



## 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.	
203104102	Elements of Civil Engineering	4	3	2	0	20	20	20	60	30	40	25	150
203104151	Mechanics of Solids	4	3	2	0	20	20	20	60	30	40	25	150
203105101	Fundamentals of Programming	4	2	4	0	20	20	20	60	30	40	25	150
203109101	Engineering Graphics	4	2	4	0	20	20	20	60	30	40	25	150
203191102	Mathematics-I	5	3	0	2	20	-	20	60	-	40	-	100
203193101	Communication Skills - 1	2	0	0	2	-	-	100	0	-	40	-	100
	<b>Total</b>	<b>23</b>	<b>13</b>	<b>12</b>	<b>4</b>								<b>800</b>

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



## Semester - 2

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
203100101	Workshop	2	0	4	0	-	40	-	-	60	-	50	100
203104103	Environmental Science	2	2	0	0	20	-	20	60	-	40	-	100
203106101	Basic Electrical Engineering	5	4	2	0	20	20	20	60	30	40	25	150
203109102	Elements of Mechanical Engineering	4	3	2	0	20	20	20	60	30	40	25	150
203191152	Mathematics-II	5	3	0	2	20	-	20	60	-	40	-	100
203192101	Engineering Physics	4	3	2	0	20	20	20	60	30	40	25	150
203193151	Communication Skills - 2	2	0	0	2	-	-	100	0	-	40	-	100
<b>Total</b>		<b>24</b>	<b>15</b>	<b>10</b>	<b>4</b>								<b>850</b>

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



## Semester - 3

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
203102201	Product Realization	1	0	2	0	-	20	-	-	30	-	25	50
203109201	Thermodynamics	4	3	0	1	20	50	20	60	-	40	25	150
203109203	Materials Engineering	3	3	0	0	20	-	20	60	-	40	-	100
203109204	Materials Engineering Lab	1	0	2	0	-	20	-	-	30	-	25	50
203109205	Manufacturing Processes	3	3	0	0	20	-	20	60	-	40	-	100
203109206	Manufacturing Processes Lab	1	0	2	0	-	20	-	-	30	-	25	50
203109207	Kinematics and Theory of Machines	3	3	0	0	20	-	20	60	-	40	-	100
203109208	Kinematics and Theory of Machines Lab	1	0	2	0	-	20	-	-	30	-	25	50
203192201	Optics and Waves	4	3	0	1	20	50	20	60	-	40	25	150
203193201	Professional Communication Skills-1	2	1	0	1	-	-	100	0	-	40	-	100
	<b>Total</b>	<b>23</b>	<b>16</b>	<b>8</b>	<b>3</b>								<b>900</b>

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



## Semester - 4

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
203109251	Mechanical Measurement and Metrology	3	3	0	0	20	-	20	60	-	40	-	100
203109252	Mechanical Measurement and Metrology Lab	1	0	2	0	-	20	-	-	30	-	25	50
203109253	Fluid Mechanics and Fluid Machines	3	3	0	0	20	-	20	60	-	40	-	100
203109254	Fluid Mechanics and Fluid Machines Lab	1	0	2	0	-	20	-	-	30	-	25	50
203109255	Manufacturing Technology	3	3	0	0	20	-	20	60	-	40	-	100
203109256	Manufacturing Technology Lab	1	0	2	0	-	20	-	-	30	-	25	50
203109257	Strength of Materials	3	2	0	1	20	50	20	60	-	40	25	150
203191256	PDE, Probability and Statistics	5	3	0	2	20	-	20	60	-	40	-	100
203193251	Professional Communication Skills-2	2	1	0	1	-	-	100	0	-	40	-	100
	<b>Total</b>	<b>22</b>	<b>15</b>	<b>6</b>	<b>4</b>								<b>800</b>

