



# MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Maisammaguda(H), Gundlapochampally Village, Medchal  
Mandal, Medchal-Malkajiri District, Telangana State – 500100

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## CIRCULAR

Date: 02/07/2019

All the 3<sup>rd</sup> /I Sem Year students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Remote Controlled Robotics -I & II, Multimedia - 2D & 3D Basic Animations, Software's related to 3D Printing Selection of proper 3D Printing materials, Advanced MATLAB(MATLB PRO), Advanced JAVA in Centre Of Excellence. In this regard Interested students are hereby directed to register for this Courses on or before 08/07/2019. For further details, please contact Centre of Excellence, MREC(A)

  
Principal

**Principal**  
**Malla Reddy Engineering College**  
**Maisammaguda, Dhulapally,**  
**(Post Via Kompally), Sec'bad-500100**

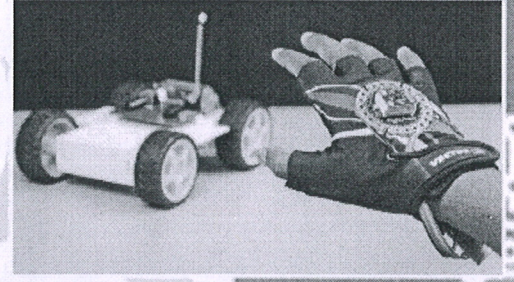
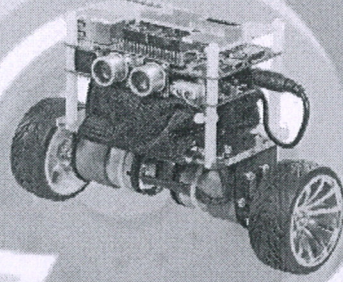
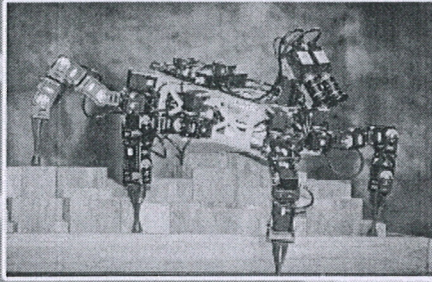
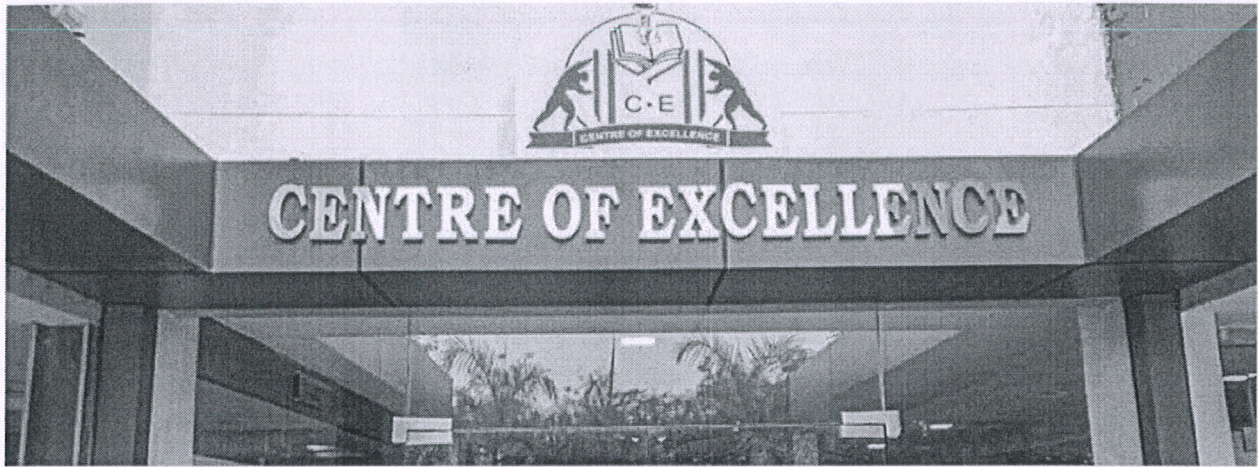
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**MALLA REDDY ENGINEERING COLLEGE**  
**MAIN CAMPUS, AUTONOMOUS INSTITUTION**  
Maisammaguda, Dhulapally (Post) via Kompally,  
Secunderabad-500100 Medchal - Malkajgiri District Telangana, India



