



FACULTY OF
ENGINEERING AND
TECHNOLOGY



2024 - 25

Integrated B.Tech. Civil Engineering (Smart Infrastructure)

Programme Structure

Division	Faculty of Engineering and Technology
School Name	School of Engineering and Technology
Department Name	Department of Polytechnic
Programme Name	Integrated B.Tech Civil Engineering (Smart Infrastructure)

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	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	Civil Engineering Workshop	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	Mechanics of Structure	PM	4
3	Basics of Survey	PM	4
4	Building Construction	PM	3
5	Mode of Transportation	PM	3
6	Skill Course 1-: Building Drawing	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	Theory of Structures	PM	4
3	Introduction to Concrete Technology	PM	4
4	Hydraulics	PM	4
5	Introduction to Geotechnical Engineering	PM	4
6	Computer Aided Drafting(CAD)	PM	2
7	Skill Course 2-: Advanced Survey Techniques	PM	2
8	Advanced Excel	UC	1
9	Financial Literacy	UC	1
10	Yoga - II	UC	1

Semester 5

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Estimating & Costing	PM	4
2	Water Resource Engineering	PM	3
3	Design of RCC Structures	PM	4
4	Public Health Engineering	PM	3
5	Capstone Project Stage -1	PR	1
6	Industrial Internship	PR	4
7	Programme Elective-I	PM	4
8	Foundations of Peace	UC	2
9	SLDP	UC	1

Semester 6

Sr. No.	Course Name /Course Title	Course Type	Total Credits
1	Design of Steel Structures	PM	3
2	Contracts & Accounts	PM	1
3	Skill Course 3-: Software's in Civil Engineering	PM	2
4	Highway Engineering	PM	3
5	Capstone Project Stage – 2	PR	3
6	Programme Elective-II	PM	4
7	Co Creation	UC	1
8	Indian Constitution	UC	1
9	IKS(General)	UC	2

*Modifications to the programmes and courses are contingent upon adherence to university guidelines and procedures. Any proposed changes must undergo a thorough review process, including consultation with relevant academic departments, approval from the appropriate administrative bodies, and compliance with accreditation standards.

Additionally, consideration will be given to feedback from students, faculty, and other stakeholders to ensure that modifications align with the overall educational objectives and mission of the university. The implementation of any approved changes will be communicated transparently to the university community, and appropriate measures will be taken to facilitate a smooth transition for all affected parties.