



Rajarajeswari College of Engineering

(An Autonomous Institute, Affiliated Visvesvaraya Technological University, Belagavi,
Approved by AICTE, UGC &GoK, Accredited by ISO 9001-2015 Certified Institution)
Sponsored by: MOOGAMBIGAI CHARITABLE AND EDUCATIONAL TRUST



Department of Robotics and Automation

Faculty Skill Enhancement Activity

NAME OF THE DEPARTMENT: Department of Robotics and Automation

1. Type of Event : ATAL Online FDP
2. Title : Energy and Electric Vehicles in India: Opportunities, Challenge, and Futures
3. Level : Basic
4. Mode : Online
5. Application No : ATAL/2025/1736305049
6. Institute : MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE
7. Dates : from 27/01/2025 to 01/02/2025.
8. Faculty member attended :



Dr.M.Karthikeyan,

Dy. CoE and Professor

Department of Robotics and Automation

Rajarajeswari College of Engineering

Bengaluru 560074

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

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9. Gained the knowledge on

- **Understanding of India's Energy Landscape:** Participants will gain a deeper understanding of India's energy consumption patterns, the shift toward sustainable energy sources, and the role of renewable energy in shaping the nation's energy future.
- **Insights into the EV Ecosystem:** The FDP will provide detailed insights into the electric vehicle (EV) ecosystem in India, including market trends, government policies, and technological innovations shaping the industry's growth.
- **Government Policies and Incentives:** Learn about government initiatives such as the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme, and other policies promoting the EV industry and renewable energy integration.
- **Challenges in EV Adoption:** Gain knowledge about the hurdles in EV adoption, including issues of battery infrastructure, cost, consumer awareness, and range anxiety, and explore solutions for overcoming these challenges.
- **Technological Innovations in Energy and EVs:** Explore emerging technologies in battery storage, charging infrastructure, electric powertrains, and smart grids that are critical for the development of a robust EV market in India.
- **Sustainability and Environmental Impact:** Understand how the transition to electric vehicles and renewable energy can contribute to India's sustainability goals, reduce emissions, and support the country's fight against climate change.
- **Economic Implications of EV Adoption:** Learn about the economic potential of the EV market, including job creation, investments in infrastructure, and its long-term impact on India's automotive and energy sectors.
- **Integration of Renewable Energy with EVs:** Explore how electric vehicles and renewable energy can work together in a smart grid setup, contributing to a more efficient, decentralized, and resilient energy system.
- **Role of Academia and Research in EV Development:** Understand the role of academic institutions and research organizations in driving innovation in EV technologies, energy storage, and smart infrastructure solutions.
- **Future Outlook for the Indian EV Market:** Get insights into the long-term prospects of electric vehicles in India, including predictions on market growth, future trends, and how India can position itself as a leader in the global EV industry.

-Report prepared by Dr.M.Karthikeyan, Dy. CoE and Professor, R&A

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ATAL/2025/1736305049



ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

Nelson Mandela Marg, Vasant Kunj, New Delhi -110070

AICTE Training and Learning (ATAL) Academy

Certificate

*It is certified that **Dr. Karthikeyan M, Professor** of **RajaRajeswari college of Engineering** has successfully participated & completed AICTE Training And Learning (ATAL) Academy Faculty Development Program on **Energy and Electric Vehicles in India: Opportunities, Challenge, and Futures** at **MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE** from **27/01/2025** to **01/02/2025**.*

S V Saravanan
Professor Level (AICTE Institute), Coordinator
**MEENAKSHI SUNDARARAJAN ENGINEERING
COLLEGE**

Dr. Sunil Luthra
Director & Bureau Head
Training and Learning Bureau, AICTE