

Course Title: Arduino for Control System Application

Course Code: EEA 142

Course Background / Summary:

Arduino is one of the best and cheapest embedded microcontrollers, yet a powerful tool for automation and control of several engineering applications. This course will introduce and apply the Arduino Mega, 2560 for control system applications such as speed, position, level, and temperature control.

Course Objectives:

- C Program of Arduino Mega 2560.
- Interface Arduino Mega with sensors and actuators.
- Utilize Arduino to Control speed, position, level, and temperature.
- Theory knowledge of control system.

Target Audience:

- Electricians, Research assistants, Research officers, Researchers, Academicians
- Technicians and Engineers
- Instructors

Course Duration: 3 Days

Course Contents

1.0 Introduction to Microcontroller and Arduino

2.0 Basic Theory of Control System

3.0 Arduino Data Transfer and Communication with MATLAB/Simulink

4.0 Arduino C Programming