## REPORT ON ARDUINO WORKSHOP

"One day workshop on Arduino" was organized by Mar Baselios Christian College of Engineering & Technology, Kuttikkanam, Peermade on 10th February 2022 from 10 am to 4 pm. Around 23 EEE students attended the workshop. The session was instructed by Shinto Tony who is the founder of Dejavu Smart Homes and his colleague Bilwin Binoy. The course content is as follows:

Arduino is an open-source platform used for building electronics projects. Arduino consists of both a physical programmable circuit board or microcontroller and a software, IDE (Integrated Development Environment) that runs on the computer. It is used to write and upload computer code to the physical board.

- Familiarization of Arduino IDE.
- •LED blinking with different ON/OFF delay timings with
  - a. inbuilt LED
  - b. Externally interfaced LED
- •Arduino based voltage measurement of 12V solar PV module/ 12V battery and displaying the measured value using the I2C LCD.
- •Arduino based DC measurement using Hall-effect current sensor like LEM LA55P sensor and displaying the value using I2C LCD module.
- •DC motor speed control using MOSFET driven by PWM signal from Arduino module.
- Program on Arduino to upload temperature and humidity data to thingspeak cloud.
- Program on Arduino to retrieve temperature and humidity data from the thingspeak cloud.

## **POSTER:**



## PHOTOS:









