



Semester - 1

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303104101	Elements of Civil Engineering	4.00	3	2	-	20	20	20	60	30	40	25	150
303104155	Mechanics of Solids	4.00	3	2	-	20	20	20	60	30	40	25	150
303106101	Basic Electrical Engineering	4.00	3	2	-	20	20	20	60	30	40	25	150
303109101	Engineering Graphics	4.00	2	4	-	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	22.00	15	10	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303100101	Workshop	2.00	-	4	-	-	40	-	-	60	-	50	100
303104105	Environmental Science	0.00	1	0	-	-	-	50	-	-	20	-	50
303105102	Programming for Problem Solving	4.00	3	2	-	20	20	20	60	30	40	25	150
303109102	Elements of Mechanical Engineering	4.00	3	2	-	20	20	20	60	30	40	25	150
303191151	Mathematics-II	4.00	4	-	-	20	-	20	60	-	40	-	100
303192101	Engineering Physics-I	4.00	3	2	-	20	20	20	60	30	40	25	150
303193152	Advanced Communication & Technical Writing	2.00	-	-	2	-	-	100	-	-	40	-	100
	Total	20.00	14	10	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102202	Product Realization	1.00	-	2	-	-	50	-	-	-	-	25	50
303109201	Thermodynamics	4.00	3	-	1	20	50	20	60	-	40	25	150
303109203	Material Engineering	3.00	3	-	-	20	-	20	60	-	40	-	100
303109204	Material Engineering Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303109205	Manufacturing Processes	3.00	3	-	-	20	-	20	60	-	40	-	100
303109206	Manufacturing Processes Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303109207	Kinematics and Theory of Machines	3.00	3	-	-	20	-	20	60	-	40	-	100
303109208	Kinematics and Theory of Machines Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303191204	PDE, Probability and Statistics	4.00	4	-	-	20	-	20	60	-	40	-	100
303193203	Professional Communication Skills	2.00	-	-	2	-	-	100	-	-	40	-	100
	Total	23.00	16	8	3								850

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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102251	Vehicle Structural Engineering	2.00	2	-	-	20	-	20	60	-	40	-	100
303109251	Metrology and Instrumentation	3.00	3	-	-	20	-	20	60	-	40	-	100
303109252	Metrology and Instrumentation	1.00	-	2	-	-	20	-	-	30	-	25	50
303109253	Fluid Mechanics and Machines	3.00	3	-	-	20	-	20	60	-	40	-	100
303109254	Fluid Mechanics and Machines Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303109255	Manufacturing Technology	3.00	3	-	-	20	-	20	60	-	40	-	100
303109256	Manufacturing Technology Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303109257	Strength of Materials	4.00	3	-	1	20	50	20	60	-	40	25	150
303193252	Professional Grooming and Personality Development	1.00	-	-	1	-	-	100	-	-	40	-	100
Total		19.00	14	6	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 - 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/Tut	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	-	-	20	-	20	60	-	40	-	100
303105304	Cyber Security	2.00	2	-	-	20	-	20	60	-	40	-	100
303105305	Internet of Things	2.00	2	-	-	20	-	20	60	-	40	-	100
303107346	Fundamentals of Communication Engineering	2.00	2	-	-	20	-	20	60	-	40	-	100
303109346	Renewable Energy Sources	2.00	2	-	-	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102301	Automobile Engines	3.00	3	-	-	20	-	20	60	-	40	-	100
303102302	Automobile Engines Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102303	Automobile Powertrains and Systems	3.00	3	-	-	20	-	20	60	-	40	-	100
303102304	Automobile Powertrains and Systems Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102305	Electric and Hybrid Vehicles	3.00	3	-	-	20	-	20	60	-	40	-	100
303102306	Electric and Hybrid Vehicles Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102307	Fundamentals of Heat Transfer	3.00	3	-	-	20	-	20	60	-	40	-	100
303102308	Fundamentals of Heat Transfer Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102310	Summer Internship - I	2.00	-	-	-	-	100	-	-	-	-	50	100



Semester - 5

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303193304	Professionalism & Corporate Ethics	1.00	-	-	1	-	-	100	-	-	40	-	100
	Open Elective 01 (Compulsory Subjects :1)	2.00	2	-	-	40	-	-	60	-	-	-	100
	PEC 01 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	24.00	17	8	1								1200

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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102331	Optimization Techniques	3.00	3	-	-	20	-	20	60	-	40	-	100
303102333	Design of Experiments	3.00	3	-	-	20	-	20	60	-	40	-	100
303102335	Computational Methods	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303100351	Programme Management and Entrepreneurship	2.00	2	-	-	20	-	20	60	-	40	-	100
303100352	Life Sciences	2.00	2	-	-	20	-	20	60	-	40	-	100
303100353	Fundamentals of Management	2.00	2	-	-	20	-	20	60	-	40	-	100
303100354	Constitution of India	2.00	2	-	-	20	-	20	60	-	40	-	100
303100355	Engineering Economics	2.00	2	-	-	20	-	20	60	-	40	-	100
303105392	Cyber Law and Ethics	2.00	2	-	-	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102351	Vehicle Operation Management	3.00	3	-	-	20	-	20	60	-	40	-	100
303102352	Vehicle Operation Management Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102353	Automobile Components Design	4.00	3	-	1	20	50	20	60	-	40	25	150
303102355	Automotive HVAC	3.00	3	-	-	20	-	20	60	-	40	-	100
303102356	Automotive HVAC Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102357	Dynamics of Automotive Systems	3.00	3	-	-	20	-	20	60	-	40	-	100
303102358	Dynamics of Automotive Systems Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102360	Project - I	1.00	-	2	-	-	50	-	-	-	-	25	50
303193353	Employability Skills	1.00	-	-	1	-	-	100	-	-	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
	Open Elective 02 (Compulsory Subjects :1)	2.00	2	-	-	40	-	-	60	-	-	-	100
	PEC 02 (Compulsory Subjects :1)	2.00	2	-	-	40	-	-	60	-	-	-	100
	Total	22.00	16	8	2								950

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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102381	Combustion and Emission Technology	2.00	2	-	-	20	-	20	60	-	40	-	100
303102383	Technomanagerial Practices and Mobility Engineering	2.00	2	-	-	20	-	20	60	-	40	-	100
303102385	Vibration and Noise Management	2.00	2	-	-	20	-	20	60	-	40	-	100
303102387	Automotive Certification and Homologation	2.00	2	-	-	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102401	Vehicle Dynamics	3.00	3	-	-	20	-	20	60	-	40	-	100
303102402	Vehicle Dynamics Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102403	Computer Aided Design and Manufacturing	3.00	3	-	-	20	-	20	60	-	40	-	100
303102404	Computer Aided Design and Manufacturing Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102406	Summer Internship - II	2.00	-	-	-	-	100	-	-	-	-	50	100
303102408	Project - II	6.00	-	12	-	-	100	-	-	100	-	100	200
	PEC 03 (Compulsory Subjects :1)	2.00	2	-	-	40	-	-	60	-	-	-	100
	PEC 03-LAB (Compulsory Subjects :1)	1.00	-	2	-	-	20	-	-	30	-	-	50
	PEC 04 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	22.00	11	18									850

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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102431	Alternative Fuel and Power System	2.00	2	-	-	20	-	20	60	-	40	-	100
303102433	Special Purpose Vehicles	2.00	2	-	-	20	-	20	60	-	40	-	100
303102435	Modern Automotive Control System	2.00	2	-	-	20	-	20	60	-	40	-	100
303102437	Manufacturing Processes for Automotive Components	2.00	2	-	-	20	-	20	60	-	40	-	100



Semester - 7 PEC 03-LAB

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102432	Alternative Fuel and Power System Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102434	Special Purpose Vehicles Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102436	Modern Automotive Control System Lab	1.00	-	2	-	-	20	-	-	30	-	25	50
303102438	Manufacturing Processes for Automotive Components Lab	1.00	-	2	-	-	20	-	-	30	-	25	50

Semester - 7 PEC 04

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102439	Vehicle Surveying and Loss Assessment	3.00	3	-	-	20	-	20	60	-	40	-	100
303102441	Nanostructures and Nanomaterials	3.00	3	-	-	20	-	20	60	-	40	-	100
303102443	Waste and Energy Management	3.00	3	-	-	20	-	20	60	-	40	-	100
303102445	Tribology in Vehicle Design	3.00	3	-	-	20	-	20	60	-	40	-	100
303102447	Industry 4.0 Technologies for Automobile	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/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102452	Project - III	6.00	-	12	-	-	100	-	-	100	-	100	200
303102453	Automobile System Design	4.00	3	-	1	20	50	20	60	-	40	25	150
303102455	Transport Management and Laws	2.00	2	-	-	20	-	20	60	-	40	-	100
	PEC 05 (Compulsory Subjects :1)	3.00	3	-	-	40	-	-	60	-	-	-	100
	Total	15.00	8	12	1								550

Semester - 8 PEC 05

						Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
Code	Subject	Credit	Lect	Lab	Tut	T	P/Tut	CE	T	P	Int. + Ext.	Int. + Ext.	
303102481	Operations Research in Automotive Industries	3.00	3	-	-	20	-	20	60	-	40	-	100
303102483	Product Life Cycle Management	3.00	3	-	-	20	-	20	60	-	40	-	100
303102485	Automotive Product Design and Manufacturing	3.00	3	-	-	20	-	20	60	-	40	-	100
303102487	Industrial Engineering, Safety and Quality 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