

Course Structure & Curriculum

2nd Year

M.Tech in Petroleum Engineering

(For foreign and national Candidates)



भारतीय पेट्रोलियम एवं ऊर्जा संस्थान

Indian Institute of Petroleum and Energy

Visakhapatnam - 530003



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Second Year M.Tech in Petroleum Engineering

Course Structure

Third Semester

SEMESTER - III						
Sl. No	Code	Course Name	L	T	P	Credit
1		Dissertation -1	0	0	0	18

Fourth Semester

SEMESTER - IV						
Sl. No	Faculty	Course Name	L	T	P	Credit
1		Dissertation - 2	0	0	0	20



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Course Structure

(2 Year M.Tech in Petroleum Engineering)

SEMESTER – I						
Sl. No	Code	Course Name	L	T	P	Credit
1		Petroleum Geology	3	0	0	3
2		Applied Reservoir Engineering	3	0	0	3
3		Applied Hydrocarbon Production Engineering	3	0	0	3
4		Drilling Technology	3	0	0	3
5		Formation Evaluation	3	0	0	3
6		Petroleum Engineering Lab	0	0	3	2
7		Seminar	0	0	0	2
Total						19

SEMESTER - II						
Sl. No	Code	Course Name	L	T	P	Credit
1		Applied Reservoir Simulation	3	0	0	3
2		Elective I	3	0	0	3
3		Elective-II	3	0	0	3
4		Elective – III	3	0	0	3
5		Elective - IV	3	0	0	3
6		Modelling and Simulation Lab	0	0	3	2
7		Viva Voce/Summer Internship	0	0	0	2
Total			15	2	6	19

SEMESTER - III						
Sl. No	Code	Course Name	L	T	P	Credit
1		Thesis -1	0	0	0	18

SEMESTER - IV						
Sl. No	Faculty	Course Name	L	T	P	Credit
1		Thesis - 2	0	0	0	20
CUMULATIVE TOTAL						76



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ELECTIVES						
Sl. No	Code	Course Name	L	T	P	Credit
1		Carbon Capture Storage and Utilization	3	0	0	3
2		Flow Assurance	3	0	0	3
3		Data Science	3	0	0	3
4		Big Data Management	3	0	0	3
5		Artificial Intelligence and Machine Learning	3	0	0	3
6		HPHT Drilling and Completion Fluids	3	0	0	3
7		Alternate Energy Resources	3	0	0	3
8		Hydrogen Energy	3	0	0	3
9		Environmental Engineering	3	0	0	3
10		Applied Gas Engineering	3	0	0	3
11		Applied Well Stimulation Techniques	3	0	0	3
12		Applied Numerical Modelling	3	0	0	3
13		Advanced Enhanced Oil Recovery	3	0	0	3