



(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

Department of Electrical and Electronics Engineering

Date: 14.06.2025

MINUTES OF BOARD OF STUDIES MEETING

Board of Studies (BoS) meeting of M.Tech., Electric Vehicle Technology (EVT) program was conducted on 14.06.2025 in virtual mode from 10.00 am to 4.00 pm.

All the internal members of VFSTR attended the meeting in person while all the external members participated the meeting virtually with link:

Google Meet joining info: <https://meet.google.com/hvh-epux-hsn>

Agenda of the BoS Meeting:

- Ratification of Course Structure under R-25 Regulation
- Ratification of Syllabi for Professional Core, Department Electives and Add-on-course.
- Any other points with the permission of Chairperson.

The following members were present

Sl. No	Name of the Member	Designation and Address	Role
1	Dr. K. Mercy Rosalina	Professor	Chairperson
2	Dr. Jithendranath J.	Senior Project Engineer, Hitachi Energy Technology Services P. Ltd., Grid and Power Quality Solutions, Chennai Mobile: +91-9949537586 Email: jithendranath.j@hitachienergy.com	External Member (Industry)
3	Dr. B. Satish Babu	Sr. Staff Engineer, Infineon Technologies, Bangalore, Phone: 9958006750 Email: satishbabu.bhogineni@infineon.com	Invited Member (External)
4	Dr. Polamraju V. S. Sobhan	Associate Professor	Internal Member
5	Dr. Y. Srinivasa Rao	Associate Professor	Internal Member
6	Dr. K. Rachananjali	Associate Professor	Internal Member
7	Dr. A. R. Vijay Babu	Associate Professor	Invited Member (Assoc. Prof.)
8	Mr. K. Ashok Kumar	Assistant Professor, VFSTR Deemed to be University, Off Campus	Internal Member
9	Dr. K. Chakravarthi	Assistant Professor (BoA), Department of EEE, VFSTR	Member Secretary

In the beginning of the meeting the Chairperson of the BoS, Dr. K. Mercy Rosalina, Professor, department of EEE welcomed all the members and briefed them about the progress of the Department.

The following are the views expressed by the external members:

Dr. Jithendranath J.

- Suggested to include communication systems course to the Programme
- Suggested to change module-2 chapter-1 title as Battery management systems in the course "EV storage system and technologies"
- suggested to add the EV dynamics to in the course "advanced modelling and control of electric mobility systems"
- appreciated the self-learning concept introduced in the present regulation

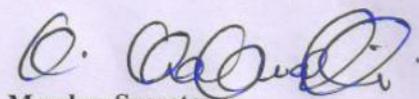
Dr. B. Satish Babu

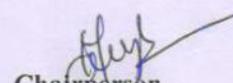
- Suggested to change the module-2, chapter 1 title of course "EV system architecture design and integration" as "vehicle control unit".
- Suggested to modify name of the course as "Autonomous E-mobility systems" instead of "intelligent autonomous e-mobility system"
- Suggested to remove few topics from course "intelligent sensor system for electric mobility" as they are present in other courses.
- appreciated the self-learning concept introduced in the present regulation

The following resolutions made after the discussion:s

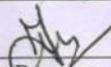
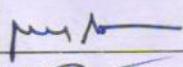
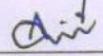
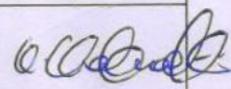
- BoS members approved the revised regulations, curriculum structure, and syllabus of the M.Tech. EVT programme, which is aligned with NEP 2020. The curriculum structure is provided in Appendix-A.
- A major restructuring has been implemented in the curriculum, emphasizing continuous learning, self-learning, and module-based assessment.
- The curriculum includes courses that promote employability, entrepreneurship, and skill development, as detailed in Appendix-B.
- Substantial changes have been made to the content of all courses; therefore, they are considered new courses, as listed in Appendix-C.
- On average, 35% of the syllabus has been revised compared to the previous curriculum.

The Chair rendered the closing remarks by thanking all the external members and internal members for their participation.