## ROBOTIC'S TRAINING

**Guide To Build Software Robots,  
Automate Repetitive Tasks.**

**Learn Arduino, Design Industrial  
Robots, Motion Control Robots,  
Autonomous Robots, IOT,  
Android Robots.**

**Course Duration -: 4 Months**

**Hands-on experience is the best way to learn  
about all the interdisciplinary aspects of Robotics.**

*Raveesh*  
Principal,  
Malla Reddy Engineering College,  
Maisammaguda, Dhulapally,  
via Kompally, Secbad-500100





	<b>MALLA REDDY ENGINEERING COLLEGE (Autonomous) CENTRE OF EXCELLENCE</b>	
<b>REMOTE CONTROLLED ROBOTICS</b>		

**MODULE-I:RF Communication**

Concepts of RF Communication, Frequencies and Frequency Modulations, Types of RF Communication Devices

**MODULE-II: Encoder and Decoder**

Definitions of Encoder and Decoders, Concepts of HT12E, Pin Diagram, Data and Address Modulations, Connection Diagram, Concepts of HT12D, Pin Diagram, Data and Address Modulations, Connection Diagram

**MODULE-III: RF Transmitter and Receiver**

RF Transmitter and Receiver, Modules of RF Transmitter and RF receiver, 433Mhz RF Transmitter and Receiver Modules, Connection Diagram

**MODULE-IV: RF Communication Robots**

Understanding a Remote Controlled robot, Sensors Structure, Algorithm, Line Diagram, Schematics Prototype Development, Remote Controlled Robot using Arduino, Research and Development

**MODULE-V: Bluetooth Communication**

Understanding a Bluetooth Communication robot, Sensors Structure, Algorithm, Line Diagram, Schematics Prototype Development, Bluetooth Control Robot using Arduino, Research and Development

*R. Sreedhar*  
Principal

**Malla Reddy Engineering College**  
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Medchal Mandal, Medchal-Malkajgiri District,  
Telangana State - 500100

Course:Remote  
Controlled  
Robotics

Date:08/07/2019  
to 01/11/2019

Registered Students

SL.No	Roll No	NAME	BRANCH
1.	17J41A0146	ALUR VINITH VITHAL	CE
2.	17J41A0163	ABHIVARSHITHA CHOWDARY GUDIPATI	CE
3.	17J41A01A1	AKULA SHIVA	CE
4.	17J41A1202	ANMISHETTY NAGA PRIYA	IT
5.	17J41A1206	DHEVARSHINI REDDY	IT
6.	17J41A1211	CHINNAGARAJU NAVEEN KUMAR	IT
7.	17J41A1219	INDRAGANTI SHANMUKHA PRIYA	IT
8.	17J41A1225	KUNINTI KEERTHI REDDY	IT
9.	17J41A1229	MEDISHETTI SATHWIK	IT
10.	17J41A1236	NENAVATH RAKESH NAYAK	IT
11.	17J41A0202	ALETI AJAY KUMAR REDDY	EEE
12.	17J41A0205	B MRINALINE	EEE
13.	17J41A0208	BANOTHU NAGENDAR NAIK	EEE
14.	17J41A0221	GUNJI PRAVALIKA	EEE
15.	17J41A03E6	GUNDEMONI VENU GOPAL	ME
16.	17J41A0384	GUDIPALLI VINAY REDDY	ME
17.	17J41A0375	BYNABOINA KALYAN	ME
18.	17J41A0301	ABHISHEK KUMAR SINGH	ME
19.	17J41A0305	BIRUDULA ANIL KUMAR	ME
20.	17J41A0311	DAMERAGIDDE NITHISH	ME
21.	17J41A0403	BANKULLA NEHA REDDY	ECE
22.	17J41A0414	GANDU DEEKSHITH	ECE
23.	17J41A0420	JADI SAI KUMAR	ECE
24.	17J41A0427	KARNE KARTHIK	ECE
25.	17J41A2508	GARA PAVANKALYAN	MINING
26.	17J41A2519	KAUSHIK ANUMALA	MINING
27.	17J41A0583	GOWARAVARAPU AKHIL KUMAR	CSE
28.	17J41A0587	KANDULA NIRMALA	CSE
29.	17J41A0593	LAKKINENI SAI SHANKAR	CSE
30.	17J41A0599	NAGOLU MANASA	CSE

*Raveedh*  
Principal  
Malla Reddy Engineering College  
Maisammaguda, Dhulapally,  
(Post Via Kompally), Sec'bad-500100



## SUMMARY

### Remote Controlled Robotics

A robot that is tele operated (operated from a distance) using any transmitting device, which is usually a remote. These robots are referred to as remote- controlled robots. In this scenario, humans and robots have a direct connection.

