SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS)

VIDYA NAGAR, PALISSERY, KARUKUTTY – 683 576

DEPARTMENT OF AUTOMOBILE ENGINEERING

Curriculum for B.Tech. in Automobile Engineering

Branch Code - AU

(Group C)

2026 Scheme • Semesters S1 – S8

Vision

To be a nationally renowned department developing automobile technocrats through service learning, research, and innovation.

Mission

- Provide strong fundamentals and practical skills in Automobile Engineering.
- Promote service learning, research, and innovation in mobility technologies.
- Develop techno- leaders with ethics and lifelong learning skills.

Program Outcomes (POs)

- PO1: Engineering Knowledge: Apply math, science, computing, and engineering fundamentals to complex problems.
- PO2: Problem Analysis: Formulate and analyse complex engineering research and literature.
- PO3: Design/Development of Solutions: Design solutions considering public safety, cost, and net zero carbon goals.
- PO4: Conduct Investigations: Use research methods, experiment design, and data analysis for valid conclusions.
- PO5: Engineering Tool Usage: Select and apply modern engineering and IT tools with an understanding of limits.
- PO6: The Engineer and the World: Evaluate societal, health, legal, and environmental sustainability impacts
- PO7: Ethics: Apply professional ethics, human values, inclusivity, and legal compliance
- PO8: Individual and Collaborative Teamwork: Function effectively as an individual or team leader.
- PO9: Communication: Communicate and write effectively across diverse cultural and technical communities.
- PO10: Project Management and Finance: Apply management and economic principles in multidisciplinary settings.
- PO11: Life-Long Learning: Adapt to emerging technologies and engage in independent critical thinking.

Program Specific Outcomes (PSOs)

- Apply engineering basics to analyse and solve domain specific problems.
- Develop sustainable mobility solutions using Design and Simulation tools.
- Demonstrate skills in research, innovation, and service learning to address real-world engineering challenges.

Program Educational Objectives (PEOs)

- Graduates will apply engineering knowledge to solve global challenges in automobile domain.
- Graduates will develop sustainable mobility solutions through community engagement and research.
- Graduates will demonstrate ethical values, leadership qualities, and a commitment to lifelong learning in their professional careers.

ABBREVIATIONS & COURSE CATEGORIES

L – Lecture (hours)	T – Tutorial (hours)	P – Practical (hours)
SL – Self-Learning (hours)	MC - MOOC Course	Cr. - Credits
IAT-1 / IAT-2 – Internal Assessment 1 / 2	CIA – Continuous Internal Assessment	SEE – Semester End Examination
BSC – Basic Science Course	ESC – Engineering Science Course	PC / PCL – Programme Core / Programme Core Lab
PC-PBL – Programme Core – Project Based Learning	PE – Programme Elective	OE / ILE – Open Elective / Industry Linked Elective
HMC – Humanities Management Course	SEC – Skill Enhancement Course	HWP – Health & Wellness Programme
PWS – Project Work / Seminar	GC / UC / UE – Group Course / Universal Course/ Universal Elective	MOOC – Massive Open Online Course

SEMESTER 1 (S1)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26GYMAT101	BSC	GC	Matrices, Ordinary Differential Equations and Transforms	3	45	0	0	45	90	40	40	40	60	100
2	B	26GCPHT121 / 26GCCYT122	BSC	GC	Physics for Physical Science / Chemistry for Physical Science	4	45	0	30	45	120	40	40	40	60	100
3	C	26GCEST103	ESC	GC	Engineering Mechanics	3	45	0	0	45	90	40	40	40	60	100
4	D	26GCEST104	ESC	GC	Introduction to Mechanical and Civil Engineering	4	60	0	0	60	120	40	40	40	60	100
5	E	26UCEST105	ESC	UC	Programming in C	4	45	0	30	45	120	40	40	40	60	100
6	F	26GCESL106	ESC	GC	Basic Engineering Workshop	1	0	0	30	-	30	-	-	100	-	100
7	G	26UCHWT127	HWP	UC	Health and Wellness	1	0	0	30	0	30	-	-	50	-	50
		26UCHUT128	HMC		Life Skills and Professional Communication									100	-	100
8		26UCSEM129	SEC	UC	MOOC Course/Communicative English (8 Weeks)	0	0	0	0	0	0	-	-	-	-	-
TOTAL						**20**	**240**	**0**	**120**	**240**	**600**					
Bridge Course : Total 15 Hours																

