

PARUL UNIVERSITY

R/Notification-1401/2024-25

Office of the Registrar
December 17, 2024

NOTIFICATION

Sub: Revision in Course structure of semester 1st to 8th of B.Tech in Petroleum Engineering programme and Syllabus of 1st and 2nd semester for the Curriculum year 2024 – 25

Ref: (i) Proceedings of the Eighteenth Meeting of the Governing Body held on December 2, 2024

(ii) Orders of the Provost

PREAMBLE:

Dean, Faculty of Engineering & Technology proposed Revision in Course structure of semester 1st to 8th of B.Tech in Petroleum Engineering programme and Syllabus of 1st and 2nd semester for the Curriculum year 2024 – 25 during the Eighteenth Meeting of the Governing Body held on December 2, 2024 which was approved by the Governing Body. Hence, the Order.

ORDER:

The revised Course structure of semester 1st to 8th of B.Tech in Petroleum Engineering programme (Curriculum year 2024 – 25) is enclosed in the annexure.

Dean, FE & T is informed to arrange to upload syllabus of 1st and 2nd semester of B.Tech in Petroleum Engineering programme (Curriculum year 2024 – 25) on MIS.

By Order


Registrar

To,

1. Dean, Faculty of Engineering & Technology and Principal, PIET
2. Principal, PIT

Copy to,

- 1) The Controller of Examinations
- 2) Director (IQAC)
- 3) PUMIS Coordinator

Submitted to,

- 1) The President
- 2) The Provost

ANNEXURE

Faculty of Engineering and Technology - PIT		
B.Tech in Petroleum Engineering		
Semester - 1		
S. No.	Name of the Subject	Credits
1	Engineering Graphics	4
2	Basic Electrical Engineering	4
3	Elements of Mechanical Engineering	4
4	Mathematics – I	4
5	Engineering Physics-I	4
6	Communication Skills	2
Total		22
Semester - 2		
S. No.	Name of the Subject	Credits
7	Transport Phenomena	2
8	Environmental Science	0
9	Programming for Problem Solving	4
10	Sedimentary and Petroleum geology	3
11	Sedimentary and Petroleum geology lab	1
12	Chemistry	4
13	Mathematics-II	4
14	Advanced Communication and Technical Writing	2
15	Sports and Yoga	0
Total		20
Semester - 3		
S. No.	Name of the Subject	Credits
16	Introduction to Petroleum Geology	3
17	Introduction to Petroleum Geology Lab	1

18	Drilling Engineering Lab	1
19	Drilling Engineering-1	4
20	Product Realization	1
21	Petroleum Exploration	3
22	Thermodynamics of Petroleum reservoir Fluids	3
23	Complex Variables and PDE	4
24	Professional Communication Skills	2
Total		22
Semester - 4		
S. No.	Name of the Subject	Credits
25	Heat and Mass Transfer	3
26	Heat and Mass Transfer lab	1
27	Drilling Engineering-II	3
28	Fluid Flow Operations Lab	1
29	Fluid Flow Operations	3
30	Elements of Reservoir Engineering	4
31	Production Operations-1	3
32	Probability, Statistics and Numerical Methods	4
33	Professional Grooming and Personality Development	1
Total		23
Semester - 5		
S. No.	Name of the Subject	Credits
34	Applied Petroleum Reservoir Engineering	3
35	Element of Reservoir Engineering Lab	1
36	Petroleum Geochemistry Lab	1
37	Petroleum Geochemistry	3
38	Internship	2
39	Python Language	2

40	Offshore Engineering	3
41	Professionalism and Corporate Ethics	1
42	Open Elective 01 (Compulsory Subjects :1)	2
43	PEC 01 (Compulsory Subjects:1) -	3
Total		21
Semester - 5 (Open Elective 01)		
1	Basic Aircraft Science	2
2	Disaster Preparedness and Planning	2
3	Cyber Security	2
4	Internet of Things	2
5	Fundamentals of Communication Engineering	2
6	Renewable Energy Sources	2
Semester - 5 (PEC 01)		
1	Oil and Gas Field Development and Planning	3
2	Natural Gas Engineering	3
3	Petroleum Economics	3
Semester - 6		
S. No.	Name of the Subject	Credits
44	Surface Production Operations	3
45	Formation Evaluation	3
46	Oil and Gas Well Testing	4
47	Oil and Gas Well Testing Lab	1
48	Pump and Compressors	3
49	Petroleum refining	2
50	Employability Skills	1
51	Open Elective 02 (Compulsory Subjects :1)	2
52	PEC 02 (Compulsory Subjects:1) -	3
Total		22

Semester - 6 (Open Elective 02)		
1	Programme Management and Entrepreneurship	2
2	Life Science	2
3	Fundamentals of Management Engineering	2
4	Constitution of India	2
5	Innovation and Entrepreneurship	2
6	Cyber Law and Ethics	2
Semester - 6 (PEC 02)		
1	Energy Technology and Engineering	3
2	Integrated Reservoir Management	3
3	City Gas Distribution	3
Semester - 7		
S. No.	Name of the Subject	Credits
53	Petroleum Engineering Design	3
54	Summer Internship	2
55	Enhanced Oil Recovery Techniques	3
56	Project-I	6
57	Reservoir Modelling and Simulation	2
58	Reservoir Modelling and Simulation lab	1
59	PEC 03 (Compulsory Subjects:1)	3
Total		20
Semester - 7 (PEC 03)		
1	Pipeline Engineering	3
2	Well Performance and Intervention	3
3	Advanced Drilling Technology	3
Semester - 8		
S. No.	Name of the Subject	Credits
60	Unconventional Energy Recourses	3

61	Health, Safety and Environment in Petroleum Industry	3
62	Project-II	6
63	Advanced Production Technologies	3
64	PEC 04 (Compulsory Subjects:1)	2
Total		17
Semester - 8 (PEC 04)		
1	Hydrocarbon Contracts and Asset Management	3
2	Petroleum Geo-mechanics and Hydraulic Fracturing	3
3	Transportation and Marketing of Petroleum and Petroleum Products	3
Grand Total		167