

Scheme of Studies of B.E. (Automotive) for Batch-2022

F.E Fall Semester					F.E Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
PH-122	Applied Physics	3	1	4	CY-109	Applied Chemistry	3	1	4
MT-114	Calculus	3	0	3	EE-118	Basic Electricity & Electronics	3	1	4
HS-104	Functional English	3	0	3	ME-112	Thermodynamics	3	0	3
AU-113	Introduction to Automotive Systems	2	0	2	ME-106	Statics	2	1	3
HS-105/ HS- 127	Pakistan Studies/ Pakistan Studies (for Foreigners)	2	0	2	AU-112	Engineering Drawing & Computer Graphics	2	1	3
ME-104	Workshop Practice	0	2	2	--	--	--	--	--
	Total	13	3	16		Total	13	4	17
S.E Fall Semester					S.E Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
MT-223	Ordinary Differential Equations & Fourier Series	3	0	3	MT-330	Applied Probability & Statistics	2	1	3
AU-241	Automotive Propulsion	3	1	4	IM-209	Mechanics of Materials	3	1	4
ME-222	Dynamics	3	0	3	ME-209	Materials & Metallurgy	3	1	4
AU-212	Computer Programming & Applications	2	1	3	EE-376	Feedback Control Systems	3	0	3
AU-225	Fundamentals of Analogue & Digital Electronics	2	1	3	ME-311	Manufacturing Processes	3	1	4
ES- 205/ ES-209	Islamic Studies/Ethical Behaviour	2	0	2	EA-200	Community Service	--	--	NC
	Total	15	3	18		Total	14	4	18

Vide Resolution No. SYN-213.6(a)(i) dated 12-08-2025

T.E Fall Semester					T.E Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
ME-317	Manufacturing Processes - II	3	1	4	MT-332	Advanced Calculus & Linear Algebra	3	0	3
ME-113	Computer Aided Drawing	0	1	1	MF-303	Applied Economics for Engineers	3	0	3
ME-302	Solid Mechanics - II	3	1	4	ME-323	Machine Design	3	0	3
ME-221	Fluid Mechanics – I	3	0	3	ME-318	Heat & Mass Transfer	3	0	3
ME-219	Mechanics of Machines	3	0	3	AU-323	Vehicle Noise & Vibrations	3	0	3
AU-332	Automobile Instrumentation	2	1	3	##-###	Foreign Language -I	--	--	NC
MG-481	Entrepreneurship	3	0	3	ME-437	Machine Design & Vibration Lab	0	1	1
	Total	17	4	21	AU-333	Chassis System Design	2	0	2
--	--	--	--	--	--	Total	17	1	18

B.E Fall Semester					B.E Spring Semester				
Course Code	Course Title	Credit Hours			Course Code	Course Title	Credit Hours		
		Th	Pr	Total			Th	Pr	Total
AU-424	Design for Manufacturing	2	0	2	AU-438	Electric & Hybrid Electric Vehicles	2	0	2
AU-###	Technical Elective – I	2	0	2	AU-430	Quality Management & Reliability	2	0	2
AU-425	Thermal Management for Automotive	2	0	2	AU-428	Automotive Health Safety & Environment	2	0	2
XX-###	Management Elective	2	0	2	AU-499	Automotive Engineering Project	0	3	3
ME-435	Operations Management	3	0	3	XX-###	Technical Elective – II	3	0	3
ME-316	Fluid Mechanics – II	3	1	4	EA-304	Business Communication & Ethics	3	0	3
AU-499	Automotive Engineering Project	0	3	3	AU-316	Vehicle Ride & Handling Lab	0	1	1
AU-331	Automotive Embedded Systems	2	0	2	MG/EA-###	Social Science (Elective)	2	0	2
AU-312	Modeling & Simulation Lab	0	1	1	AU-313	Combustion, Emission and Pollution	3	0	3
##-###	Foreign Language – II			NC	--	--	--	--	--
	Total	16	5	21	--	Total	17	4	21
						Total credit hours	--	--	150

Technical Electives

Course Code	Courses	Credit Hours		
		Th.	Pr.	Total
Technical Elective – I				
AU-422	Automotive Transmission & Drives	2	0	2
AU-429	Vehicle Development	2	0	2
AU-435	Automotive Vendor Development	2	0	2
AU-436	Automotive Structure Design	2	0	2

Course Code	Courses	Credit Hours		
		Th.	Pr.	Total
Technical Elective – II				
AU-417	Automotive Paints and Coatings	3	0	3
AU-442	FEM & FVM Applications in Automotive Engineering	2	1	3
AU-434	Automotive Service & Dealership	2	1	3
ME-438	AI & Internet of Things	2	1	3

Management Electives

Course Code	Courses	Credit Hours		
		Th.	Pr.	Total
IM-323	Project Management	2	0	2
MG-483	Supply Chain Management	2	0	2
ME-434	Total Quality Management	2	0	2

Social Science Electives

Course Code	Courses	Credit Hours		
		Th.	Pr.	Total
MG- 228	Sociology & Development	2	0	2
EA-321	Logic & Critical Thinking	2	0	2
MG- 257	Organizational Behavior	2	0	2

Vide Resolution No. SYN-213.6(a)(i) dated 12-08-2025



REGISTRAR

To,

Chairperson, Department of Automotive & Marine Engg.

Copy to:-

- 1- Dean (MME)
- 2- Controller of Examinations
- 3- Director, I.T. Department
- 4- Deputy Registrar (Cdn)
- 5- Assistant Registrar (Academic)

Copy for information to:-

- 1- PS to the Vice Chancellor
- 2- PA to Pro-Vice Chancellor
- 3- Director QEC