



**DEPARTMENT OF HUMANITIES AND SCIENCES**  
**MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY**

**TWO DAY WORKSHOP ON ROBOTICS FOR ECE STUDENTS**

A workshop on robotics was held on 24<sup>th</sup> & 25<sup>th</sup> and 27<sup>th</sup> & 28<sup>th</sup> of January, 2017 for the students of the Electrical and Communications Engineering students. The workshop was an initiative by the Principal jointly administered by Head of the Humanities and Sciences department, Dr. V. Madhusudhana Reddy, along with the Head of the Electrical and Communications Engineering, Dr. Srinivasa Rao, and also the director, Dr. Sanjeeva reddy.

**Resource person:** *Mr. Mohammad Nawaz*

He is the founder of RobotSpace Robotics And Automation Pvt. Ltd. This is a start-up company set up by the alumni of mrcet. Mr. Mohammad Nawaz was a student of MRCET who passed out in the year 2014. This company brings innovations to the field of robotics, while they have created few drones and a surveillance bots, which are preliminarily used by the Indian army. They pioneer in app development, web development, embedded systems and robot manufacturing. They also take up training programs and workshop for students in the field of robotics.

**Objective:** *The main objective of the two day workshop is to*

- *Expose to the field of robotics*
- *Explain the instrumentation of robots*
- *Coding*
- *Construction of robots*

The Principal, Dr. V.S.K. Reddy inaugurated the program with a brief introduction on the main objective of organizing the workshop emphasising the importance of robotics and where the robots were deployed. His motivational lecture was followed by an introduction and a warm welcome to the resource person, Mr. Nawaz, on to the dais.

On the forenoon session of the first day, the students were exposed to the theoretical aspects of the various parts of a robot and its construction. Since robot is the next future the lecture was interesting.

The theoretical class was followed by a lab session where the learners were given an in-depth explanation of how coding is being done in arduino. They were divided into a group of 4 and each group was given a kit comprising of an arduino board, chassis, connecting wires, a pair of wheels, electric motors, motor drive, screws, screwdrivers and a keychain to expose the students to the assembly thereof.

The second day was highly anticipated. The learners faced various challenges such as powering and blinking an LED, insertion of potentiometer; the students were enthusiastic to participate.

During coding and execution, co-ordinators from both the RobotSpace and the college assisted the students. Robotics is identification of the ports, which is the most important task during assembly. The assembly was difficult but the faculty members supported in every way.

The last segment of the workshop was spine-tingling. The students were asked to assemble the robot which could sense obstacle and take a turn thereby. The sessions ended with an explanation as to where the robots were deployed.

The students were pleased by the initiative that the college has taken to enlighten and inculcate core subjects at an early stage of engineering. More than 250 students participated in the event. Active participation of the students indeed made it a lively environment and has also induced great interest in the field of robotics.

