

**B.TECH PETROCHEMICAL TECHNOLOGY
 (FOUR YEAR FULL TIME)
 CURRICULUM-2009
 SEMESTER I**

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC101	Technical English	3	1	0	4
XPC102	Mathematics- I	3	1	0	4
XPC103	Computer Programming	4	0	0	4
XPC104	Applied Chemistry	3	1	0	4
XPC105	Engineering Graphics	2	0	3	4
XPC106	Basic Engineering	4	0	0	4
PRACTICAL					
XPC107	Computer Programming Lab	0	0	3	2
XPC108	Applied Chemistry Lab	0	0	3	2
XPC109	Basic Workshop Practice	0	0	3	2

Total Hours: 34

Total Credits:30

SEMESTER II

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC201	Mathematics – II	3	1	0	4
XPC202	Applied Physics	4	0	0	4
XPC203	Physical chemistry	3	1	0	4
XPC204	Organic Chemistry	3	1	0	4
XPC205	Material Technology	4	0	0	4
XPC206	Environmental Science & Engineering	3	0	0	3
PRACTICAL					
XPC207	Applied Physics Lab	0	0	3	2
XPC208	Communication Skills Enhancement	2	0	2	3
XPC209	Physical and Organic Chemistry Lab	0	0	3	2

Total Hours: 33

Total Credits:30

SEMESTER III

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC301	Mathematics-III	3	1	0	4
XPC302	Fluid mechanics	3	1	0	4
XPC303	Electrical Machines and Drives	3	1	0	4
XPC304	General Chemical Technology	4	0	0	4
XPC305	Process Calculations	3	1	0	4
XPC306	Professional Ethics and Human values (PC)	3	0	0	3
PRACTICAL					
XPC307	Basic Engineering Lab	0	0	3	2
XPC308	Fluid Mechanics Lab	0	0	3	2

Total Hours: 29

Total Credits:27

SEMESTER IV

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC401	Mechanical Operations	3	0	0	3
XPC402	Petroleum Refinery Engineering I	3	1	0	4
XPC403	Heat Transfer	3	1	0	4
XPC404	Process Instrumentation	3	1	0	4
XPC405	Petroleum Thermodynamics	3	1	0	4
XPC406	Petrochemical technology I	3	1	0	4
PRACTICAL					
XPC407	Mechanical Operations Lab	0	0	3	2
XPC408	Heat Transfer Lab	0	0	3	2

Total Hours: 29

Total Credits: 27

SEMESTER V

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC501	Numerical Methods and Statistics	3	1	0	4
XPC502	Petroleum Refinery Engineering II	3	1	0	4
XPC503	Petroleum Exploration and Exploitation Techniques	3	1	0	4
XPC504	Chemical Reaction Engineering - I	3	1	0	4
XPC505	Mass Transfer - I	3	1	0	4
XPC506	Petrochemical technology II	3	0	0	3
PRACTICAL					
XPC507	Mass Transfer Lab	0	0	3	2
XPC508	Petrochemical Analysis Lab - I	0	0	3	2

Total Hours: 29

Total Credits: 28

SEMESTER VI

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC601	Process Dynamics and Control	3	1	0	4
XPC602	Natural Gas and Synthetic Fuels Technology	3	0	0	3
XPC603	Plant Utilities	3	0	0	3
XPC604	Chemical Reaction Engineering - II	3	1	0	4
XPC605	Mass Transfer -II	3	1	0	4
XPC606	Elective – I	3	0	0	3
PRACTICAL					
XPC607	Chemical Reaction Engineering Lab	0	0	3	2
XPC608	Petrochemical Analysis Lab - II	0	0	3	2

Total Hours: 27

Total Credits: 25

SEMESTER VII

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC701	Social Engineering	3	0	0	3
XPC702	Process Engineering Economics	3	1	0	4
XPC703	Transport Phenomena	3	0	0	3
XPC704	Process Modeling and Simulation	3	1	0	4
XPC705*	Elective – II	3	0	0	3
XPC706*	Elective – III	3	0	0	3
PRACTICAL					
XPC707	Process Dynamics and Control Lab	0	0	3	2
XPC708	Process Equipment Design and Drawing Lab	1	1	3	4
XPC709	Mini Project	0	0	4	4

Total Hours: 31

Total Credits: 30

SEMESTER VIII

CODE NO.	COURSE TITLE	L	T	P	C
THEORY					
XPC801	Entrepreneurial development management	3	0	0	3
XPC802	Safety and Risk Management	3	1	0	4
XPC803*	Elective – IV	3	0	0	3
XPC804*	Elective – V	3	0	0	3
PRACTICAL					
XPC805	Project Work & IPT Evaluation	0	0	24	12

Total Hours: 37

Total Credits: 25

Over all Credits: 222

NOTE:

- L** → LECTURE HOURS
- T** → TUTORIAL HOURS
- P** → PRACTICAL HOURS
- C** → CREDITS HOURS