SEMESTER 2 (S2)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26GYMAT201	BSC	GC	Partial Differential Equations and Vector Calculus	3	45	0	0	45	90	40	40	40	60	100
2	B	26GCPHT121 / 26GCCYT122	BSC	GC	Physics for Physical Science / Chemistry for Physical Science	4	45	0	30	45	120	40	40	40	60	100
3	C	26GCEST203	ESC	GC	Engineering Graphics	3	30	0	30	30	90	60	60	40	60	100
4	D	26PCAUT204	PC	PC	Automotive Engine Systems	4	45	15	0	60	120	40	40	40	60	100
5	E	26UCEST205	ESC	UC	Engineering Entrepreneurship & IPR	3	45	0	0	45	90	40	40	60	40	100
6	F	26GUESL206	ESC	GC	Basic Electrical and Electronics Engineering Workshop	1	0	0	30	-	30	-	-	100	-	100
7	G	26UCHWT127	HWP	UC	Health and Wellness	1	0	0	30	0	30	-	-	50	-	50
		26UCHUT128	HMC		Life Skills and Professional Communication							-	-	100	-	100
8		26UCSEM129	SEC	UC	MOOC Course/Communicative English (8 Weeks)	1	0	0	0	30	30	-	-	-	-	-
TOTAL						**20**	**210**	**15**	**120**	**255**	**600**					

SEMESTER 3 (S3)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26GYMAT301	BSC	GC	Complex Analysis and Integral Transforms	3	45	0	0	45	90	40	40	40	60	100
2	B	26PCAUT302	PC	PC	Automotive Chassis	3	45	0	0	45	90	40	40	40	60	100
3	C	26PCAUT303	PC	PC	Fluid Mechanics and Hydraulic Machines	4	45	15	0	60	120	40	40	40	60	100
4	D	26PBAUT304	PC-PBL	PB	Material Science and Metallurgy	4	60	0	0	60	120	40	40	60	40	100
5	E	26GCEST305	ESC	GC	Introduction to Electrical, Electronics and AI	3	45	0	0	45	90	40	40	40	60	100
6	F	26UCHUT346	HMC	UC	Economics for Engineers	2	30	0	0	30	60	40	40	50	50	100
		26UCHUT347			Engineering Ethics and Sustainable Development							-	-	50	50	100
7	G	26PCAUL307	PCL	PC	Fluid Mechanics and Machinery Lab	2	0	0	45	15	60	-	-	50	50	100
8	H	26PCAUL308	PCL	PC	Vehicle Systems Lab	2	0	0	45	15	60	-	-	50	50	100
9			SEC	MC	MOOC Course (8 Weeks)	0	0	0	0	0	0	-	-	-	-	-
TOTAL						**23**	**270**	**15**	**90**	**315**	**690**					
Bridge Course for Lateral Entry Students: Total 15 Hrs.																

SEMESTER 4 (S4)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT T-2	CIA	SEE	
1	A	26GCMAT401	BSC	GC	Probability Distributions and Numerical Methods	3	45	0	0	45	90	40	40	40	60	100
2	B	26PCMUT402	PC	PC	Mechanics of Solids	3	45	0	0	45	90	40	40	40	60	100
3	C	26PCAUT403	PC	PC	Thermodynamics and Heat Transfer	4	45	15	0	60	120	40	40	40	60	100
4	D	26PBAUT404	PC-PBL	PB	Industrial Manufacturing Process	4	60	0	0	60	120	40	40	60	40	100
5	E	26PEAUT41N	PE	PE	Program Elective-1	3/5	45	0	0	45/105	90/150	40	40	40	60	100
6	F	26UCHUT346	HMC	UC	Economics for Engineers	2	30	0	0	30	60	40	40	50	50	100
		26UCHUT347			Engineering Ethics and Sustainable Development							-	-	50	50	100
7	G	26PCAUL407	PCL	PC	Production Engineering Lab	2	0	0	45	15	60	-	-	50	50	100
8	H	26PCAUL408	PCL	PC	Thermal Engineering Lab	2	0	0	45	15	60	-	-	50	50	100
9			SEC	MC	MOOC Course (8 Weeks)	1	0	0	0	30	30	-	-	-	-	-
TOTAL						**24/26**	**270**	**15**	**90**	**345/405**	**720/780**					