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.	
203101346	Basic Aircraft Science	2	2	0	0	20	-	20	60	-	40	-	100
203104346	Disaster Preparedness and Planning	2	2	0	0	20	-	20	60	-	40	-	100
203105346	Cyber Security	2	2	0	0	20	-	20	60	-	40	-	100
203107346	Fundamentals of Communication Engineering	2	2	0	0	20	-	20	60	-	40	-	100
203108346	Internet of Things	2	2	0	0	20	-	20	60	-	40	-	100
203109346	Renewable Energy Sources	2	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.	
203102301	Automobile Engines	3	3	0	0	20	-	20	60	-	40	-	100
203102302	Automobile Engines Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102303	Automobile Powertrains and Systems	3	3	0	0	20	-	20	60	-	40	-	100
203102304	Automobile Powertrains and Systems Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102305	Automobile Electrical System	3	3	0	0	20	-	20	60	-	40	-	100
203102306	Automobile Electrical System Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102307	Vehicle Structural Engineering	2	2	0	0	20	-	20	60	-	40	-	100
203109301	Heat Transfer	3	3	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.	
203109302	Heat Transfer Lab	1	0	2	0	-	20	-	-	30	-	25	50
203193301	Programming Skills and Placement Essentials (All Branches Except CSE/IT/ICT)	2	1	0	1	-	-	100	0	-	40	-	100
	Open Elective 01 (Compsory Subjects :1) -	2	2	0	0	-	-	-	-	-	-	-	100
	<b>Total</b>	<b>22</b>	<b>17</b>	<b>8</b>	<b>1</b>								<b>900</b>

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.	
203100351	Life Science	2	2	0	0	60	-	40	0	0	40	0	100
203100352	Biology for Engineers	2	2	0	0	60	-	40	0	0	40	0	100
203100353	Engineering Geology	2	2	0	0	60	-	40	0	0	40	0	100
203100354	Landscape Planning and Design	2	2	0	0	60	-	40	0	0	40	0	100
203100355	Fundamentals of Management	2	2	0	0	60	-	40	0	0	40	0	100
203100356	Corporate Social Responsibility	2	2	0	0	60	-	40	0	0	40	0	100
203100357	Innovation and Entrepreneurship	2	2	0	0	60	-	40	0	0	40	0	100
203100358	Constitution of India	2	2	0	0	60	-	40	0	0	40	0	100
203100359	Cyber Law & Ethics	2	2	0	0	60	-	40	0	0	40	0	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.	
203102351	Vehicle Operation Management	3	3	0	0	20	-	20	60	-	40	-	100
203102352	Vehicle Operation Management Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102353	Automobile Components Design	4	3	0	1	20	50	20	60	-	40	25	150
203102355	Automotive HVAC	3	3	0	0	20	-	20	60	-	40	-	100
203102356	Automotive HVAC Lab	1	0	2	0	-	20	-	-	30	-	25	50



## 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.	
203102358	Project - I	2	0	4	0	-	50	-	-	50	-	50	100
203109353	Dynamics of Machines	3	3	0	0	20	-	20	60	-	40	-	100
203109354	Dynamics of Machines Lab	1	0	2	0	-	20	-	-	30	-	25	50
	Open Elective 02 (Compulsory Subjects :1) -	2	2	0	0	-	-	-	-	-	-	-	100
	Open Elective 03 (Compulsory Subjects :1) -	2	1	0	1	-	-	-	-	-	-	-	100
	PEC 01 (Compulsory Subjects :1) -	2	2	0	0	-	-	-	-	-	-	-	100
	<b>Total</b>	<b>24</b>	<b>17</b>	<b>10</b>	<b>2</b>								<b>1000</b>

## Semester - 6 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.	
203102381	Combustion and Emission Technology	2	2	0	0	20	-	20	60	-	40	-	100
203102383	Technomanagerial Practices and Mobility Engineering	2	2	0	0	20	-	20	60	-	40	-	100
203102385	Vibration and Noise Management	2	2	0	0	20	-	20	60	-	40	-	100



