



Semester - 1

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303100101	Workshop	2.00	0	4	0	-	40	-	-	60	-	50	100
303103101	Chemistry	4.00	3	2	-	20	20	20	60	30	40	25	150
303104101	Elements of Civil Engineering	4.00	3	2	0	20	20	20	60	30	40	25	150
303104105	Environmental Science	0.00	1	0	0	-	-	50	-	-	20	-	50
303109101	Engineering Graphics	4.00	2	4	0	20	20	20	60	30	40	25	150
303191101	Mathematics-I	4.00	4	-	-	20	-	20	60	-	40	-	100
303193103	Communication Skills	2.00	-	-	2	-	-	100	-	-	40	-	100
	Total	20.00	13	12	2								800

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 2

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303104155	Mechanics of Solids	4.00	3	2	0	20	20	20	60	30	40	25	150
303105102	Programming for Problem Solving	4.00	3	2	0	20	20	20	60	30	40	25	150
303106101	Basic Electrical Engineering	4.00	3	2	0	20	20	20	60	30	40	25	150
303109102	Elements of Mechanical Engineering	4.00	3	2	0	20	20	20	60	30	40	25	150
303191151	Mathematics-II	4.00	4	-	-	20	-	20	60	-	40	-	100
303193152	Advanced Communication & Technical Writing	2.00	-	-	2	-	-	100	-	-	40	-	100
	Total	22.00	16	8	2								800

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 3

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103209	Chemistry-II	3.00	3	0	0	20	-	20	60	-	40	-	100
303103210	Chemistry II Lab	1.00	0	2	0	-	20	-	-	30	-	25	50
303103211	Particle and Fluid Particle Processing	3.00	3	0	0	20	-	20	60	-	40	-	100
303103212	Particle and Fluid Particle Processing Lab	1.00	0	2	0	-	20	-	-	30	-	25	50
303103213	Material & Energy Balance Computation	4.00	3	0	1	20	-	20	60	-	40	-	100
303103214	Fluid Mechanics Lab	1.00	0	2	0	-	20	-	-	30	-	25	50
303103215	Fluid Mechanics	4.00	3	0	1	20	-	20	60	-	40	-	100
303103216	Product Realization	1.00	0	2	0	-	50	-	-	-	-	25	50
303191201	Complex Variables and PDE	4.00	4	-	-	20	-	20	60	-	40	-	100
303193203	Professional Communication Skills	2.00	-	-	2	-	-	100	-	-	40	-	100
	Total	24.00	16	8	4								800

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 4

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103251	Heat Transfer	4.00	3	-	1	20	-	20	60	-	40	-	100
303103252	Heat Transfer Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103253	Mass Transfer-I	4.00	3	-	1	20	-	20	60	-	40	-	100
303103254	Mass Transfer-I Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103255	Numerical Methods in Chemical Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100
303103256	Numerical Methods in Chemical Engineering Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103257	Thermodynamics-I	4.00	3	-	1	20	-	20	60	-	40	-	100
303103259	Material Science	3.00	3	-	-	20	-	20	60	-	40	-	100
303193252	Professional Grooming and Personality Development	1.00	-	-	1	-	-	100	-	-	40	-	100
	Total	22.00	15	6	4								750

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 5 Open Elective 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303101331	Basic Aircraft Science	2.00	2	-	-	20	-	20	60	-	40	-	100
303104311	Disaster Preparedness and Planning	2.00	2	0	0	20	-	20	60	-	40	-	100
303105304	Cyber Security	2.00	2	0	0	20	-	20	60	-	40	-	100
303105305	Internet of Things	2.00	2	0	0	20	-	20	60	-	40	-	100
303107346	Fundamentals of Communication Engineering	2.00	2	0	0	20	-	20	60	-	40	-	100
303109346	Renewable Energy Sources	2.00	2	0	0	20	-	20	60	-	40	-	100

