



RAJARAJESWARI COLLEGE OF ENGINEERING

(An Autonomous Institution Approved by UGC under Visvesvaraya Technological University* and Approved by AICTE, New Delhi)

#14, Ramohalli Cross, Kumbalaguda, Mysuru Road, Bengaluru-560074.

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

NBA

CSE, ECE, ISE



Department of Electrical and Electronics Engineering

VALUE ADDED COURSE/SKILL TRAINING

on

DESIGN AND DEVELOPMENT OF ELECTRIC VEHICLE



DATE

29/04/2025 to 03/05/2025



TIME

09:00 AM - 04:00 PM



VENUE

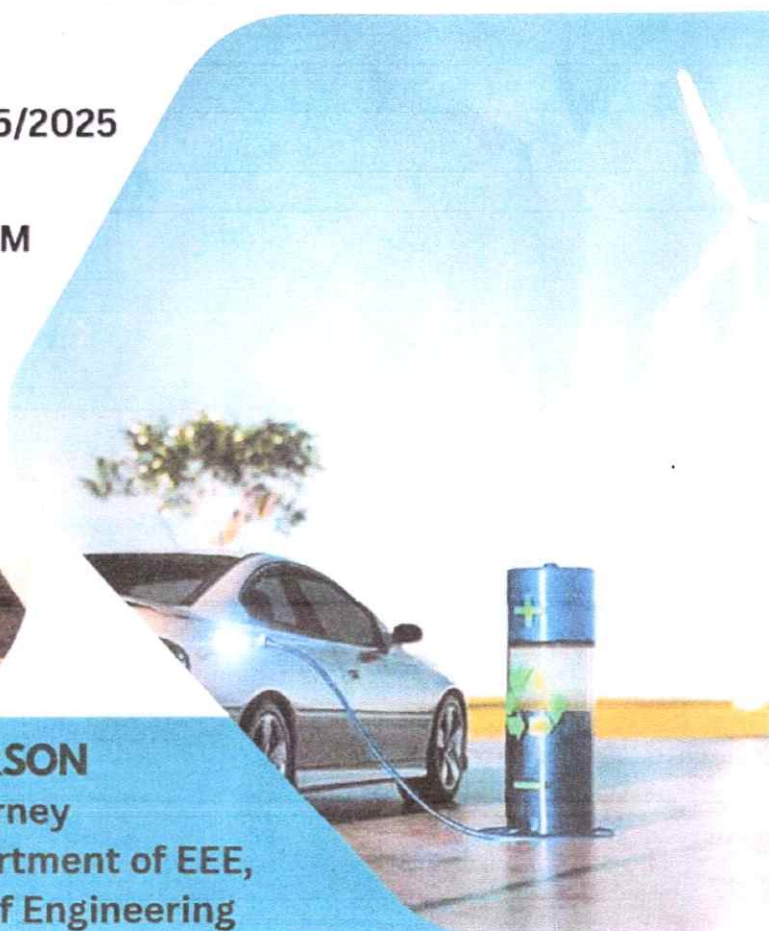
EEE Lab



RESOURCE PERSON

Dr.P.Ebby Darney

**Professor & Head, Department of EEE,
Rajarajeswari college of Engineering**



**Dr.R.Arul Jose
COORDINATOR**

**Dr.P.Ebby Darney
HOD-EEE**

**Dr.R.Balakrishna
PRINCIPAL**

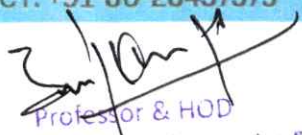
ADMISSION OPEN FOR 2024-2025

CET CODE: E145 COMED-K: E099 PG CET: T858

CONTACT: +91-80-28437375

www.rrce.org

Email Id: admission@rrce.org


Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74


Principal
RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

Date: 17/04/2025

CIRCULAR

Event Name : Value Added Course / Skill Training on "Design and Development of Electric Vehicle"
Date : 29th April to 3rd May 2025
Venue & Time : EEE Lab / 09:00 AM to 04:00 PM
Trainer : Dr.P.Ebby Darney
Professor & Head
Department of EEE
Rajarajeswari College of Engineering.

We are pleased to announce a **5-day Value Added Course on "Design and Development of Electric Vehicle"** aimed at enhancing practical and theoretical knowledge in the emerging field of electric mobility. This skill training program will cover key aspects of EV design including battery technologies, motor control, powertrain systems, embedded systems, and IoT applications.

This course provides an excellent opportunity for students to gain hands-on experience and industry-relevant knowledge in the EV sector, which is rapidly growing in India and globally.

