

UG Curriculum

SEMESTER I

CHEMICAL ENGINEERING / PETROLEUM ENGINEERING

#	Subject Name	L-T-P	Credit
1	Engineering Mathematics – I	3-1-0	4
2	Physical Chemistry	3-1-0	4
3	Engineering Mechanics	3-1-0	4
4	Earth Energy and Environment	2-0-0	2
5	Fundamentals of Electrical Systems	3-1-0	4
6	English for Communication	1-0-2	2
7	Engineering Drg. & Computer Graphics	1-0-3	3
8	Physical Chemistry Lab	0-0-3	2
9	EAA – 1		0
Total		16-4-8	25

SEMESTER II

CHEMICAL ENGINEERING / PETROLEUM ENGINEERING

#	Subject Name	L-T-P	Credit
1	Engineering Mathematics – II	3-1-0	4
2	Strength of Materials	3-1-0	4
3	Polymers & Surfactants	3-0-0	3
4	Programming and Data Structure	3-1-3	6
5	Intro to Chemical / Petroleum Engineering	2-0-0	2
6	Fundamentals of Biological Systems	2-0-0	2
7	Organic Chemistry Lab	0-0-3	2
8	Electrical Systems Lab	0-0-3	2
9	EAA – 2		0
Total		16-3-9	25

SEMESTER III**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Transform Calculus, Probability & Statistics	3-0-0	3
2	Numerical Methods	1-0-3	3
3	Fluid Mechanics and Multiphase Flow	3-1-0	4
4	Chemical Process Calculations	3-1-0	4
5	Information Technology	2-0-3	4
6	Innovations Lab	0-0-3	2
7	Workshop	0-0-3	2
8	EAA III	0-0-3	0
Total		12-2-14	22

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Transform Calculus, Probability & Statistics	3-0-0	3
2	Sedimentary & Petroleum Geology	3-1-0	4
3	Fluid Mechanics & Multiphase Flow	3-1-0	4
4	Numerical Methods	1-0-3	3
5	Information Technology	2-0-3	4
6	Innovations Lab	0-0-3	2
7	Workshop	0-0-3	2
8	EAA III	0-0-2	0
Total		12-2-14	22

SEMESTER IV**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Advance Statistical Techniques	3-0-0	3
2	Chemical Engineering Thermodynamics	3-1-0	4
3	Heat Transfer	3-1-0	4
4	Chemical Process Technology	3-0-0	3
5	Chemical Reaction Engineering	3-0-0	3
6	Fuel Lab	0-0-3	2
7	Fluid Flow Lab and Design	0-0-3	2
8	EAA IV	0-0-3	0
Total		15-2-9	21

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Advance Statistical Techniques	3-0-0	3
2	Phase Equilibria Thermodynamics	3-1-0	4
3	Geomechanics	3-1-0	4
4	Transport in Porous Media	3-0-0	3
5	Well Logging	3-0-3	5
6	Fuel Lab	0-0-3	2
7	Fluid Flow Lab and Design	0-0-3	2
8	EAA IV	0-0-3	
Total		15-2-12	23

SEMESTER V**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Industrial psychology & Professional Ethics	2-0-0	2
2	Mass Transfer I	3-1-0	4
3	Reaction Engineering II	3-1-0	4
4	Instrumentation and Process Control	3-1-0	4
5	Particle Technology	2-0-0	2
6	Bio Chemical Engineering	3-1-0	3
7	Reaction Engineering Laboratory	0-0-3	2
6	Heat Transfer & Particle Technology Lab	0-0-3	2
Total		16-4-6	23

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Industrial Psychology & Professional Ethics	2-0-0	2
2	Reservoir Engineering I	3-1-0	4
3	Hydrocarbon Production Engineering I	3-1-0	4
4	Drilling & Hydraulic Fracturing Technology	3-1-0	4
5	Instrumentation and Process Control	3-1-0	4
6	Drilling & Fracturing Lab	0-0-3	2
Total		14-4-3	20

SEMESTER VI**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Mass Transfer II	3-1-0	4
2	Transport Phenomena	3-1-0	4
3	Computer Aided Process Engineering	1-0-3	3
4	Process Equipment Design	2-0-4	4
5	Elective- I	3-0-0	3
6	Economics	2-0-0	2
7	Instrumentation and Process Control Laboratory	0-0-3	2
Total		14-2-10	22

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Reservoir Engineering II	3-1-0	4
2	Hydrocarbon Production Engineering II	3-1-0	4
3	Advanced Drilling Technology	3-0-0	3
4	Pipeline Engineering	3-0-0	3
5	Elective I	3-0-0	3
6	Economics	2-0-0	2
7	Reservoir Engineering Lab	0-0-3	2
8	Instrumentation and Process Control Laboratory	0-0-3	1
Total		17-2-6	22

SEMESTER VII**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Elective II	3-0-0	3
2	Elective III	3-1/0-0	4/3
3	Project Engineering and Management	3-0-0	3
4	Process Safety	1-0-0	1
5	Industrial Training	0-0-0	2
6	Mass Transfer Lab	0-0-3	2
7	Project I	0-0-6	4
Total		10-1/0-9	19/18

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Process Safety	1-0-0	1
2	Reservoir Simulation	3-1-0	4
3	Elective II	3-0-0	3
4	Elective III	3-1/0-0	4/3
5	Production Engineering Lab	0-0-3	2
6	Industrial Training II	0-0-0	2
7	Project I	0-0-6	4
Total		10-2/1-9	20/19

SEMESTER VIII**CHEMICAL ENGINEERING**

Sl. No.	Subject Name	L-T-P	Credits
1	Process Integration and System Design	3-1-0	4
2	Elective IV	3-1/0-0	4/3
3	Elective V	2-0-0	2
4	Project II	0-0-9	6
5	Comprehensive Viva-Voce	0-0-0	2
Total		8-2/1-9	18/17

PETROLEUM ENGINEERING

Sl. No.	Subject Name	L-T-P	Credits
1	Project Engineering and Management	3-0-0	3
2	Elective IV	3-1/0-0	4/3
3	Elective V	2-0-0	2
4	Reservoir Simulation Lab	0-0-3	2
5	Project II	0-0-9	6
6	Comprehensive Viva-Voce	0-0-0	2
Total		8-1/0-12	19/18