



FACULTY OF
ENGINEERING AND
TECHNOLOGY



2024 - 25

B.Tech. Petroleum Engineering

Programme Structure

Division	Faculty of Engineering and Technology
School Name	Engineering and Technology
Department Name	Department of Petroleum Engineering
Programme Name	B.Tech Petroleum Engineering

Category-wise Credit Distribution

Category	Credits
Programme Foundation	34
Programme Major	48
Programme Electives	16
Programme Capstone Project/Problem-Based Learning/Seminar and Internships	32
University Core	24
University Electives	9

Course Basket

Course Type	Description
Programme Core	Courses dealing with foundations, depth and breadth of the major in which a 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	Course Type	Course Name / Course Title	Total Credits
I	University Core	Effective Communication	1
I	University Core	Critical Thinking	1
I	University Core	Environment and Sustainability	1
I	University Core	Foundations of Peace	2
I	University Core	Yoga - I	1
I	University Core	SLDP	1
I	Programme Foundation	Linear Algebra and Differential Calculus	3
I	Programme Foundation	Physics	3
I	Programme Foundation	Engineering Graphics	3
I	Programme Foundation	Chemistry	3
I	Programme Foundation	Ideas and Innovations in Manufacturing	1
II	University Core	Advanced Excel	1
II	University Core	Financial Literacy	1
II	University Core	Yoga - II	1
II	University Core	Co-creation	1
II	University Core	Indian Constitution	1
II	University Core	IKS(General)	2
II	University Core	Sports	1
II	Programme Foundation	Integral Calculus	3
II	Programme Foundation	Engineering Mechanics	3
II	Programme Foundation	Programming and Problem Solving (Linux based)	3
II	Programme Foundation	Basics of Electrical and Electronics Engineering	3
II	Programme Major	Petroleum Engineering Practices	4

Semester	Course Type	Course Name / Course Title	Total Credits
III	University Core	Research Innovation Design Entrepreneurship (RIDE)	1
III	University Core	Spiritual & Cultural Heritage; Indian Experience	2
III	University Electives	UE - I	3
III	University Electives	UE-II	3
III	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - I	1
III	Programme Foundation	Differential Equations and Transform Techniques	4
III	Programme Major	Petroleum Geology-I	3
III	Programme Major	Fluid Mechanics for Petroleum Engineers	3
III	Programme Major	Drilling Operations	3
IV	University Electives	UE-III	3
IV	University Core	Rural Immersion	1
IV	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - II	1
IV	Programme Foundation	Statistical Methods in Oil & Gas	3
IV	Programme Major	Numerical Methods	3
IV	Programme Major	Petroleum Production Engineering-I	3
IV	Programme Major	Heat Transfer in Wellbore	3
IV	Programme Major	Reservoir Engineering - I	3
IV	University Core	Life Transformation Skills	1

Semester	Course Type	Course Name / Course Title	Total Credits
V	University Core	Managing Conflicts Peacefully: Tools and Techniques	2
V	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - III	1
V	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Problem Based Learning-I	1
V	Programme Electives	Programme Elective - I	4
V	Programme Major	Petroleum Geology-II	3
V	Programme Major	Reservoir Engineering - II	3
V	Programme Major	Well Engineering and Design	3
V	Programme Major	Petroleum Production Engineering - II	3
VI	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Project Based Learning - IV	1
VI	University Core	National Academic Immersion	2
VI	Programme Electives	Programme Elective - II	4
VI	Programme Major	Petroleum Production Engineering - III	3
VI	Programme Major	Enhanced Oil Recovery	4
VI	Programme Major	Petroleum Exploration and Formation Evaluation	4
VI	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Seminar	1
VI	Programme Foundation	Indian Knowledge System for Petroleum Engineering (IKS II)	2

Semester	Course Type	Course Name / Course Title	Total Credits
VII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Internship	13
VII	Programme Electives	Programme Elective - III	4
VIII	Programme Capstone Project/Problem Based Learning/Seminar and Internships	Capstone Project	13
VIII	Programme Electives	Programme Elective - IV	4

*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.