



Estd. 1939

Karnatak Law Society's

**GOGTE INSTITUTE OF TECHNOLOGY, BELAGAVI**

An Autonomous Institute under Visvesvaraya Technological University

"Jnana Ganga", Udyambag, Belagavi – 590008, Karnataka, India



Estd. 1979

**Electronics & Communication Engineering Department**

**Offering ONE Week CERTIFICATION COURSE in**

# **SIMULINK BASED MODELING of EV SUB-SYSTEMS**

**Prerequisites** – Basic Engg. Physics, **NO PRE-REQUISITE REQUIRED FOR MATLAB/ SIMULINK**

**Objective** – To represent the Electric Vehicle (EV) subsystems in mathematical model (DIGITAL TWIN) form which can be easily processed by computers. Software tools like MATLAB & SIMULINK will be used for system response analysis for different inputs and under various ambient conditions. This course will make the students EV industry ready. Students will learn to simulate an EV plant & control its parameters for various used cases. They will also be able to optimize the dynamic performances of EV sub-system.

**Benefits** – Hands on sessions with MATLAB, SIMULINK & SIMSCAPE for EV sub-system response analysis and optimization. Hands On Hardware Session in EC Dept. Control Systems and Sensors Lab in which real time response analysis of 20 physical sensor (Temperature, pressure, flow, liquid level, displacement, proximity sensors) performance will be seen.

**Course Instructor** – Dr. Saurav Mitra (Professor, ECE, KLS GIT) : Mob – 9769187407

After fee payment, students have to fill up their details in the given Google Form, to confirm course registration. Maximum 25 participants (first come first serve basis).

**Google Form Link for Course Registration** <https://forms.gle/unCLnDrfP3Ao2EUN8>

**QR Code for Fee Payment**



**Course Intro. Video Link**

will be uploaded shortly

**Course Duration: 30 Hours (16 Hrs. hands on training)**

**Course date: 1<sup>st</sup> Week of March 2025**

**Fees for the Certification Course:**

- Rs. 1000 for GIT participants
- Rs. 2000 for external students / participants
- Rs. 3000 for industry participants



**Course Topics:** Modeling of mechanical systems, vehicular systems, EV & electrical systems, thermal, hydraulic, electromechanical, battery management systems, fuel cell based systems. Understanding concepts like system stability, system gain, energy etc. with MATLAB & SIMULINK.