SEMESTER 5 (S5)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26PCAUT501	PC	PC	Automobile Electrical and Electronics	3	45	0	0	45	90	40	40	40	60	100
2	B	26PCAUT502	PC	PC	Theory of Machines	4	45	15	0	60	120	40	40	40	60	100
3	C	26PCAUT503	PC	PC	Automotive Transmission	3	45	0	0	45	90	40	40	40	60	100
4	D	26PBAUT504	PC-PBL	PB	Computer Aided Design and Manufacturing	4	60	0	0	60	120	60	60	60	40	100
5	E	26PEAUT52N	PE	PE	Program Elective-2	3/5	45	0	0	45/105	90/150	40	40	40	60	100
6	F	26GCEST566	ESC	GC	Design Thinking and Product Development (Group specific)	2	30	0	0	30	60	40	40	40	60	100
		26UCHUT567	HMC	UC	Constitution of India											
7	G	26PCAUL507	PCL	PC	Automotive Electrical Lab	2	0	0	45	15	60	-	-	50	50	100
8	H	26PCAUL508	PCL	PC	Computer Aided Design and Analysis Lab	2	0	0	45	15	60	-	-	50	50	100
9			SEC	MC	MOOC (8 Weeks)	0	0	0	0	0	0	-	-	-	-	-
					TOTAL	**23/25**	**270**	**15**	**90**	**315/375**	**690/750**					

Industrial Visit: Maximum 12 days are permitted in S5/S6, not exceeding more than 6 working days.
Industrial Training: Students who are not participating in the industrial visit must attend industrial training during that period.

SEMESTER 6 (S6)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26PCAUT601	PC	PC	Hybrid and Fuel Cell Vehicles	3	45	0	0	45	90	40	40	40	60	100
2	B	26PCAUT602	PC	PC	Vehicle Stability and Dynamics	4	45	15	0	60	120	40	40	40	60	100
3	C	26PBAUT604	PC-PBL	PB	Automotive Component Design	4	60	0	0	60	120	40	40	60	40	100
4	D	26PEAUT63N	PE	PE	Program Elective-3	3/5	45	0	0	45/105	90/150	40	40	40	60	100
5	E	26OEAUT61N/ 26IEAUT611	OE/ ILE	OE/ IE	Open Elective -1/ Industry Linked Elective- 1	3	45	0	0	45	90	40	40	40	60	100
6	F	26GCEST566	ESC	GC	Design Thinking and Product Development (Group specific)	2	30	0	0	30	60	40	40	40	60	100
		26UCHUM567	HMC	UC	Constitution of India											
7	G	26PCAUL607	PCL	PC	Autotronics Lab	2	0	0	45	15	60	-	-	50	50	100
8	H	26PCAUP608	PWS	PC	Mini Project	2	0	0	45	15	60	-	-	50	50	100
9			SEC	MC	MOOC (8 Weeks)	1	0	0	0	30	30	-	-	-	-	-
					TOTAL	**24/26**	**270**	**15**	**90**	**345/405**	**720/780**					

Industrial Visit: Maximum 12 days are permitted in S5/S6, not exceeding more than 6 working days.
Industrial Training: Students who are not participating in the industrial visit must attend industrial training during that period.

