

**M.A.M. COLLEGE OF ENGINEERING AND TECHNOLOGY.
SIRAGANUR, TRICHY.**

DEPARTMENT OF EEE

**A THREE-DAY WORKSHOP ON
“REALIZATION OF EMBEDDED APPLICATIONS USING ARDUINO”**

The Department of EEE organized a three-day workshop on “Realization of Embedded Applications using Arduino” in association with Pantech ProEd Pvt.Ltd. from 25.07.18 to 27.07.18 at the CS Lab-II MAMCET. About 16 participants from other colleges and over 80 students from MAMCET participated in the event. The main objective of the event was to enhance the microcontroller programming skills of the students by providing hands on training. The event was handled by three resource persons from Pantech ProEd Pvt Ltd.

On the first day of the session the students were given an introduction about embedded systems and their development in the real world. They were also educated on the uses of Arduino implementation in electronic circuits. After the brief introduction, the students were asked to install Proteus and Arduino IDE which was already saved in the server. Following the installation the students were guided on using the Proteus simulation software. They were asked to develop basic circuits like 555 timer, sine wave generator and also design circuits for practical applications like LED blinking.

On the second day of the event the students were provided with Arduino UNO kits using which they learnt to develop circuits for LED lighting, Buzzer operation and displaying information on a LCD. The students initially developed the code for the required operation and then they were instructed to dump the code into the target hardware. During the afternoon session, the students were given the task of developing the code for displaying information on multiple LCD's and also creating a timer circuit.

On the third day, the students learnt the technique of developing circuits for real world applications. During the forenoon session they developed the code for determining the temperature of a gas and also detecting the presence of smoke in a room. They then linked the code to the hardware thus creating temperature and gas sensor circuits. The students were briefed on the working of Node Microcontroller during the afternoon session. They developed a code for sending messages using the GSM technique.

During the entire three-day event refreshments were provided for all the participants during the break for both forenoon and afternoon sessions and lunch was provided for external participants .On the final day of the event, certificates were distributed to all the students by Dr.S.Rajasekaran Dean/Admin. The feedback from the students about the session revealed that, through it they were able to imbibe microcontroller programming skills which they could apply for their projects. The workshop proved to be very useful and interesting for the students.

