

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
BELAGAVI**



**Scheme of Teaching and Examinations  
M.Tech. in Electrical & Electronics Engineering  
(Electric Vehicle Technology)**

Choice Based Credit System (CBCS) and Outcome Based Education (OBE)

### Specialization in –(Electric Vehicle Technology)

#### II SEMESTER

Sl. No	Course	Course Code	Course Title	Teaching Hours /Week			Examination				Credits
				Theory	Practical/ Seminar	Tutorial/ Skill Development Activities	Duration in hours	CIE Marks	SEE Marks	Total Marks	
				L	P	T/SDA					
1	PCC/PEC/ MDC/PCC(PB) /IPCC	MEVT201	Power Electronic Converters	3	0	0	03	50	50	100	3
2		MEVT202	Modeling & Simulation of EV	3	2	0	03	50	50	100	4
2		MEVT203	Vehicle Dynamics	3	0	0	03	50	50	100	3
3		MEVT204	EV Motor drives and control	3	0	0	03	50	50	100	3
4		MEVT215	ELECTIVE -III	3	0	0	03	50	50	100	3
5		MEVT216	ELECTIVE -IV	3	0	0	03	50	50	100	3
6	PCCL	MEVTL207	EV Motor drives and control Lab	0	2	2	03	50	50	100	2
7	AEC/SEC	24EVT27x	Ability/Skill Enhancement Course (Offline/Online)	00	02	---	02	50	50	100	1
				01	00	----	01				
<b>TOTAL</b>								<b>400</b>	<b>400</b>	<b>800</b>	<b>22</b>

Note: **PCC**: Professional core. **IPCC**-Integrated Professional Core Courses, **PCC(PB)**: Professional Core Courses (Project Based), **PCCL**- Professional Core Course lab, **PEC**- Professional Elective Courses, **MDC**- Multi-Disciplinary Courses  
**L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities** (Hours are for Interaction between faculty and students)  
**L-Lecture, P-Practical, T/SDA-Tutorial / Skill Development Activities** (Hours are for Interaction between faculty and students) **PBLC**: Project Based Learning Course,  
 Note: **xxx** means specialization code for example **MDE- Design Engineering, LDN-** Digital Communication and Networking, **SCE-** Computer Engineering, **CCT-** Construction Technology, **AUD-** Urban Design, **MBA-** Master of Business Administration, **MCA-**Master of Computer Application, etc

Ability / Skill Enhancement Courses					
Course Code	Course title	L	T/SDA	P	
24EVT271	Refer <a href="http://www.online.vtu.ac.in">www.online.vtu.ac.in</a>				
24EVT272	Refer <a href="http://www.online.vtu.ac.in">www.online.vtu.ac.in</a>				
24EVT273	Refer <a href="http://www.online.vtu.ac.in">www.online.vtu.ac.in</a>				
24EVT274	Refer <a href="http://www.online.vtu.ac.in">www.online.vtu.ac.in</a>				
<p><b>Ability Enhancement Courses (AEC):</b> These courses are designed to help students enhance their skills in communication, language, and personality development. They also promote a deeper understanding of subjects like social sciences and ethics, culture and human behaviour, human rights, and the law.</p> <p><b>Skill Enhancement Course (SEC):</b> Skill Enhancement Course means a course designed to provide value-based or skill-based knowledge and should contain both theory and lab/hands-on/training/fieldwork. The main purpose of these courses is to provide students with life skills in the hands-on mode to increase their employability.</p> <p><b>If AEC/SEC courses are ONLINE (MOOCs) courses</b> suggested by the concerned board of studies. These courses will be made available on <a href="http://www.online.vtu.ac.in">www.online.vtu.ac.in</a>, however online courses are not considered for vertical progression, but qualifying in online courses is mandatory for the award of the degree.</p>					
Specialization		Specialization			
Course Code	Course Title	Course Code	Course Title		
MEVT215A	EVs in Smart Grid	MEVT216A	Automotive Electronics for EVs		
MEVT215B	Energy Storage Systems for Electrical Vehicle	MEVT216B	Microcontrollers and Embedded System for EVs		
MEVT215C	Thermal Management of Electric Vehicles	MEVT216C	IoT and Vehicle Communication		
MEVT215D	Electric Charging Systems for Electrical Vehicles	MEVT216D	Sensors for EV Systems		