# THE GT ACADEMY
Learn | Aspire | Inspire

**A GreenTree Global Initiative**

## MGL
### Microgrid Labs
*More than renewable energy*

Become an EVOPT Certified Professional

# Fleet Electrification Planning Modelling & Simulation



Modeling, Simulation & Optimization using EVOPT developed with support from:

**EV⚡PT** BY MICROGRID LABS

**NSF**

**Berkeley** UNIVERSITY OF CALIFORNIA

**NREL**

**BERKELEY LAB** Lawrence Berkeley National Laboratory

(Microgrids)

# Build Knowledge & Skillset for the
# **EV Revolution**

📅 Starting soon

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₹ **Early Bird Price**
Rs. ~~50,000~~ 35,000/-
USD ~~1000~~ 750/-

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🕐 1 Month Certificate course
10+ Hours of Learning
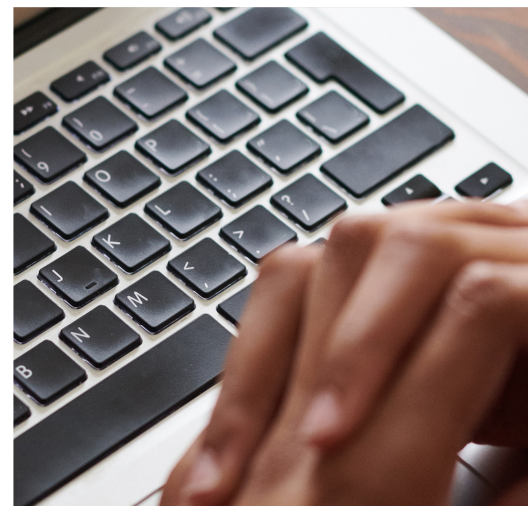
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📋 Registration Link

Click here to Register

# Target Audiences

- Government Officials
- Fleet Companies, Owners & Managers
- Electric Vehicle OEMs
- EV Charger OEMs
- Transport Planners
- Depot Managers - Bus / Truck
- Logistic Professionals
- Electrical Engineers
- Energy Professionals
- Utilities
- Aspiring individuals for EV
- Students

# Program Overview

This one-month course is uniquely designed by MicroGrid Labs Inc. (USA) and GT Academy to help you master electric fleet system planning & operations with the help of real examples & case studies. Learn from our experts in the US & the Indian market.

**Session 01**

## EV BASICS

- Basics of Electric Vehicle and ICE Vehicle
- Electric Drive train
- Battery/Battery Management System
- Type of Chargers – AC/DC

**Session 02**

## FLEET ELECTRIFICATION - BASICS

- Electric Fleet Ecosystem
- Planning challenges
- Planning Steps
- Importance of Charging Strategy
- Electric Fleet Charging management system
- Introduction to EVOPT

**Session 03**

## FLEET ELECTRIFICATION PLANNING USING EVOPT

- Route energy modelling
- Battery sizing
- Charger sizing
- Load profile
- Financial Analysis

## FLEET ELECTRIFICATION PLANNING USING EVOPT- PRACTICE SESSION

- Route energy Modelling
- Battery sizing
- Charger sizing
- Load profile generation
- Financial analysis

## FLEET ELECTRIFICATION PLANNING - ADVANCED

- Dedicated Charger vs Charger Sharing
- Load Management - Managed/Controlled charging
- Depot/On-Route Charging
- Queuing Problems and Solutions

## FLEET PLANNING – CHARGING AND ENERGY INFRASTRUCTURE

- Plugin DC Charger
- Pantograph DC Charger
- Depot / Hub space contraints
- Power distribution network - Radial distribution/Ring main architecture

## CASE STUDIES AND MGL EXPERIENCE WITH REAL WORLD PROJECTS.

- Case Studies
- Emerging Topics
  - i. Introduction to V2X
  - ii. Resiliency
  - iii. Digital Twin of the electrical network

## EVALUATION AND DISCUSSIONS.

# PROGRAM Highlights

The best of its kind course on Electric Vehicle System Design for a Global audience.

**Achieve Excellence in EV Fleet Modeling & Simulation.**

**Free EVOPT basic access for 6 months!**

**Avail Attractive financing options - No cost EMI!**

**Get Access to all the GT Academy courses at discounted price for 3 months!**

**Learn with Real Life applications and Case studies!**

# Know Your Trainers

**Director - GreenTree Global**
**Executive Council Member - GT Academy**

**Anurag Bajpai**

- 13 + years of experience in Energy Efficiency Implementation.
- Certified Measurement & Verification professional (CMVP) by AEE, a certified GRIHA Evaluator, IGBC AP, and an ECBC Expert empaneled with BEE.
- Board member of International Building Performance and Simulation Association (IBPSA
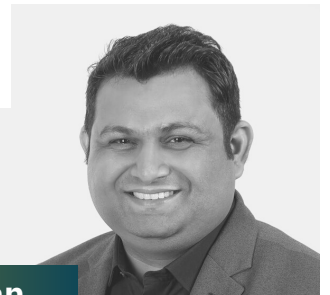- India) and a member of the core committee of ECBC, GRIHA, IGBC & SEEM India.

