



## MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

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

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### CIRCULAR

Date: 12/12/2017

All the 2<sup>nd</sup>/II Year/Sem students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Autonomous Robotics -II, Multimedia - 2D Basic Concepts, Green Matte Studio - Audio Editing, Different Technologies of Additive Manufacturing, PYTHON With DJANGO, Foundations Of Blockchain, Labview in Centre Of Excellence. In this regard Interested students are hereby directed to register for this Courses on or before 18/12/2017. For further details, please contact Centre of Excellence, MREC(A)

  
Principal

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

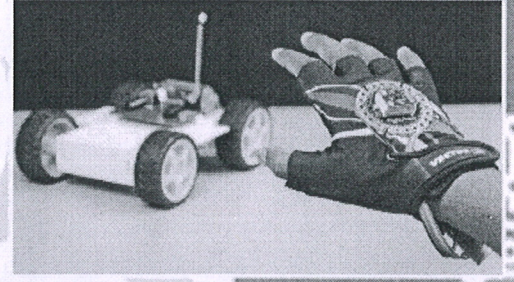
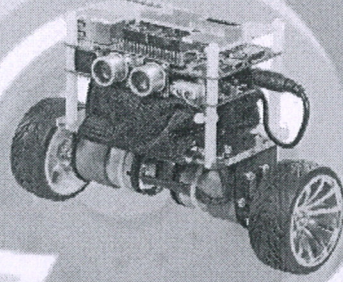
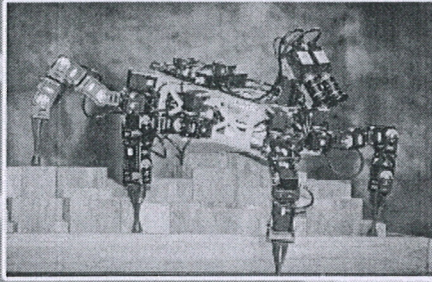
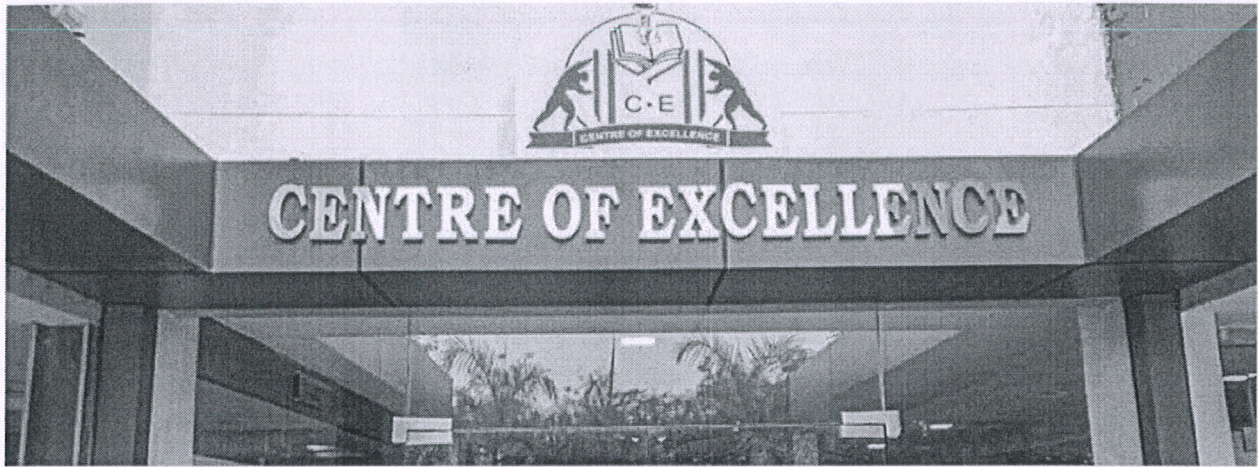
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**MALLA REDDY ENGINEERING COLLEGE**  
**MAIN CAMPUS, AUTONOMOUS INSTITUTION**  
Maisammaguda, Dhulapally (Post) via Kompally,  
Secunderabad-500100 Medchal - Malkajgiri District Telangana, India



## 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>AUTONOMOUS ROBOTICS</b>		

**MODULE-I: Line follower Robot**

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

**MODULE-II: Light follower robot using Arduino**

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

**MODULE-III: Obstacle Avoidance Robot using Arduino**

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

**MODULE-IV: Edge Follower Robot using Arduino**

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

**MODULE-V: Heat Follower Robot using Arduino**

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

*R. Reddy*  
Principal

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





MALLA REDDY ENGINEERING  
COLLEGE (Autonomous)  
Maisammaguda(H), Gundlapochampally  
Village,  
Medchal Mandal, Medchal-Malkajgiri  
District,  
Telangana State - 500100