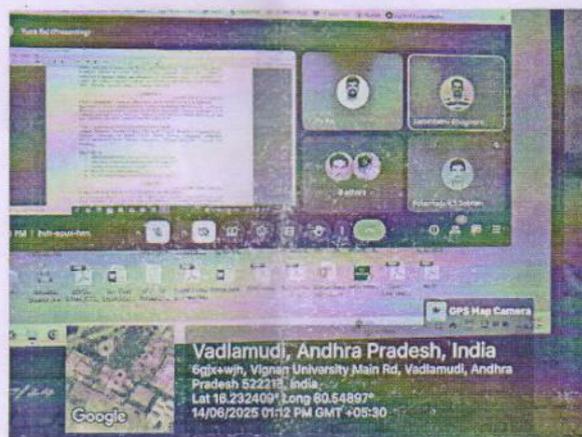
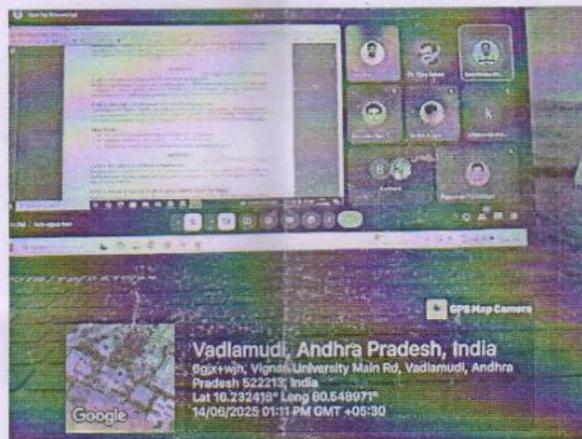
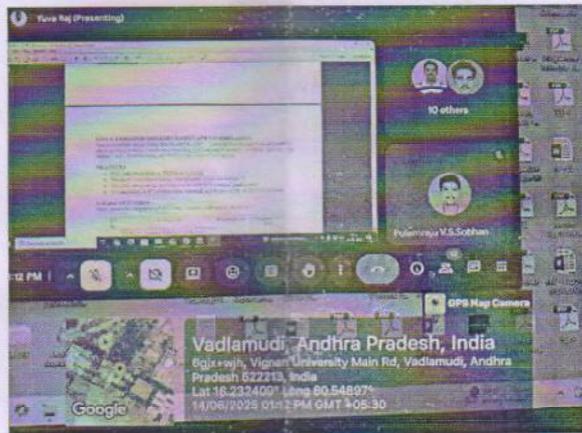

Member Secretary

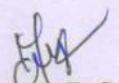

Chairperson

The following are the members present for the board of studies meeting held at Department of Electrical and Electronics Engineering on 24.05.2025

Sl. No	Name of the Member	Designation and Address	Signature
1	Dr. K. Mercy Rosalina	Professor	
2	Dr. Narasimharaju B. L	Professor, Department of Electrical Engineering, NIT Warangal Phone: 9448401052, 08702462247 Email: blnraju@nitw.ac.in , narasimharaju.bl@gmail.com	Not Present
3	Dr. Jithendranath J.	Senior Project Engineer, Hitachi Energy Technology Services P. Ltd., Grid and Power Quality Solutions, Chennai Mobile: +91-9949537586 Email: jithendranath.j@hitachienergy.com	Participated the Meeting Virtually
4	Dr. B. Satish Babu	Sr. Staff Engineer, Infineon Technologies, Bangalore Phone: 9958006750 Email: satishbabu.bhogineni@infineon.com	Participated the Meeting Virtually
5	Dr. Polamraju V. S. Sobhan	Associate Professor	
6	Dr. Y. Srinivasa Rao	Associate Professor	
7	Dr. K. Rachananjali	Associate Professor	
10	Dr. A. R. Vijay Babu	Associate Professor	
11	Mr. P. Ashok Kumar	Assistant Professor, VFSTR Deemed to be University, Off Campus	online
12	Dr. K. Chakravarthi	Assistant Professor (BoA), Department of EEE, VFSTR	

PHOTOS




Chairman, BoS

APPENDIX A
M.Tech- Power Electronic Drives
Course Structure- R25 Regulation
M.Tech. – Electric Vehicle Technology (EVT)

Pre - Semester

Course Code	Title of the course	L	T	P	SL	C	Course type
	Orientation Session					1	Binary graded
	IT workshop and cyber security					1	Binary graded
	Total					2	

I Year I Semester

Course Code	Title of the course	L	T	P	SL	C	Course type
1	EV Systems Architecture Design and Integration	2	2	2	2	4	Professional Core
2	EV Energy Storage Systems and Technologies	2	2	2	2	4	Professional Core
3	Power Converters for Electric Vehicles	3	0	2	3	4	Professional Core
	Department Elective					4	Elective
	Teaching Assistantship					1	Binary graded
	Indian Knowledge System					1	Binary graded
	Work-in-lieu of a course*					2	Elective & Floating Credit
	Sub Total					20	
	Add on course -1					3	
	Total					23	

