

**TABLE 2: COURSE DISTRIBUTION PER SEMESTER**

A/A	Course Type	Course Name	Course Code	Periods per week	Period duration (min.)	Number of weeks/ Academic semester	Total periods/ Academic semester	Number of ECTS
<b>Semester 1</b>								
1.	Required	Calculus and Analytic Geometry I	AMAT111	3	50	13	39	5
2.	Required	Physics I	PHY111	3+1	50	13	52	5
3.	Required	Vehicle Electrical and Electronic Principles	AU108	3+1	50	13	52	5
4.	Required	Vehicle's Technology	AU110	3+2	50	13	65	5
5.	Required	Mechanical Engineering Drawing (Computer Aided Drafting)	ME113	3	50	13	39	5
6.	Elective	Free Elective		3	50	13	39	5
<b>Semester 2</b>								
7.	Required	Calculus and Analytic Geometry II	AMAT122	3	50	13	39	5
8.	Required	Vehicle Electrical and Electronic Systems	AU203	3+2	50	13	65	5
9.	Required	Materials Science and Engineering	ME106	3	50	13	39	5
10.	Required	Introduction to Mechanical Engineering with Workshop	ME112	3+3	50	13	78	5
11.	Required	Rigid Body Mechanics	ME114	3+1	50	13	52	5
12.	Elective	Free Elective		3	50	13	39	5
<b>Semester 3</b>								
13.	Required	Linear Algebra	AMAT181	3	50	13	39	5



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<b>Semester 6</b>								
30.	Required	Vehicle Dynamics and Control	AU303	3+1	50	13	52	6
31.	Required	Electric and Alternative Vehicle Propulsion Systems	AU307	2+2	50	13	52	6
32.	Required	Machine Elements and Analysis II	AU309	3+1	50	13	52	6
33.	Required	Computational Fluid Dynamics Methodology and Applications	AU310	3+1	50	13	52	6
34.	Required	CAD/CAM Technology in Automotive Engineering	AU407	3+1	50	13	52	6
<b>Semester 7</b>								
35.	Required	Vehicle Internal Combustion Engines Design	AU401	3+1	50	13	52	6
36.	Required	Driver Assistance Systems (DAS) and Intelligent Vehicle Control	AU411	3	50	13	39	6
37.	Required	Vehicle Structures	AU403	3+2	50	13	65	6
38.	Required	Automotive Operations Management	AU408	3+1	50	13	52	6
39.	Required	Research Techniques for Thesis Preparation	AU410	3	50	13	39	6
<b>Semester 8</b>								
40.	Required	Ground Vehicle Aerodynamics	AU400	3	50	13	39	6
41.	Required	Vehicle Crashworthiness	AU404	3+2	50	13	65	6
42.	Required	Vehicle Engineering Design	AU405	3	50	13	39	6
43.	Required	Final Year Project (Thesis)	AU406	-	-	13	-	6
44.	Required	Mechatronics in Vehicle Engineering	AU412	3+1	50	13	52	6