Remote controls today have mainly based on these technologies:

- Infrared technology is the most often utilized control method in robotics. An infrared remote, also known as a transmitter, sends messages to a receiver or robot by using infrared light. It correlates to particular binary codes that indicate instructions such as "volume up," "volume down," and so on. The receiver converts infrared light pulses into binary signals.
- Radio frequency technology: Radio waves are used by these remote controllers to send codes through the transmitter. These remotes are used in modern satellite television systems. The robots may be controlled from a distance of more than 100 feet using this kind of remote.
- Speech recognition technology: This is the most difficult to develop, but it is a critical tool for increasing the capacity to communicate with robots. The goal is to evaluate a sentence uttered into a microphone, which is subsequently written down and utilized. There are many APIs available for integrating voice recognition. The 'Say It Module' is one of the most popular applications that makes use of this technology.
- Sound technology: While it may seem to be similar to speech recognition technology, it is not. This is primarily concerned with the frequency of the noises, while the former is concerned with the acoustics of it. Different noises, such as clapping and whistling, may be set to activate the function of certain activities.
- Network technology: As the name implies, it operates the remote through various networks. It may be wired, or the remote could be linked to an Ethernet network. It may also be wireless, such as Wi-Fi, Bluetooth, and so on.

*Raveesh*  
Principal

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(Post Via Kompally), Sec'bad-500100



**MALLA REDDY ENGINEERING COLLEGE**  
MAIN CAMPUS, AUTONOMOUS INSTITUTION



**Certificate**  
**Of the Course Completion**

*This is to Certify that*  
ALETI AJAY KUMAR REDDY

*has Successfully Completed Remote Controlled Robotics I & II Offered by*  
*Centre of Excellence, MRECA) on* 01/11/2019 *bearing with*  
*Roll No.* 17J41A0202 *and Branch* EEE.

**Dr.N.Rishikanth**  
COE Dean

**Principal**  
**Malla Reddy Engineering College**  
**Maisammaguda, Dhulapally,**  
**(Post Via Kompally), Sec'bad-500100**

**Dr.S.Sudhakara Reddy**  
Conference Chair &Principal



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MAIN CAMPUS, AUTONOMOUS INSTITUTION



**Certificate**  
**Of the Course Completion**

*This is to Certify that*  
ANMISHETTY NAGA PRIYA

*has Successfully Completed Remote Controlled Robotics I & II Offered by*  
*Centre of Excellence, MREC(A) on 01/11/2019 bearing with*  
*Roll No. 17J41A1202 and Branch IT.*

**Dr.N.Rishikanth**  
COE Dean

Principal  
Malla Reddy Engineering College  
Mansamaguda, Dhulapally,  
(Post Via Kompally), Sec bad-500100

**Dr.S.Sudhakara Reddy**  
Conference Chair &Principal





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MAIN CAMPUS, AUTONOMOUS INSTITUTION



**Certificate**  
**Of the Course Completion**

*This is to Certify that*  
**BANKULLA NEHA REDDY**

*has Successfully Completed Remote Controlled Robotics I & II Offered by*  
*Centre of Excellence, MREC(A) on 01/11/2019 bearing with*  
*Roll No. 17J41A0403 and Branch ECE.*

**Dr.N.Rishikanth**  
COE Dean

**Principal**  
Malla Reddy Engineering College  
Maisammaguda, Dhulapally,

**Dr.S.Sudhakara Reddy**  
Conference Chair &Principal

(Print Via Kompaty), Sec'bad-500139





**MALLA REDDY ENGINEERING COLLEGE**  
**MAIN CAMPUS, AUTONOMOUS INSTITUTION**



**Certificate**  
**Of the Course Completion**

*This is to Certify that*  
**GUNDEMONI VENU GOPAL**

*has Successfully Completed Remote Controlled Robotics I & II Offered by*  
*Centre of Excellence, MREC(A) on 01/11/2019 bearing with*  
*Roll No. 17J41A03E6 and Branch ME.*

**Dr.N.Rishikanth**  
COE Dean

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Post via Kothapally, Sec 1 Ind 500100

**Dr.S.Sudhakara Reddy**  
Conference Chair & Principal





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**Certificate**  
**Of the Course Completion**

*This is to Certify that*  
**ALUR VINITH VITHAL**

*has Successfully Completed Remote Controlled Robotics I & II Offered by*  
*Centre of Excellence, MREC(A) on 01/11/2019 bearing with*  
*Roll No. 17J41A0146 and Branch CE.*

**Dr.N.Rishikanth**  
COE Dean

**Principal**  
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**Dr.S.Sudhakara Reddy**  
Conference Chair &Principal