**Director - GreenTree Global**
**Executive Council Member - GT Academy**

**Dhruv Jain**

- 11+ years of experience in the engineering industry.
- Extensive experience in the corporate sector in India and Europe working across roles in Engineering, Sales, Strategy, Finance and Project Management.
- Worked with Renewable Energy and Energy Efficiency Partnership (REEEP), Vienna, Siemens VAI Gmbh in Linz, Austria, Siemens India & Induja Group India.
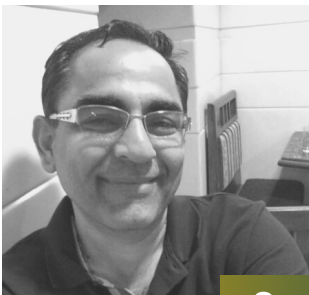
# Know Your Trainers

**Country Lead - Microgrid Labs India**
**Area of Expertise - Transition Planning for Fleet Electrification**

**Lalit Chauhan**

- 2+ years' experience planning and design of EV Charging Infrastructure.
- 9+ years of experience in Power System, Energy Management and Industrial Automation.
- Extensive experience in Business Development, Sales and Project Management of engineered solutions.

**E - Mobility Consultant**
**Area of Expertise - Transition Planning for Fleet Electrification**

**Sanjay Bhatia**

- 35 years of experience in the Automotive sector including Electric Vehicles & Hydrogen Fuel based vehicles.
- Extensive experience in the Supplier development, Process and Manufacturing engineering and planning services at Tata Motors.
- Experience in dealing with State Transport Undertakings through tendering process & winning bids for more than INR 2000 Cr for Electric buses under GCC which are in operations at the moment in Mumbai, Lucknow, Indore, Kolkata, Jammu and Kashmir and in Guwahati at Tata Motors

# Know Your Trainers

**E - Mobility Consultant**
**Area of Expertise - Charging Management System & BMS**

**Raveesh S.**

• 12+ years of experience in Electrical industry. Worked with engineering companies like Larsen & Toubro and ABB India, his industry knowledge includes Project Engineering, Electrical Engineering, Electrical Panels (LT & HT), Power Distribution System, Project Management and Switchgears.
• Worked on esteemed projects with DMRC, the largest and busiest rapid transit system in India and NTPC, India's largest power generation company.
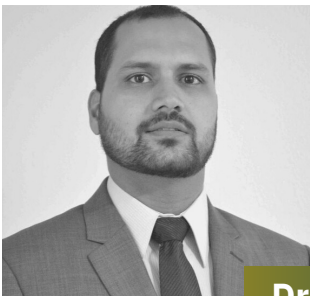
**Founder and CEO - Microgrid Labs USA**
**Area of Expertise - Transition Planning for Fleet Electrification**

**Narayanan Sankar**

• 3+ years' experience in transition planning of medium and heavy-duty vehicles and design of EV Charging Infrastructure.
• 5+ years of experience in Renewable Energy, Microgrid and Energy Storage.
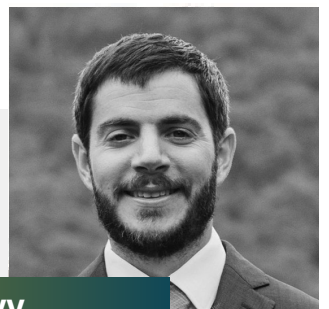• 25+ years in Power System, Energy Management and Industrial Automation.

# Know Your Trainers

**Co-Founder - Microgrid Labs USA**
**Area of Expertise - Transition Planning for Fleet Electrification**

**Dr. Namit Singh**

- 3+ years' experience in transition planning of medium and heavy-duty vehicles and design of EV Charging Infrastructure.
- 5+ years of experience in Renewable Energy, Microgrid and Energy Storage.

**Product Manager - Microgrid Labs USA**
**Area of Expertise - Transition Planning for Fleet Electrification**

**Jonathan Levy**

- 2+ years' experience in modelling and optimization of renewable energy systems, microgrids and e Mobility systems.
- 10+ years of experience in infrastructure systems for alternative fuel vehicles, designing hydrogen purification systems and manufacturing industrial and chemical processing equipment.

# Know Your Trainers

**Data Scientist - Microgrid Labs USA**
**Area of Expertise - Modelling, Simulation & Optimization**

**Dr. Arun Kumar**

- 6+ years of experience in modelling and optimization of renewable energy systems, microgrids and e Mobility systems.
- 30+ years of experience in designing hardware, software, and algorithms.

**Data Scientist - Microgrid Labs USA**
**Area of Expertise - Modelling, Simulation & Optimization**

**Andrew Thibeault**

- 1+ years of experience in modelling of e-Mobility systems.
- 7+ years of experience in energy system modelling, simulation and grid modernization.

# EVOPT
By Microgrid Labs

## Contact us

✉ **training@greentree.global**

📞 **+91 8104026897**

🌐 **https://academy.greentree.global**