MIT-WPU
॥ विश्वशान्तिर्ध्रुवं ध्रुवा ॥

FACULTY OF ENGINEERING AND TECHNOLOGY

2024 - 25

Integrated B.Tech. Computer Science & Engineering (Artificial Intelligence & Data Science)

Programme Structure

mitwpu.edu.in

Division	Faculty of Computer Science & Engineering
School Name	School of Computer Science & Engineering
Department Name	Department of Computer Engineering and Technology
Programme Name	Integrated B.Tech Computer Science and Engineering

Category-wise Credit Distribution

Category	Credits
Programme Foundation	44
Programme Major	59
Programme Electives	8
Programme Capstone Project/Problem Based Learning/Seminar and Internships	8
University Core	15
University Electives	0

Course Basket

Course Type	Description
Programme Core	Courses dealing with foundations, depth and breadth of the major in which student is admitted at MIT-WPU
Programme Electives	Open electives under the programme allow students to specialise in a particular area connected to their major.
University Core	Courses that reflect the core MITWPU values and the mission of Life Transformation of students.
University Electives	Multidisciplinary courses across the faculties at MIT-WPU and outside the programme core.

Semester 1

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Foundation of Engineering Mathematics	PF	4
2	Physics-I	PF	4
3	Chemistry-I	PF	3
4	Problem Solving & Programme Design Using C Language	PF	3
5	Graphics for Engineers	PF	2
6	English	PF	2
7	Yoga-I	UC	1
8	Environment and Sustainability	UC	1

Semester 2

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Calculus and Basic Statistics	PF	4
2	Physics-II	PF	4
3	Chemistry-II	PF	3
4	Basics of Mechanics	PF	4
5	Fundamentals of Electrical & Electronics Engineering	PF	3
6	Programming in C	PF	2
7	Sports	UC	1

Semester 3

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Linear Algebra and Differential Calculus	PF	3
2	Algorithms and Data structures Concepts	PM	5
3	Object Oriented Programming	PM	4
4	Relational Database Management System Concepts	PM	4
5	Fundamentals of AI	PM	2
6	Skill Course-1: Statistics for ML using Python	PM	2
7	Effective Communication	UC	1
8	Critical Thinking	UC	1

Semester 4

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Integral Calculus	PF	3
2	Concepts of Operating Systems	PM	4
3	Competitive Programming	PM	4
4	Basics of Machine Learning	PM	4
5	Foundation of Data warehousing and Data Mining	PM	4
6	Skill Course-2: Python for Data Science	PM	2
7	Advanced Excel	UC	1
8	Financial Literacy	UC	1
9	Yoga-II	UC	1

Semester 5

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Java Technologies	PM	5
2	Fundamentals of Computer Networks	PM	4
3	Fundamentals of Data Analytics	PM	4
4	Fundamentals of Cloud Computing	PM	3
5	1. Foundations of Network Security 2. Applied Machine Learning	PE	4
6	Capstone Project Stage-I	PR	1
7	Summer Internship	PR	4
8	Foundation of Peace	UC	2
9	SLDP	UC	1

Semester 6

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	1. Introduction to Blockchain Technology 2. Big Data Analytics using Tableau	PE	4
2	Software Engineering	PM	4
3	Data Visualization using Python	PM	2
4	Skill Course-3: Deep Learning Essentials	PM	2
5	Capstone Project Stage-II	PR	3
6	Co-creation	UC	1
7	Indian Constitution	UC	1
8	IKS (General)	UC	2