***Note**: Open Electives are such courses which will be offered by other departments.*

SEMESTER 7 (S7)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26PEAUT74N / 26PEAUM74N	PE	PE	Program Elective-4 (Self Study/MOOC/Online)	3/5	45	0	0	45/105	90/150	40	40	40	60	100
2	B	26PEAUT75N / 26PEAUM75N	PE	PE	Program Elective-5 (Self Study/MOOC/Online)	3/5	45	0	0	45/105	90/150	40	40	40	60	100
3	C	26UEHUT71N / 26UEHUM71N	HMC	UE	HMC Elective (Self Study/MOOC/Online)	2	30	0	0	30	60	40	40	50	50	100
4	D	26OEAUT72N/ 26IEAUT721	OE/ILE	OE/IE	Open Elective-2 / Industry Linked Elective -2(Self Study/MOOC/Online)	3	45	0	0	45	90	40	40	40	60	100
5	E	26PCAUS705	PWS	PC	Seminar	2	0	0	45	15	60	-	-	50	-	50
6	F	26PCAUP706 / 26PCAUI706	PWS	PC	Option 1: Major Project Option 2: Internship (4-6 Months)	5	0	0	150	0	150	-	-	100	-	100
TOTAL						18/20/22	165	0	195	180/240/300	540/600/660					

SEMESTER 8 (S8)

Sl.	Slot	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Marks Distribution				Overall Marks
							L	T	P	SL		IAT-1	IAT-2	CIA	SEE	
1	A	26PEAUT86N / 26PEAUM86N	PE	PE	Program Elective-6 (Self Study/MOOC/Online)	3/5	45	0	0	45/105	90/150	40	40	40	60	100
2	B	26UCHUT802 / 26UCHUM802	HMC	UC	Organizational Behaviour and Business Communication (Self Study/MOOC/Online)	2	30	0	0	30	60	40	40	50	50	100
3	C	26OEAUT83N / 26OEAUM83N	OE	OE	Open Elective-3 (Self Study/MOOC/Online)	3	45	0	0	45	90	40	40	40	60	100
4	D	26PCAUP806 / 26PCAUI806 / 26PCAUJ806	PWS	PC	Option 1: Major Project Option 2: Internship (4-6 Months) Option 3: Major Project Phase II	5	0	0	150	0	150	-	-	100	0	100
TOTAL						13	120	0	150	120/180	390/450					

TOTAL PROGRAMME CREDITS (S1 – S8):

165 + Additional Credits from level 5 courses (if awarded) + 3 Credits from Activity Points

PROGRAMME ELECTIVES, OPEN ELECTIVES & HMC ELECTIVES

Note : *Level 5 courses in the B. Tech. curriculum carry a total of 5 credits, consisting of 3 credits for the Programme Elective and 2 additional credits. The additional 2 credits shall be awarded only if the student meets the eligibility conditions specified in the B. Tech. -2026 regulations. If those conditions are not fulfilled, the student will receive only 3 credits for the course.*

PROGRAM ELECTIVE-1

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT411	PE	PE	Automobile Maintenance and Repair	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT412	PE	PE	Hydrogen Fuel Cell Vehicles	3	45	0	0	45	90	40	40	40	60	100
3	26PEAUT415	PE	PE	Automotive Air Conditioning	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT416	PE	PE	Automotive Sensors and Actuators	3	45	0	0	45	90	40	40	40	60	100
5	26PEAUT417	PE	PE	Automotive Business Management	5/3	45	0	0	45	90	40	40	40	60	100

PROGRAM ELECTIVE-2

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT521	PE	PE	Vehicle Inspection and Testing	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT522	PE	PE	Sustainable Mobility Systems	3	45	0	0	45	90	40	40	40	60	100
3	26PEAUT523	PE	PE	Thermal Management in Electric Vehicles	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT524	PE	PE	ADAS (Advanced Driver Assistance Systems)	3	45	0	0	45	90	40	40	40	60	100
5	26PEAUT525	PE	PE	Production Planning and Control	5/3	45	0	0	45	90	40	40	40	60	100

PROGRAM ELECTIVE-3

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT631	PE	PE	Automotive Service Management	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT632	PE	PE	Smart Mobility and Shared Transportation	3	45	0	0	45	90	40	40	40	60	100
3	26PEAUT633	PE	PE	Refrigeration and Air Conditioning	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT634	PE	PE	Autonomous Vehicle Technology	3	45	0	0	45	90	40	40	40	60	100

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
5	26PEAUT635	PE	PE	Total Quality Management (TQM)	5/3	45	0	0	45	90	40	40	40	60	100

