data Base Management System
Principles of Economics and Management	Soft computing
Image and Signal Processing	Mechanics for Robotics
Soft Computing	Project Based Learning (PBL) - I

Third Year:

Semester V	Semester VI
Basic concepts of Robotics	Big Data Technology
Data Wrangling	Artificial Intelligence
Cost & Financial Accounting for Engineers	Deep Learning
Design and Analysis of Algorithms	Cyber Security
Project Based Learning (PBL) - III	Distributed Computing
Elective - I	Elective - II
Technical Skill Enhancement Course-1 (LINUX Programming Lab)	Open Elective -I

Fourth Year:

Semester VII	Semester VIII
Industrial Internship	Robotics and Intelligent Systems
	Advanced Neural Network
	Elective - III
	Elective - IV
	Open Elective - II
	Capstone Project

Elective list and Open Elective list as follows:

Elective - I	Elective - II
E1.1:Computer Vision	E2.1: Data visualization
E1.2: Natural Language Processing	E2.2: Information Retrieval and Web Search
E1.3:Speech Systems	E2.3: Machine Learning with Big Data
E1.4: Human Computer Interaction	E2.4: Data Mining
	E2.5: Database organization

Elective - III	Elective - IV
E3.1: Applications of AI in Healthcare	E4.1 Bayesian Computational Stats
E3.2: Bioinformatics	E4.2 Cognitive Science
E3.3: Applications of AI in Agriculture	E4.3 Probabilistic Graphical Models
E3.4: AI in Manufacturing	E4.4 Intro to Information Security
E3.5: Gene Editing	E4.5 Intelligent text analysis and knowledge management

Open Elective - I	Open Elective - II
Operation and Supply Chain Management	Predictive Analysis
Marketing	Gaming theory
Foundation of Information systems	Sentiment / Web Analytics