

Online Short Term Course on “Electric Vehicles: A primer for beginners”



March 13 and 20, 2021

Centre for Continuing Education (CCE)

Indian Institute of Science, Bangalore, India - 560012

Course Description:

- Differences in EV and ICE vehicles powertrain and vehicle layout.
- Overview of related concepts including Li-Ion battery, Battery Management System, etc.
- Different types of EV charging (slow, fast, AC/DC)
- Global EV-related protocols like OCPP, OCPI, etc.
- EV outlook (current state and projections in Indian and international market).
- Understanding the role of domain stakeholders (drivers, fleet operators, charge point operators, mobility service providers, energy suppliers, OEMs)
- Electricity distribution network concepts to understand role of utilities in EV (DER, V2G, etc.)
- EV Financing in India (current state, hurdles, opportunities, and examples)
- EV Policy in India (FAME II, Electricity Rates, Subsidies, etc.)
- Research/commercial hurdles and opportunities in India EV landscape including urban planning, end-user behavior, policy making, infrastructure planning, etc.
- Skill sets required for EV professionals

Minimum Qualification Required:

Bachelor's degree
(B.E./B.Tech/B.Com/B.A.)
(completed or pursuing)

Course Coordinator:

- Dr. Tarun Rambha
Assistant Professor, CiSTUP Dept.,
Indian Institute of Science, Bangalore -
560012

Instructor profiles:

Dr. Arvind Kumar:

Dr Kumar has 20 years of experience in mobility domain. As a VP-R&D at Optym, an MNC in transportation space, he has helped several companies worldwide in improving the efficiency of their operations using advance mathematical modeling tools. For over a year, he has been closely involved in EV domain, and guiding the team at a Bangalore/Toronto-based EV startup, Elocity, in developing solutions in EV space to help chargepoint operators, cities and electric utilities grow with the EV adoption. He also holds a BTech in Chemical Engineering from IIT Madras, and a PhD in Industrial Engineering from University of Florida.

More about him at <https://www.linkedin.com/in/arvindkumarphd/>

Mr. Vignesh Nandakumar:

Mr. Nandakumar has 20 years of corporate experience in the roles of lead executive and investor in large firms. Recently, as a Partner with LGT Lightstone Aspada, a global impact fund, he led the environmental sustainability focused investments, into electric vehicles, renewable energy and the shared and circular economy. He has also served an active Board member of Amp Energy, Vogo Automotive and Lithium Urban Technologies as well as the co-CEO of Lithium Urban Technologies. He has a track record of developing and executing on renewable energy investments of over \$750M across India, South Africa and SE Asia with SunEdison and headed the sub-Saharan Africa business. He holds a BTech in Electrical Engineering from IIT Madras, and an MBA from ISB Hyderabad.

More about him at <https://www.linkedin.com/in/vigneshnandakumar/>

Registration: This course can be attended only by registration.

Apply online at: <http://cce.iisc.ac.in/ssp-stc.html>

Course fee per participant:

- Students from academic institutions: Rs. 500/- + 18% GST
- Non-student participants from academic institutions and R&D units: Rs.750/- + 18% GST
- Participants from industry entities: Rs. 1,000/ + 18% GST

Duration: March 13 (2 sessions) and 20 (2 sessions), 2021

Last Date to Apply: 06/03/2021

Note: Classes will be conducted via Microsoft Teams.