MIT-WPU
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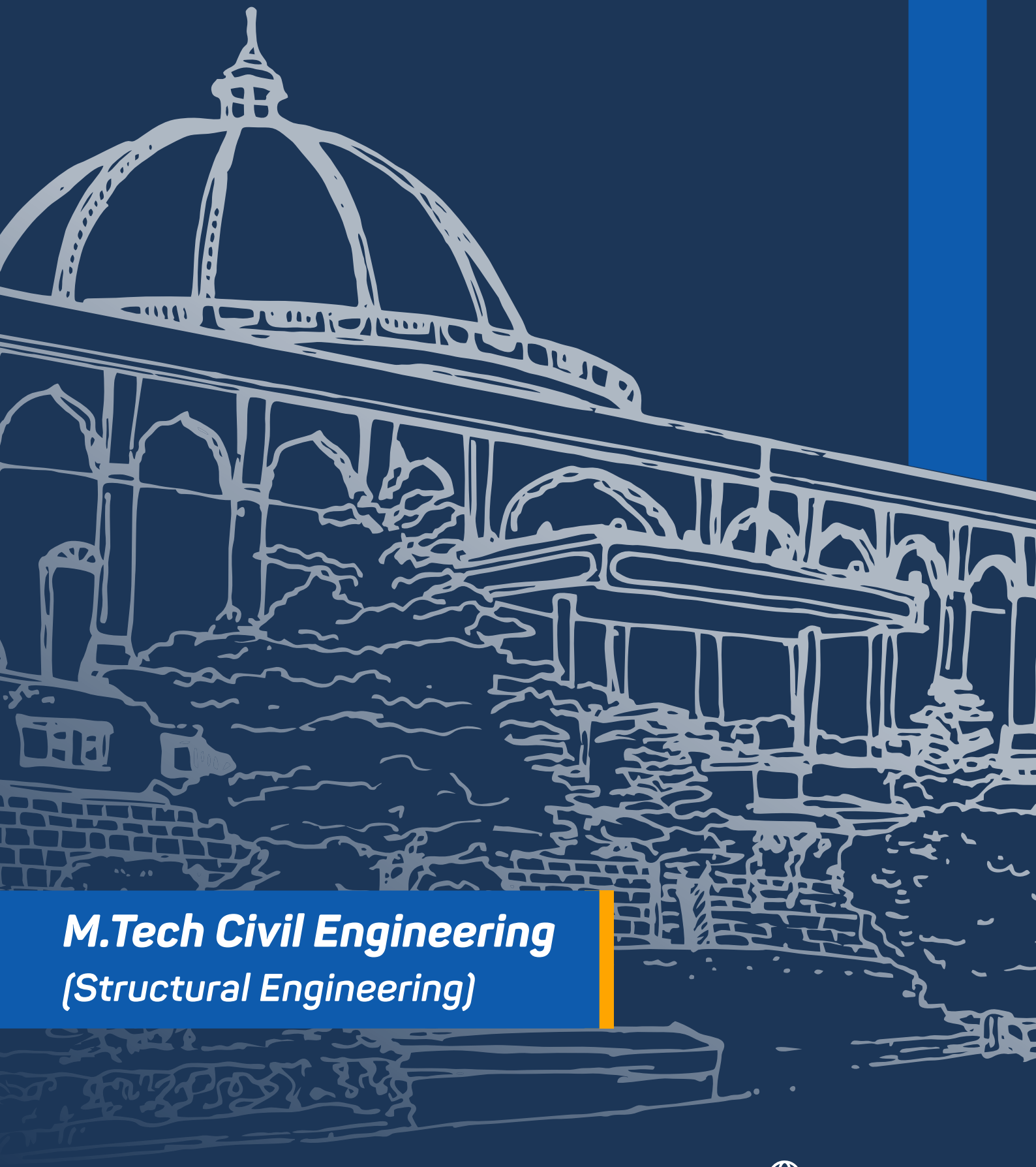
FACULTY OF ENGINEERING AND TECHNOLOGY



M.Tech Civil Engineering
(Structural Engineering)

Programme Structure

mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Engineering & Technology
Department Name	Department of Civil Engineering
Program Name	M.Tech Civil Engineering (Structural Engineering)

COURSE BASKET

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

Semester I

Semester	Course Type	Course Name / Course Title	Total Credits
I	PC	Advanced Mechanics of Solids	4
I	PC	Structural Dynamics	4
I	PC	Advanced Design of Steel Structures	4
I	PC	Soil Structure Interaction and Advanced Design of Foundation	4
I	UC	Scientific Studies of Mind, Matter, Spirit and Consciousness	2
I	UC	Yoga	1
		Total	**19**

Semester II

Semester	Course Type	Course Name / Course Title	Total Credits
II	PC	Finite Element Methods	4
II	PC	Earthquake Resistant Design of Structure	4
II	PC	Software Lab I STR	2
II	PC	Seminar	2
II	PC	Research Methodology for Civil Engineers	4
II	PE	Program Elective - I	4
II	UC	Peace Building: Global Initiatives	2
		Total	**22**

Semester - III

Semester	Course Type	Course Name / Course Title	Total Credits
III	PC	Design of Reinforced Concrete and Prestressed Bridges	4
III	PC	Software Lab II STR	2
III	PC	Research Project I	8
III	PE	Program Elective-II	4
III	PE	Program Elective-III	4
		Total	**22**

SEMESTER - IV

Semester	Course Type	Course Name / Course Title	Total Credits
IV	PC	Internship	4
IV	PC	Research Project II	12
IV	PE	Program Elective – IV	4
		Total	20

Professional Elective Tracks

Semester	Name of the Course	Type
II	Composite Construction and Design of Precast components	Program Elective I
II	Advance Concrete Technology	Program Elective I
II	Theory of Plasticity	Program Elective I
II	Pre-engineered Buildings	Program Elective I
III	Plastic analysis and Design of Steel Structure	Program Elective II
III	Biomechanics and Biomaterials	Program Elective II
III	Mechanics of Composites Materials	Program Elective II
III	Ferrocement Technology and Design	Program Elective II
III	Theory of Plates and Shells	Program Elective III
III	Advanced Design of Concrete Structures	Program Elective III
III	Subsea Engineering	Program Elective III
III	Formwork Design and Enabling Structures	Program Elective III
IV	Design of Atomic Reactor structures	Program Elective IV
IV	Structural Audit and Retrofitting	Program Elective IV
IV	Safety Practices in construction and structural safety audit	Program Elective IV
IV	Finance and Accounting	Program Elective IV

*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.