Registration Deadline: 25th April 2025

Eligibility: Open to III & IV Year EEE students

Seats: Limited – First come, first served!

We encourage all eligible students to make the most of this opportunity and actively participate in this enriching and skill-enhancing program.

Event Coordinator

Dr.R.Arul Jose

Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Principal

RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74

HoD

Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Campus: #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074

Phone: +91-80-28437124 / 28437375

Email Id: hodeec@rrce.org

Website: <https://www.rrce.org>



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST




Department of Electrical & Electronics Engineering

Date: 17/04/2025


SCHEDULE


Event Name : Value added course/Skill training on "Design and Development of Electric Vehicle"
Date : 29th April to 3rd May 2025
Venue & Time : EEE Lab / 09:00am to 04:00pm
Trainer : Dr.P.Ebby Darney
Professor & Head
Department of EEE
Rajarajeswari College of Engineering.

Day	Topics
Day 1	Introduction to EVs & Industry Scenario
Day 2	Powertrain and Battery Technology
Day 3	Electric Motor Control & Simulation
Day 4	Embedded System and IoT in EV
Day 5	EV Battery & Control


Event Coordinator
Dr.R.Arul Jose


Principal
RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74


HoD
Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74


Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Campus: #14, Ramohalli Cross, Kumbalgodu, Mysore Road, Bengaluru – 560074

Phone: +91-80-28437124 / 28437375

Email Id: hodeee@rrce.org

Website: <https://www.rrce.org>



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

CSE ECE ME



Department of Electrical & Electronics Engineering

Attendance Sheet

Event Name : Value added course/Skill training on "Design and Development of Electric Vehicle"
Date : 29th April to 3rd May 2025
Venue & Time : EEE Lab / 09:00am to 04:00pm
Trainer : Dr. P. Ebby Darney
Professor & Head
Department of EEE
Rajarajeswari College of Engineering.

S.No	Name	USN Number	Day 1 29/04/25	Day 2 30/04/25	Day 3 01/05/25	Day 4 02/05/25	Day 5 03/05/25
1.	ARUNKUMAR	1RR22EEE005	AB	AB	AB	AB	AB
2.	ASHER SUMITH	1RR22EEE006	AB	AB	AB	AB	AB
3.	BASAVARAJ N	1RR22EEE007	AB	AB	AB	AB	AB
4.	CHIDANANDA SWAMY	1RR22EEE008	AB	AB	AB	AB	AB
5.	CHIMAY SWAROOP	1RR22EEE009	AB	AB	AB	AB	AB
6.	DEEKSHITH AREDDY	1RR22EEE010	AB	AB	AB	AB	AB
7.	DIVYA D	1RR22EEE011	AB	AB	AB	AB	AB
8.	GANDIKOTA VISHNU DATTA	1RR22EEE013	AB	AB	AB	AB	AB
9.	JEEVAN P	1RR22EEE014	AB	AB	AB	AB	AB
10.	KIRANA J	1RR22EEE015	AB	AB	AB	AB	AB
11.	LIKITH A	1RR22EEE016	AB	AB	AB	AB	AB
12.	LTHISH M R	1RR22EEE017	AB	AB	AB	AB	AB
13.	MADHUSHUDHAN	1RR22EEE018	AB	AB	AB	AB	AB
14.	NITHIN A	1RR22EEE019	AB	AB	AB	AB	AB
15.	PAVAN KUMAR R L	1RR22EEE020	AB	AB	AB	AB	AB
16.	PRAJWAL	1RR22EEE021	AB	AB	AB	AB	AB
17.	PRAJWAL L	1RR22EEE022	AB	AB	AB	AB	AB

Prof. P. Ebby Darney
Principal

Dept. of Electrical & Electronics Engineering
Rajarajeswari College of Engineering
Bengaluru-74

Principal

Bengaluru-74

COLLEGE OF ENGINEERING
Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)
Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

18.	RAGINI SHARMA R	1RR22EE023	Ragini Sharma	Ragini Sharma	Ragini Sharma	Ragini Sharma
19.	RISHITHA H S	1RR22EE024	Rishitha	Rishitha	Rishitha	Rishitha
20.	SAMPRAS ANDREW ANGRLO	1RR22EE026	Sampras	Sampras	Sampras	Sampras
21.	SHOBHITHA N	1RR22EE027	Shobhitha	Shobhitha	Shobhitha	Shobhitha
22.	SONIYA M CHAVAN	1RR22EE030	Soniya	Soniya	Soniya	Soniya
23.	SPANDANA S S	1RR22EE031	Spandana	Spandana	Spandana	Spandana
24.	SUSHMA L	1RR22EE034	Sushma	Sushma	Sushma	Sushma
25.	TABASSUM A	1RR22EE035	Tabassum	Tabassum	Tabassum	Tabassum
26.	VIJAY KUMAR H K	1RR22EE038	Vijay Kumar	Vijay Kumar	Vijay Kumar	Vijay Kumar
27.	WANE GAON ADITYA RAJ KUMAR	1RR22EE039	Wane Gaon	Wane Gaon	Wane Gaon	Wane Gaon
28.	YASHAS B	1RR22EE040	Yashas	Yashas	Yashas	Yashas
29.	ANIL KUMAR	1RR23EE400	Anil Kumar	Anil Kumar	Anil Kumar	Anil Kumar
30.	ARPITHA M	1RR23EE401	Arpitha	Arpitha	Arpitha	Arpitha
31.	B M DARSHAN	1RR23EE402	B M Darshan	B M Darshan	B M Darshan	B M Darshan
32.	PAVAN B R	1RR23EE419	Pavan B R	Pavan B R	Pavan B R	Pavan B R
33.	PREM KUMAR M	1RR23EE420	Prem Kumar	Prem Kumar	Prem Kumar	Prem Kumar
34.	PUGGI BHARATH	1RR23EE421	Puggi Bharath	Puggi Bharath	Puggi Bharath	Puggi Bharath
35.	PUNITH KUMAR G	1RR23EE422	Punith Kumar	Punith Kumar	Punith Kumar	Punith Kumar
36.	SAMEER BASHA	1RR23EE423	Sameer Basha	Sameer Basha	Sameer Basha	Sameer Basha
37.	SANDEEP BM	1RR23EE424	Sandeep BM	Sandeep BM	Sandeep BM	Sandeep BM
38.	SANTHOSH M	1RR23EE425	Santhosh M	Santhosh M	Santhosh M	Santhosh M
39.	TEJASHREE R	1RR23EE426	Tejashree R	Tejashree R	Tejashree R	Tejashree R
40.	THAMBARA SELVA S	1RR23EE427	Thambara Selva S	Thambara Selva S	Thambara Selva S	Thambara Selva S
41.	THEJASWINI N	1RR23EE428	Thejaswini N	Thejaswini N	Thejaswini N	Thejaswini N

Event Coordinator
Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Principal
RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74

Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

Event Report: Value Added Course / Skill Training on “Design and Development of Electric Vehicle”

Organized by: Department of Electrical & Electronics Engineering, RajaRajeswari College of Engineering, Bengaluru


Date : 29th April to 3rd May 2025
Venue & Time : EEE Lab / 09:00 AM to 04:00 PM
Resource Person : Dr.P.Ebby Darney
Professor & Head
Department of EEE
Rajarajeswari College of Engineering

Program Coordinators: Dr. R. Arul Jose, Associate Professor

Event Overview:

The training aimed to provide students with a strong foundation and hands-on exposure to electric vehicle technology, which is a rapidly evolving area in the electrical and automotive sectors. Each day of the course was structured with a combination of expert lectures and practical sessions to ensure a comprehensive understanding of the subject.

Day	Topic	Session Highlights
Day 1	Introduction to EVs & Industry Scenario	Inauguration, EV basics, market trends
Day 2	Powertrain and Battery Technology	Battery types, BMS, hands-on battery demo
Day 3	Motor Control & Simulation	BLDC, PMSM motors, MATLAB/Simulink simulation
Day 4	Embedded System & IoT in EV	Sensor integration, IoT monitoring using ESP32
Day 5	EV Battery & Control	Mini project, student presentations, valedictory


Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74


Principal
RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

Day-wise Summary

Day 1: Introduction to EVs & Industry Scenario

The course commenced with an inaugural session followed by an introduction to electric vehicles. Participants learned about the evolution of EVs, their types, components, and comparison with internal combustion engine (ICE) vehicles. The session also covered current EV market trends, policies like FAME II, and India's vision for electric mobility. The interactive discussions helped students understand the significance and future scope of EVs.

Day 2: Powertrain and Battery Technology

The second day focused on the EV powertrain structure, working principles, and battery technologies. Students explored different types of batteries including Li-ion and LFP, and learned about key parameters such as energy density and charge cycles. The role of Battery Management Systems (BMS) in ensuring safe and efficient operation was also discussed. A hands-on demonstration of battery pack assembly and BMS integration provided practical exposure.