Semester - 5

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103301	Mass Transfer -II	4.00	3	-	1	20	-	20	60	-	40	-	100
303103302	Mass Transfer-II Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103303	Chemical Reaction Engineering-I	4.00	3	-	1	20	-	20	60	-	40	-	100
303103304	Chemical Reaction Engineering-I Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103305	Thermodynamics-II	4.00	3	-	1	20	-	20	60	-	40	-	100
303103306	Summer Internship-I	2.00	-	-	-	-	50	-	-	-	-	25	50
303193304	Professionalism & Corporate Ethics	1.00	-	-	1	-	-	100	-	-	40	-	100
	Open Elective 01 (Compulsory Subjects :1)	2.00	2	-	-	40	-	-	60	-	-	-	100



Semester - 5

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
	PEC 01 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	22.00	16	4	4								850

Semester - 5 PEC 01

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103331	Sustainability Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100
303103333	Renewable Energy	3.00	3	-	-	20	-	20	60	-	40	-	100
303103335	Water Conservation & Management	3.00	3	-	-	20	-	20	60	-	40	-	100

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 6 Open Elective 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303100351	Programme Management and Entrepreneurship	2.00	2	0	0	20	-	20	60	-	40	-	100
303100352	Life Sciences	2.00	2	0	0	20	-	20	60	-	40	-	100
303100353	Fundamentals of Management	2.00	2	0	0	20	-	20	60	-	40	-	100
303100354	Constitution of India	2.00	2	0	0	20	-	20	60	-	40	-	100
303100355	Engineering Economics	2.00	2	0	0	20	-	20	60	-	40	-	100
303105392	Cyber Law and Ethics	2.00	2	0	0	20	-	20	60	-	40	-	100

Semester - 6

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103351	Chemical Process Industries	3.00	3	-	-	20	-	20	60	-	40	-	100
303103353	Chemical Reaction Engineering- II	4.00	3	-	1	20	-	20	60	-	40	-	100
303103354	Chemical Reaction Engineering- II Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103355	Process Equipment Design	4.00	4	-	-	20	-	20	60	-	40	-	100
303103356	Process Equipment Design Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303193353	Employability Skills	1.00	-	-	1	-	-	100	-	-	40	-	100
	Open Elective 02 (Compulsory Subjects :1)	2.00	2	0	0	40	-	-	60	-	-	-	100
	PEC 02 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	19.00	15	4	2								700



Semester - 6 PEC 02

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103381	Nano science & Nanotechnology	3.00	3	-	-	20	-	20	60	-	40	-	100
303103383	Separation Process	3.00	3	-	-	20	-	20	60	-	40	-	100
303103385	Biochemical Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 7

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103401	Design & Simulation	3.00	3	-	-	20	-	20	60	-	40	-	100
303103402	Design & Simulation Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103403	Instrumentation and Process Control	4.00	4	-	-	20	-	20	60	-	40	-	100
303103404	Instrumentation and Process Control Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303103405	Transport Phenomena	3.00	3	-	0	20	-	20	60	-	40	-	100
303103406	Summer Internship-II	2.00	-	-	-	-	50	-	-	-	-	25	50
303103408	Project-I	6.00	-	12	-	-	100	-	-	100	-	100	200
	PEC 03 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	23.00	13	16	0								750

Semester - 7 PEC 03

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103431	Environmental Pollution Control and Safety Management	3.00	3	-	-	20	-	20	60	-	40	-	100
303103433	Optimization Method	3.00	3	-	-	20	-	20	60	-	40	-	100
303103435	Interfacial Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50



Semester - 8

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103451	Project II	6.00	-	12	-	-	100	-	-	100	-	100	200
303103453	Process Synthesis	3.00	3	-	-	20	-	20	60	-	40	-	100
303103455	Chemical Engineering Plant Design & Economics	3.00	3	-	-	20	-	20	60	-	40	-	100
	PEC 04 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	15.00	9	12									500

Semester - 8 PEC 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
303103481	Petrochemical Technology	3.00	3	-	-	20	-	20	60	-	40	-	100
303103482	Polymer Science and Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100
303103483	Process Integration	3.00	3	-	-	20	-	20	60	-	40	-	100

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical
Theory Passing % : 40 Practical Passing % : 50