



BMS

INSTITUTE OF TECHNOLOGY AND MANAGEMENT

Avalahalli, Doddaballapur Main Road, Bengaluru – 560064

DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

WORKSHOP REPORT

**Five days “Workshop On Advanced Embedded Systems & IOT Using Texas Instrumentation Board”
In collaboration of Texas Innovation Center: Texas University Program, Edgate Pvt. Technologies
and IETE**

Department of Electronics and Telecommunication Engineering has organized Five days Workshop on “Advanced Embedded Systems & IOT Using Texas Instrumentation Board”, in collaboration of Texas Innovation Center: Texas University Program, Edgate Pvt. Technologies and IETE from 27th to 31st January 2020. The workshop was coordinated by Mrs. Thejaswini S, Mrs. Saritha I G, Mrs. Sowmyashree M S, Mrs. Sumathi M S and Mrs. Prathibha N.

The resource person for the workshop was Mr. Jeevan, Senior Embedded System Engineer, Edgate Technologies Pvt Ltd. Day 1 began with the introduction of the microcontroller, the Texas Instruments TIVA TM4C123GH6PMI, Code Composer Studio IDE for programming Microcontroller. Hands-on session using TIVA boards like controlling the built in LED lights

The second day involved the use of a separate IDE called Energia. Hands-on session using Energia and was interfaced with user interface and menus to the Arduino IDE. This was followed by sessions on WIFI booster pack, which was attached to the development board and hands-on sessions for sending and receiving data using TCP was explained. Programs for controlling LEDs using a server Client configuration using TCP and a WIFI hotspot was carried out.

The third day started with the introduction of other communication protocols such as http and UDP. Hands-on Session for transmitting messages to different boards using protocols were done. further they used applications such as Blynk and IFTTT, to control these boards using our smartphones.

On fourth day, they were introduced to a new Microcontroller called the MSP432. The board was made into a rover kind of robot. They used the Energia IDE to configure this robot and to move it. In the afternoon session, they were thought to install a custom application and were able to control the rover with our smartphones.

On Day five, there was an informative talk on applications of embedded systems and IOT was delivered by Mr. Ganga Prasad, Chairman, Technical Committee IETE, Bangalore.

The workshop concluded with valedictory function .



Inauguration of workshop



Session by Mr. Jeevan



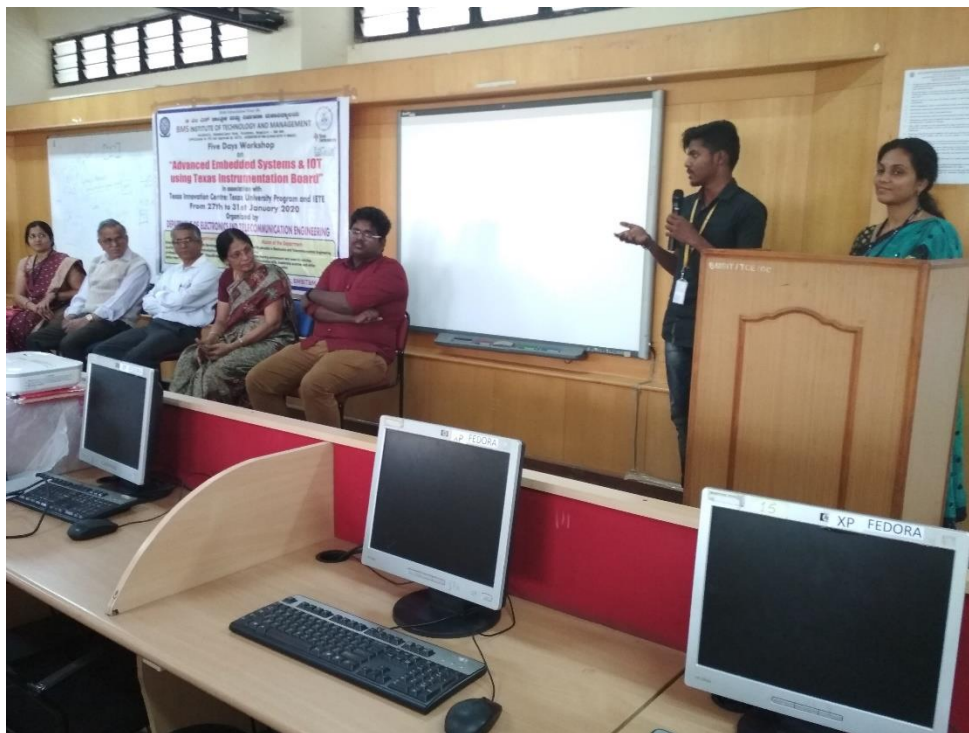
Participants involved in demonstrating applications using Robotics kit



Session by Mr. Mr. Ganga Prasad, Chairman, Technical Committee IETE, Bangalore



Valedictory



Feed back by the participant



Certificate distribution to participants



Certificate distribution to participants



Participants with resource persons



Participants