I Year II Semester

Course Code	Title of the course	L	T	P	SL	C	Course type
4	Autonomous E-Mobility Systems	2	2	2	2	4	Professional Core
5	EV Powertrain and System Integration	3	0	2	3	4	Professional Core
	Department Elective					4	Elective
	Department Elective					4	Elective
	Research Methodology & IPR					2	Interdisciplinary
	Interdepartmental Project					1	Project
	Teaching Assistantship					1	Binary graded
	Sub Total					20	
	Add on course -2					3	
	Total					23	

II Year I Semester

Course Code	Title of the course	L	T	P	SL	C	Course type
	Project/Internship					13	Project
	Sub Total					13	
	Add on course -3 (MOOCs Course)					3	
	Total					16	

II Year II Semester

Course Code	Title of the course	L	T	P	SL	C	Course type
	Project/Internship					13	Project
	Sub Total					13	
	Add on course -4 (MOOCs Course)					3	
	Total					16	

DEPARTMENT ELECTIVES

Course Code	Title of the course	L	T	P	SL	C	Course type
6	Machine Learning Techniques	3	2	0	3	4	Department Elective
7	Advanced Control Systems	3	0	2	3	4	Department Elective
8	Computational Methods for Optimization	2	2	2	2	4	Department Elective
9	Soft Computing Techniques	3	2	0	3	4	Department Elective
10	EV Testing Procedures and Regulatory Compliance	3	0	2	2	4	Department Elective
11	Battery Management System in Electric Vehicles	3	0	2	2	4	Department Elective
12	Advanced Modelling and Control of Electric Mobility Systems	2	2	2	2	4	Department Elective
13	Advanced Thermal management for E-Mobility	3	0	2	2	4	Department Elective
14	Intelligent Sensor Systems for Electric Mobility	2	2	2	2	4	Department Elective

Add on Courses

Course Code	Title of the course	L	T	P	SL	C	Course type
15	IoT Applications in Electrical Engineering	2	2	0	2	3	Add on Course
16	Smart Automation Systems	2	2	0	2	3	Add on Course
17	Smart Grid Technologies	2	2	0	2	3	Add on Course
18	Embedded and Communication Systems for Electric Vehicles	2	2	0	2	3	Add on Course

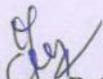

 Chairman, BOS

APPENDIX – B

List of courses that enable employability or entrepreneurship or skill development in the R25 Regulation

M.Tech – Electric Vehicle Technology (EVT)

Sl.	Course Name	Employability / Skill Development / Entrepreneurship	Percentage of change
1	EV Systems Architecture Design and Integration	Professional Core	
2	EV Energy Storage Systems and Technologies	Professional Core	
3	Power Converters for Electric Vehicles	Professional Core	
4	Intelligent Autonomous E-Mobility Systems	Professional Core	
5	EV Powertrain and System Integration	Professional Core	
6	Machine Learning Techniques	Department Elective	
7	Advanced Control Systems	Department Elective	
8	Computational Methods for Optimization	Department Elective	
9	Soft Computing Techniques	Department Elective	
10	EV Testing Procedures and Regulatory Compliance	Department Elective	
11	Battery Management System in Electric Vehicles	Department Elective	
12	Advanced Modelling and Control of Electric Mobility Systems	Department Elective	
13	Advanced Thermal management for E-Mobility	Department Elective	
14	Intelligent Sensor Systems for Electric Mobility	Department Elective	
15	IoT Applications in Electrical Engineering	Add on Course	
16	Smart Automation Systems	Add on Course	
17	Smart Grid Technologies	Add on Course	
18	Embedded and Communication Systems for Electric Vehicles	Add on Course	


Chairman, BoS

APPENDIX – C

List of new courses in the R25 Regulation M.Tech – Electric Vehicle Technology

Sl.	Course Name
1.	EV Systems Architecture Design and Integration
2.	EV Energy Storage Systems and Technologies
3.	Power Converters for Electric Vehicles
4.	Intelligent Autonomous E-Mobility Systems
5.	EV Powertrain and System Integration
6.	Machine Learning Techniques
7.	Advanced Control Systems
8.	Computational Methods for Optimization
9.	Soft Computing Techniques
10.	EV Testing Procedures and Regulatory Compliance
11.	Battery Management System in Electric Vehicles
12.	Advanced Modelling and Control of Electric Mobility Systems
13.	Advanced Thermal management for E-Mobility
14.	Intelligent Sensor Systems for Electric Mobility
15.	IoT Applications in Electrical Engineering
16.	Smart Automation Systems
17.	Smart Grid Technologies
18.	Embedded and Communication Systems for Electric Vehicles


Chairman, BoS