

Curriculum

Semester – I

Type	Code	Course Name	L	T	P	Credits
FC	26AL601	Data Science for Automotive Applications	3	0	0	3
FC	26AL602	Automotive Systems	3	0	2	4
FC	26AL603	E/E Architecture	3	0	0	3
SC	26AL604	Embedded Systems Design	3	0	0	3
SC	26AL605	Electric Vehicles	3	0	0	3
SC	26AL606	Automotive Control Systems	3	0	0	3
SC	26AL681	Data Science Lab	0	0	3	1
SC	26AL682	Embedded Systems Lab	0	0	3	1
HU	22ADM501	Glimpses of Indian Culture	0	0	3	P/F
HU	23HU601	Career Competency- I	0	0	3	P/F
HU	25AVP501	Mastery Over Mind (MAOM)	1	0	2	2
		Total	19	0	16	23

Semester – II

Type	Code	Course Name	L	T	P	Credits
SC	26AL611	Advanced Embedded Systems	3	0	0	3
SC	26AL612	Automotive Systems Engineering & Safety	3	0	0	3
SC	26RM604	Research Methodology	2	0	0	2
E	—	Elective - 1	3	0	0	3
E	—	Elective - 2	3	0	0	3
E	—	Elective - 3	3	0	0	3
SC	26AL683	Advanced Embedded Systems Lab	0	0	3	1
SC	26AL684	Systems Engineering Lab	0	0	3	1
SC	26AL685	Open Lab	0	0	3	1
HU	23HU611	Career Competency – II	0	0	3	1
SC	26AL698	Industry Internship*	0	0	2	1
		Total	17	0	14	22

*The internship will be during the break between the second and third semesters. This will be evaluated based on a viva-voce and a written report.

Semester – III

Type	Code	Course Name	L	T	P	Credits
P	26AL798	Dissertation- Phase I	0	0	30	10
		Total	0	0	30	10

Semester – IV

Type	Code	Course Name	L	T	P	Credits
P	26AL799	Dissertation- Phase I	0	0	45	15
		Total	0	0	45	15

Total Credits :70**Electives****Domain – Software Defined Vehicles**

Type	Code	Course Name	L	T	P	Credits
E	26AL731	Advanced Communication Systems	3	0	0	3
E	26AL732	Software Defined Vehicles	3	0	0	3
E	26AL733	Connected Vehicles and Security	3	0	0	3

Domain – Advanced Driver Assistance Systems (ADAS)

Type	Code	Course Name	L	T	P	Credits
E	26AL741	Deep Learning and Applications	3	0	0	3
E	26AL742	Perception and Control for Autonomous Driving	3	0	0	3
E	26AL743	Sensing for Autonomous Vehicles	3	0	0	3

Domain – Electrification

Type	Code	Course Name	L	T	P	Credits
E	26AL751	Battery and Battery Management Systems in EV	3	0	0	3
E	26AL752	Control of Power Converters and Electrical Drives	2	0	2	3
E	26AL753	Power Converters for Automotive Applications	2	0	2	3