Day 3: Electric Motor Control & Simulation

This session introduced students to electric motors used in EVs, including BLDC, PMSM, and induction motors. Motor control techniques, inverter functionality, and torque-speed characteristics were explained. Students practiced modeling and simulating EV motor drive systems using MATLAB/Simulink, reinforcing theoretical concepts through simulation-based learning.


Day 4: Embedded System and IoT in EV

Day four covered the application of embedded systems and IoT in smart EVs. Students worked with microcontrollers like Arduino and ESP32 to interface sensors for voltage, current, and temperature monitoring. They also built a basic IoT-based EV monitoring system using cloud platforms. The session provided insights into real-time diagnostics and smart vehicle communication.

Day 5: EV Battery & Control – Project & Valedictory


Principal
RAJARAJESWARI

COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74


Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering

On the final day, students worked in teams to apply their learning by developing mini-projects related to EV battery monitoring and motor control. Each group presented their work, showcasing prototypes and design models. The course concluded with a feedback session, certificate distribution, and a valedictory address by faculty members, marking a successful end to the training program.

RAJARAJESWARI COLLEGE OF ENGINEERING
An Autonomous Institute Approved by VTU under Visvesvaraya Technological University and Approved by AICTE, New Delhi
Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST

Department of Electrical and Electronics Engineering

VALUE ADDED COURSE/SKILL TRAINING

ON

DESIGN AND DEVELOPMENT OF ELECTRIC VEHICLE

DATE
29/04/2025 to 03/05/2025

TIME
09:00 AM - 04:00 PM

VENUE
EEE Lab

RESOURCE PERSON
Dr. P. Ebby Darney
Professor & Head, Department of EEE,
Rajarajeswari College of Engineering

Dr. R. Arul Jose
COORDINATOR

Dr. P. Ebby Darney
HOD-EEE

Dr. R. Balakrishna
PRINCIPAL

ADMISSION OPEN FOR 2024-2025
CITY CODE: 1245 COMED-C 10199 PGKIT: 7886
CONTACT: +91-90-68497325

Website: www.rjcet.org
Email: admission@rjcet.org



[Signature]

Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

[Signature]

Principal
RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74



Rajarajeswari College of Engineering

(An Autonomous Institute, under Visvesvaraya Technological University, Belagavi)

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical & Electronics Engineering



Conclusion:

This event successfully provided students with a valuable learning experience and motivated them to explore further in the field of Electric Vehicle. The Department of Electrical & Electronics Engineering looks forward to organizing more such informative and engaging events in the future.

HoD-EEE

Professor & HOD

Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74

Principal

RAJARAJESWARI
COLLEGE OF ENGINEERING
Ramohalli Cross, Bengaluru-74

Professor & HOD

Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74



RAJARAJESWARI COLLEGE OF ENGINEERING

(An Autonomous Institution, Affiliated to VTU, Approved by AICTE,

UGC & GoKA)

#14, Ramohalli Cross, Kumbalagodu, Mysuru Road, Bengaluru-560074.

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical and Electronics Engineering

Certificate of Appreciation

This is to certify that Mr/Ms JEEVAN P

of III year B.E. EEE has attended hands-on skill training on **Design and**

Development of Electric Vehicle for 5 Days from 29.04.2025 to 03.05.2025 at

Rajarajeswari College of Engineering, Bengaluru.

Dr.P.Ebby Darney

HoD-EEE

Dr.R.Balakrishna

Principal
COLLEGE OF ENGINEERING
Ramohalli cross, Bengaluru-74

Professor & HOD

Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74



RAJARAJESWARI COLLEGE OF ENGINEERING

(An Autonomous Institution, Affiliated to VTU, Approved by AICTE,

UGC & GoKA)

#14, Ramohalli Cross, Kumbalagodu, Mysuru Road, Bengaluru-560074.

Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Electrical and Electronics Engineering

Certificate of Appreciation

This is to certify that Mr/Ms RISHITHA HS

of III year B.E. EEE has attended hands-on skill training on **Design and**

Development of Electric Vehicle for 5 Days from 29.04.2025 to 03.05.2025 at

Rajarajeswari College of Engineering, Bengaluru.

Dr. P. Ebby Darney

HOD-EEE

Dr. R. Balakrishna

COLLEGE OF ENGINEERING

Principal

Ramohalli Cross, Bengaluru-74

Professor & HOD
Dept. of Electrical & Electronics Engg.
Rajarajeswari College Of Engineering
Bengaluru-74