## Semester - 6 Open Elective 03

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
203193351	Advanced Programming and Placement Essentials	2	1	0	1	-	-	100	0	-	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.	
203102401	Vehicle Dynamics	3	3	0	0	20	-	20	60	-	40	-	100
203102402	Vehicle Dynamics Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102403	Hybrid Vehicles	3	3	0	0	20	-	20	60	-	40	-	100
203102404	Hybrid Vehicles Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102405	Computer Aided Design and Manufacturing	3	3	0	0	20	-	20	60	-	40	-	100
203102406	Computer Aided Design and Manufacturing Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102410	Summer Internship	2	0	0	0	-	50	-	-	-	-	25	50
203102412	Project-II	5	0	10	0	-	100	-	-	100	-	100	200
	Open Elective 04 (Compulsory Subjects :1) -	3	2	0	1	-	-	-	-	-	-	-	150
	PEC 02 (Compulsory Subjects :1) -	3	3	0	0	-	-	-	-	-	-	-	100
	PEC 02-LAB (Compulsory Subjects :1) -	1	0	2	0	-	-	-	-	-	-	-	50
	<b>Total</b>	<b>26</b>	<b>14</b>	<b>18</b>	<b>1</b>								<b>1000</b>

## Semester - 7 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.	
203102431	Alternative Fuel and Power System	3	3	0	0	20	-	20	60	-	40	-	100
203102433	Special Purpose Vehicles	3	3	0	0	20	-	20	60	-	40	-	100



## Semester - 7 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.	
203102435	Manufacturing Processes for Automotive Components	3	3	0	0	20	-	20	60	-	40	-	100

## Semester - 7 PEC 02-LAB

						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.	
203102432	Alternative Fuel and Power System Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102434	Special Purpose Vehicles Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102436	Manufacturing Processes for Automotive Components Lab	1	0	2	0	-	20	-	-	30	-	25	50

## Semester - 7 Open Elective 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.	
203109437	Nanomaterials and Surface Engineering	3	2	0	1	20	50	20	60	-	40	25	150
203109438	Industrial Safety and Maintenance Engineering	3	2	0	1	20	50	20	60	-	40	25	150
203109439	Waste to Energy Conversion	3	2	0	1	20	50	20	60	-	40	25	150

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.	
203102452	Project - III	6	0	12	0	-	100	-	-	100	-	100	200
	PEC 03 (Compulsory Subjects :1) -	4	3	0	1	-	-	-	-	-	-	-	150
	PEC 04 (Compulsory Subjects :1) -	3	3	0	0	-	-	-	-	-	-	-	100
	PEC 04-LAB (Compulsory Subjects :1) -	1	0	2	0	-	-	-	-	-	-	-	50
	PEC 05 (Compulsory Subjects :1) -	2	2	0	0	-	-	-	-	-	-	-	100
	<b>Total</b>	<b>16</b>	<b>8</b>	<b>14</b>	<b>1</b>								<b>600</b>

## Semester - 8 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.	
203102481	Automobile System Design	4	3	0	1	20	50	20	60	-	40	25	150
203102483	Industrial Engineering and Quality Management	4	3	0	1	20	50	20	60	-	40	25	150
203102485	Tribology in Vehicle Design	4	3	0	1	20	50	20	60	-	40	25	150



## 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.	
203102487	Modern Automotive Control System	3	3	0	0	20	-	20	60	-	40	-	100
203102489	Two and Three Wheeler Technology	3	3	0	0	20	-	20	60	-	40	-	100
203102491	Internal Combustion Engine Modelling	3	3	0	0	20	-	20	60	-	40	-	100

## Semester - 8 PEC 04-LAB

						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.	
203102488	Modern Automotive Control System Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102490	Two and Three Wheeler Technology Lab	1	0	2	0	-	20	-	-	30	-	25	50
203102492	Internal Combustion Engine Modelling Lab	1	0	2	0	-	20	-	-	30	-	25	50

## 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	CE	T	P	Int. + Ext.	Int. + Ext.	
203102493	Automotive Certification and Homologation	2	2	0	0	20	-	20	60	-	40	-	100
203102495	Transport Management and Laws	2	2	0	0	20	-	20	60	-	40	-	100



## Semester - 8 PEC 05

Code	Subject	Credit	Lect	Lab	Tut	Internal Marks			External Marks		Passing Marks (Theory + CE)	Passing Marks (Practical)	Total Marks
						T	P	CE	T	P	Int. + Ext.	Int. + Ext.	
203102497	Vehicle Surveying and Loss Assessment	2	2	0	0	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