MIT-WPU
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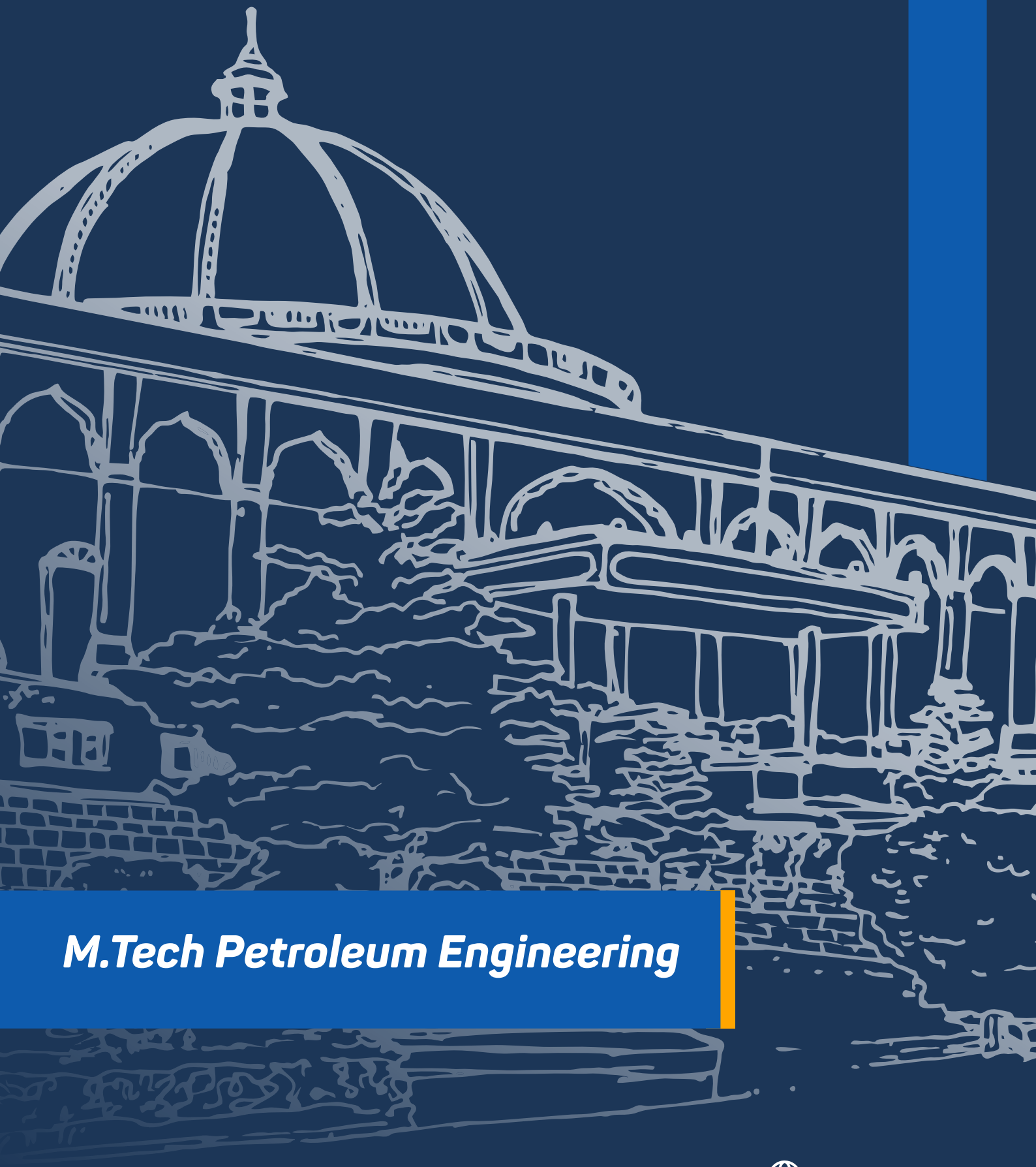
FACULTY OF ENGINEERING AND TECHNOLOGY



M.Tech Petroleum Engineering

Programme Structure

mitwpu.edu.in

Division	Faculty of Engineering and Technology
School Name	School of Engineering & Technology
Department Name	Department of Petroleum Engineering
Program Name	M.Tech Petroleum 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	Geology in Reservoir Description	4
I	PC	Advanced Reservoir Engineering	4
I	PC	Advanced Drilling Engineering	4
I	PC	Advanced Petroleum Production Engineering	4
I	PC	Research Methodology for Petroleum Engineers	4
I	UC	Scientific Studies of Mind, Matter, Spirit and Consciousness	2
I	UC	Yoga	1
		Total	**23**

Semester II

Semester	Course Type	Course Name / Course Title	Total Credits
II	PC	Petroleum Formation Evaluation	4
II	PC	Advanced Enhanced Oil Recovery	4
II	PE	Program Elective – I	4
II	PE	Program Elective – II	4
II	PC	Seminar	2
II	UC	Peace Building: Global Initiatives	2
		Total	**20**

Semester - III

Semester	Course Type	Course Name / Course Title	Total Credits
III	PC	Reservoir Simulation	4
III	PC	Numerical Methods and Geostatistics	3
III	PE	Program Elective – III	4
III	PE	Program Elective – IV	4
III	PC	Research Project – I	4
		Total	**19**

SEMESTER - IV

Semester	Course Type	Course Name / Course Title	Total Credits
IV	PC	Internship	4
IV	PC	Research Project II	16
		Total	20

Professional Elective Tracks

Semester	Name of the Course	Type
II	Flow Assurance	Program Elective I
II	Refining Technology	Program Elective I
II	Transport of Oil and Gas	Program Elective I
II	Petroleum Resource Evaluation	Program Elective I
II	Subsea Systems Engineering	Program Elective I
II	Advanced Artificial Lift and Stimulation Techniques	Program Elective I
II	Offshore Production Engineering	Program Elective II
II	Well Completion and Workover	Program Elective II
II	Advanced Well Control	Program Elective II
II	AI in Oil and Gas	Program Elective II
II	Natural Gas Engineering and Technology	Program Elective II
II	Surface Production Operations	Program Elective II
II	Unconventional Oil and Gas Resources	Program Elective II
III	Integrated Reservoir Management	Program Elective III
III	Horizontal and Multilateral Wells	Program Elective III
III	Advanced Production Enhancement and Optimization	Program Elective III
III	Data Analytics in Oil and Gas	Program Elective III
III	Pipeline Design and Engineering	Program Elective III
III	Carbon Sequestration	Program Elective IV
III	Petroleum Economics	Program Elective IV
III	Health, Safety and Environment in Oil and Gas	Program Elective IV
III	Environmental Impact Analysis of Oil and Gas Projects	Program Elective IV
III	Deepwater Drilling Practices	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.