



**MIT ART, DESIGN AND
TECHNOLOGY UNIVERSITY, PUNE**

MIT SCHOOL OF ENGINEERING, PUNE

STRUCTURE

FOR

M. Tech

Electric Vehicles (EV)

UNDER FACULTY OF TECHNOLOGY

(w.e.f. 2020-2021)

M. Tech. Electric Vehicles (EV)
(2020 Regulations) Credits to be earned: 74

SEMESTER-I

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
19MTMT106*	Advanced Engineering Mathematics	3	1	0	4	40	60	100
20MTEV102	IC Engine and Electric Motors	3	0	0	3	40	60	100
20MTEV103	Energy Storage systems and Management	4	0	0	4	40	60	100
19MTMD104*	Research Methodology	3	0	0	3	40	60	100
20MTEV105	Automotive Technology	4	0	0	4	40	60	100
20MTEV111	Lab Practice – I	0	0	4	2	40	60	100
20MTEV121	Technical Seminar – I	0	0	4	2	40	60	100
Total		17	1	8	22	280	420	700

Note: * Course common for all M. Tech - Mechanical Specializations

SEMESTER-II

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
20MTEV201	Power Electronics and Controls	3	0	0	3	40	60	100
20MTEV202	Vehicle Design for e-Powertrain	4	0	0	4	40	60	100
20MTEV203	Fundamentals of Computational Fluid Dynamics	3	0	2	4	40	60	100
20MTEV204	Vehicle Dynamics & Aerodynamics	4	0	0	4	40	60	100
20MTEV205	Automotive safety & Lighting	4	0	0	3	40	60	100
20MTEV211	Lab Practice – II	0	0	4	2	40	60	100
Total		18	00	06	20	240	360	600

SEMESTER-III

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
20MTEV321	Technical Seminar-II	0	0	4	2	40	60	100
20MTEV322	Research Project – I	0	0	26	13	100	100	200
Total		0	0	30	15	140	160	300

SEMESTER-IV

Course Code	Course Name	Hours/week				Maximum Marks		
		Lecture	Tutorial	Practical	Credits	CA	FE	Total
20MTEV421	Research Project – II	0	0	34	17	100	200	300
Total		0	0	34	17	100	200	300

CA = Continuous Assessment, FE= Final Examination,

**Final Lab exam will be conducted with viva-voce of the respective practical (50 exam +10 viva = 60)