Course:Autonomous Robotics  
-II  
Date:18/12/2017 to  
19/04/2018

Registered Students

SL.No	Roll No	NAME	BRANCH
1.	16J41A0162	ALAKUNTA CHARAN KUMAR	CE
2.	16J41A0176	GANDESRI BHARGAV	CE
3.	16J41A0181	GUDIPUDI RAJITHA	CE
4.	16J41A0189	KASHABOINA ASHWITH	CE
5.	16J41A0193	KONDAM DIVYA	CE
6.	16J41A0232	KOTTAKONDA SAIRAM	EEE
7.	16J41A0238	MARELLY RAJESHWARI	EEE
8.	16J41A0247	PENDAM BHARATH	EEE
9.	16J41A0250	SAINDLA SAI KIRAN	EEE
10.	16J41A0260	VINNAKOTA MADHU MANASA	EEE
11.	16J41A0361	AITHA REVANTH	ME
12.	16J41A0365	BADIYA VIKAS	ME
13.	16J41A0366	BANDANAKANTI SAI PREETHAM	ME
14.	16J41A0384	GURDEEP SAHU	ME
15.	16J41A0388	KANTETI VENKATESH BABU	ME
16.	16J41A0363	KATHULA SAI NIHAR	ME
17.	16J41A0463	ANWAR KHAN	ECE
18.	16J41A0470	BYROJU ANAND RAGHAVA	ECE
19.	16J41A0481	JAMI RAKESH	ECE
20.	16J41A0486	KALTHI CHANDINI	ECE
21.	16J41A0494	MAHAMMAD MUJEEB	ECE
22.	16J41A0463	ANWAR KHAN	ECE
23.	16J41A0468	BANDI ANVESH	ECE
24.	16J41A0561	ADEPU NITHEESH	CSE
25.	16J41A0566	BOINAPALLY HARSHITHA	CSE
26.	16J41A0574	GANJI NORISH GOVARDHAN SAI	CSE
27.	16J41A0579	JILLALA RENUKA	CSE
28.	16J41A0585	KODURU MITHIL REDDY	CSE
29.	16J41A0589	M. SHIRISHA	CSE
30.	16J41A0593	MAMTAM SRAVANTHI	CSE

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



# SUMMARY

## Autonomous Robotics

Autonomous robots, like humans, have the capacity to make their own decisions and then behave accordingly. A fully autonomous robot can detect its surroundings, make decisions based on what it sees or has been taught to recognize situations, and then perform a movement or manipulation within that environment. In terms of robot mobility, for example, these decision-based activities include, but are not limited to, fundamental tasks such as starting, stopping, and maneuvering around obstacles in their path.

The capacity to make your own choices is referred to as autonomy. In humans, autonomy enables us to do the most significant, as well as useless, activities. Walking, chatting, waving, opening doors, pressing buttons, and replacing light bulbs are all examples of this. Autonomy is no different in robots.

Autonomous robots, like humans, have the capacity to make their own choices and then act on those decisions. A fully autonomous robot is one that can sense its surroundings, make choices based on what it sees, and/or has been programmed to identify circumstances and then act on them within that environment. In terms of robot mobility, for example, these decision-based activities include, but are not limited to, fundamental tasks such as starting, halting, and navigating around obstacles.

True autonomous robots are intelligent devices that can execute tasks and function in an environment without human involvement or control. This degree of autonomy allows the workforce to outsource boring, hazardous, or filthy duties to the robot, allowing them to spend more time performing the fascinating, engaging, and important aspects of their job for which they are uniquely suited.

  
Principal

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





# MALLA REDDY ENGINEERING COLLEGE

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## Certificate Of the Course Completion

*This is to Certify that*

JILLALA RENUKA

*has Successfully Completed Autonomous Robotics -II Offered by  
Centre of Excellence, MREC(A) on 19/04/2018 bearing  
with Roll No. 16J41A0579 and Branch CSE.*

Dr. Yogesh Madaria  
CONVENOR

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

Dr. S. Sudhakara Reddy  
Conference Chair & Principal





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## Certificate

### Of the Course Completion

*This is to Certify that*

ANWAR KHAN

*has Successfully Completed Autonomous Robotics -II Offered by  
Centre of Excellence, MRCE(A) on 19/04/2018 bearing  
with Roll No. 16J41A0463 and Branch ECE.*

*Yogesh*

Dr. Yogesh Madaria  
CONVENOR

*Kanubh*

Principal  
Malla Reddy Engineering College

Dr. S. Sudhakar Reddy  
Conference Chair & Principal

*Jan*

Maisammaguda, Dhulapally,  
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Dr. Yogesh Madaria  
CONVENOR

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

Dr. S. Sudhakara Reddy  
Conference Chair & Principal





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*This is to Certify that*

AITHA REVANTH

*has Successfully Completed Autonomous Robotics -II Offered by  
Centre of Excellence, MREC(A) on 19/04/2018 bearing  
with Roll No. 16J41A0361 and Branch ME.*

**Dr. Yogesh Madaria**  
CONVENOR

**Principal**  
**Principal College**  
**Malla Reddy Engineering, Dhulapally,**  
**Maisammaguda, Sec'bad-500100**  
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Dr. Yogesh Madaria  
CONVENOR

Principal Engineering College,  
Malla Reddy Engineering, Dhulapally,  
Meisammaguda, Sec'bad-500100  
Post Via Kompally

Dr. S. Sudhakar Reddy  
Conference Chair & Principal