PROGRAM ELECTIVE-4

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT741	PE	PE	Reliability and Maintenance Engineering	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT742	PE	PE	Green Manufacturing	3	45	0	0	45	90	40	40	40	60	100
3	26PEAUT745	PE	PE	Computational Fluid Dynamics for Automobiles	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT746	PE	PE	Vehicle-to-Everything (V2X) Communication	3	45	0	0	45	90	40	40	40	60	100
5	26PEAUT747	PE	PE	Human Resource Management	5/3	45	0	0	45	90	40	40	40	60	100

PROGRAM ELECTIVE-5

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT751	PE	PE	Condition Monitoring and Predictive Maintenance	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT752	PE	PE	Circular Economy in Automotive Engineering	3	45	0	0	45	90	40	40	40	60	100
3	26PEAUT753	PE	PE	Vehicle Aerodynamics	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT754	PE	PE	Intelligent Transportation Systems	3	45	0	0	45	90	40	40	40	60	100
5	26PEAUT755	PE	PE	Supply Chain and Logistics Management	5/3	45	0	0	45	90	40	40	40	60	100

PROGRAM ELECTIVE-6

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26PEAUT861	PE	PE	Automotive Cyber security and Data Privacy	3	45	0	0	45	90	40	40	40	60	100
2	26PEAUT862	PE	PE	Noise, Vibration and Harshness (NVH) Engineering	3	45	0	0	45	90	40	40	40	60	100

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
3	26PEAUT863	PE	PE	Battery Management Systems and EV Charging Infrastructure	3	45	0	0	45	90	40	40	40	60	100
4	26PEAUT864	PE	PE	Automotive Lightweight Materials and Composite Structures	3	45	0	0	45	90	40	40	40	60	100
5	26PEAUT865	PE	PE	Digital Twin and Industry 4.0 in Automotive Manufacturing	5/3	45	0	0	45	90	40	40	40	60	100

OPEN ELECTIVE-1

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26OEAUT611	OE/ILE	OE	Automated Guided and Autonomous Vehicles	3	45	0	0	45	90	40	40	40	60	100
2	26OEAUT612	OE/ILE	OE	Modern Automotive Technologies	3	45	0	0	45	90	40	40	40	60	100
3	26OEAUT614	OE/ILE	OE	Special Types of Vehicles	3	45	0	0	45	90	40	40	40	60	100

OPEN ELECTIVE-2

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26OEAUT721	OE/ILE	OE	Electric and Hybrid Vehicle	3	45	0	0	45	90	40	40	40	60	100
2	26OEAUT722	OE/ILE	OE	Automotive Ergonomics and Safety	3	45	0	0	45	90	40	40	40	60	100
3	26OEAUT723	OE/ILE	OE	Vehicle Aerodynamics	3	45	0	0	45	90	40	40	40	60	100

OPEN ELECTIVE-3

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26OEAUT831	OE/ILE	OE	Industrial Revolution X	3	45	0	0	45	90	40	40	40	60	100
2	26OEAUT832	OE/ILE	OE	Solar Energy Conservation Systems	3	45	0	0	45	90	40	40	40	60	100
3	26OEAUT833	OE/ILE	OE	Computational Heat Transfer	3	45	0	0	45	90	40	40	40	60	100

HMC ELECTIVE-1

Sl.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT-1	IAT-2			
1	26UEHUT711	HMC	UE	Project Management: Planning, Execution, Evaluation and Control	2	30	0	0	30	60	40	40	50	50	100
2	26UEHUT712	HMC	UE	Proficiency course in Foreign Language (MOOC only)	2	0	0	0	60	60	-	-	-	-	100
3	26UEHUT713	HMC	UE	Financial Management	2	30	0	0	30	60	40	40	50	50	100

MINOR PROGRAM - Electric & Hybrid Vehicle Technology

Sem.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT1	IAT2			
S3	26MNAUT309	MN	MN	Fundamentals of Electric and Hybrid Vehicles/MOOC	4	45	15	0	60	120	40	40	40	60	100
S4	26MNAUT409	MN	MN	Energy Storage Devices/MOOC	4	45	15	0	60	120	40	40	40	60	100
S5	26MNAUT509	MN	MN	Electric Drives and Controllers	4	45	15	0	60	120	40	40	40	60	100
S6	26MNAUT609	MN	MN	EV Electronics, Protocols and Testing	4	45	0	0	45	90	40	40	40	60	100
				TOTAL	**15**										

Slot M is assigned to Minor Examinations in the respective semesters.

