



FACULTY OF
ENGINEERING AND
TECHNOLOGY



2024 - 25

M.Tech Petroleum Engineering

Programme Structure

Division	Faculty of Engineering and Technology
School Name	School of Engineering & Technology
Department Name	Department of Petroleum Engineering
Programme Name	Petroleum Engineering

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 specialize 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	Course Type	Course Name / Course Title	Total Credits
I	PM	Geology in Reservoir Description	4
I	PM	Advanced Reservoir Engineering	4
I	PM	Advanced Drilling Engineering	3
I	PM	Advanced Petroleum Production Engineering	4
I	PM	Research Methodology for Petroleum Engineers	4
I	UC	Scientific Studies of Mind, Matter, Spirit and Consciousness	2
I	UC	Yoga	1
		Total	22

Semester	Course Type	Course Name / Course Title	Total Credits
II	PM	Petroleum Formation Evaluation	4
II	PM	Tertiary Oil Recovery	4
II	PE	Programme Elective – I	4
II	PE	Programme Elective – II	4
II	PR	Seminar	2
II	UC	Peace Building: Global Initiatives	2
Total:			20

Semester	Course Type	Course Name / Course Title	Total Credits
III	PM	Reservoir Simulation	4
III	PM	Numerical Methods and Geostatistics	4
III	PE	Programme Elective – III	4
III	PE	Programme Elective – IV	4
III	PR	Research Project – I	4
Total:			20

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

List of Programme Electives

Semester	Course Type	Course Name / Course Title
II	Programme Electives I	Flow Assurance
II	Programme Electives I	Refining Technology
II	Programme Electives I	Transport of Oil and Gas
II	Programme Electives I	Petroleum Resource Evaluation
II	Programme Electives I	Subsea Systems Engineering
II	Programme Electives I	Advanced Artificial Lift and Stimulation Techniques
II	Programme Electives II	Offshore Production Engineering
II	Programme Electives II	Well Completion and Workover
II	Programme Electives II	Advanced Well Control
II	Programme Electives II	AI in Oil and Gas
II	Programme Electives II	Natural Gas Engineering and Technology
II	Programme Electives II	Unconventional Oil and Gas Resources
III	Programme Electives III	Integrated Reservoir Management
III	Programme Electives III	Horizontal and Multilateral Wells
III	Programme Electives III	Advanced Production Enhancement and Optimization
III	Programme Electives III	Data Analytics in Oil and Gas
III	Programme Electives III	Pipeline Design and Engineering
III	Programme Electives III	Surface Production Operations

*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.