HONOURS PROGRAM

Sem.	Course Code	Type	Cat.	Course Title	Cr.	Hour Structure				Total Hrs.	Internal Test		CIA	SEE	Overall Marks
						L	T	P	SL		IAT1	IAT2			
S4	26HNAUT409	HN	HN	Advanced Materials and Sustainable Manufacturing	4	45	15	0	60	120	40	40	40	60	100
S5	26HNAUT509	HN	HN	Electric Vehicle Powertrain and Battery Management Systems / MOOC	4	45	15	0	60	120	40	40	40	60	100
S6	26HNAUT609	HN	HN	Automotive Embedded Systems and IoT / MOOC	4	45	15	0	60	120	40	40	40	60	100
S7	26HNAUT709	HN	HN	Artificial Intelligence in Automotive Systems / MOOC	3	45	15	0	60	120	40	40	40	60	100
				TOTAL	**15**										

Slot N is assigned to Honours Examinations in the respective semesters.

Activity Points					
Sl. No.	**Group**	**Activities**	**Point**	**Credit**	**Minimum Credit Requirements**
Participation					**3 Credits (One credit from each Group)**
1	I	Short Term Internship (Minimum 2 weeks offline).	10 points	1 Credit for 40 Points	
2		Industrial Training (Minimum 2 weeks).	10 points		
3		Attending Conference (Within Institute or outside).	5 points		
4		Attended Conference with Paper Presentation (Within Institute or outside).	10 points		
5		Attended Workshops/STTP (Totalling 5 days of all programs per semester).	5 points per semester		
6		Professional Body member.	5 points		
7		Participation in Club activity within institutions.	2 points		
8		Participation in Inter/Intra college Hackathons/project competitions/ Technical festivals/Technical Events.	5 points per event		
9		Participation in Industrial Visit organized as per S5/S6 curriculum.	10 points		
10		Participation in GATE/National Exams (On submission of score card/result).	10 points		
11		Participation in IEDC Activities (minimum 2 activities per year).	10 points per year		
12		MOOC certification on Indian knowledge systems (IKS).	10 points		
Technical/ Academic/Co-Curricular Achievements					
1	II	Journal/Conference Publication.	40 points per publication	1 Credit for 40 Points	
2		Patent Publishing.	40 points per publication		
3		Department/College owned Magazine/newsletter publication.	5 points per year		
4		Winners in Inter/Intra college Hackathons/ project competitions/ Technical festivals/Technical Events.	20 points per win		
5		Winners of Club Activities (college level).	10 points per win		
6		Academic achievement (Above 9 SGPA in any semester).	20 points		
7		Silver or above certification in any NPTEL/SWAYAM MOOCs.	20 points for each MOOC		
8		Aptitude Proficiency Certification (GRE, CAT, GMAT etc.)/ Valid Gate Score.	40 points for every single score		
9		Funded Projects.	40 points per funded project		
10		Individual Start-up/Entrepreneurship activity validated by the department.	20 points (per year)		
11		Elected Student Representatives of Club/University/National/International Technical Bodies.	20 points		
12		Foreign Language Skill (TOEFL/IELTS/BEC exams).	20 points per score		
13		International Internship.	40 points		
14		Coordinators of Editorial board/Club/University/National Technical events.	10 points per year		
Extracurricular					
1	III	NSS, NCC, NSO (National Sports Organization) (minimum 2 years of activity done as member)	40 points	1 Credit for 40 Points	
2		Arts/Sports/Games: (Multiply by 2 for University level, Multiply by 3 for state level, Multiply by 4 for national level)	5 points for Participation per year		
			10 points for winning in any event per year		

			10 points for coordinating any event per year		
3		Union Activities	5 points for Participation in Election as a voter per year		
			10 points for Standing in Election as a candidate per year (must have come in top 5 in election result within the category)		
			15 points for Elected members		
4		Participation Social outreach program (initiated or approved by Department/College/NSS/Government bodies/professional bodies)	5 points per certificate		