



# MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

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

## CIRCULAR

Date: 04/07/2018

All the 2<sup>nd</sup> /I Year/Sem students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Autonomous Robotics -I, Graphic Designing - I & II, Green Matte Studio - Audio Effects/Transitions, Design for Additive Manufacturing (Introduction to 3D Modeling), Foundations Of JAVA in Centre Of Excellence. In this regard Interested students are hereby directed to register for this Courses on or before 09/07/2018. For further details, please contact Centre of Excellence, MREC(A)

  
Principal

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

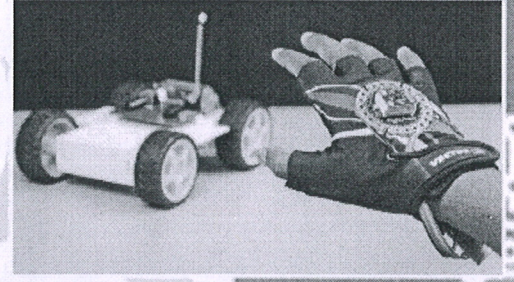
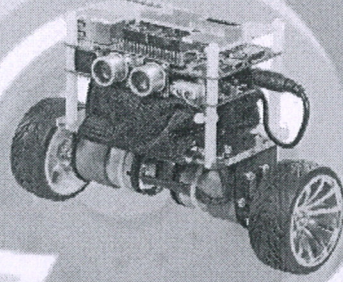
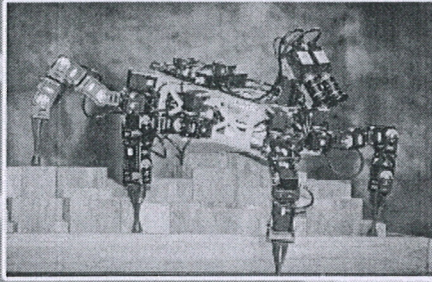
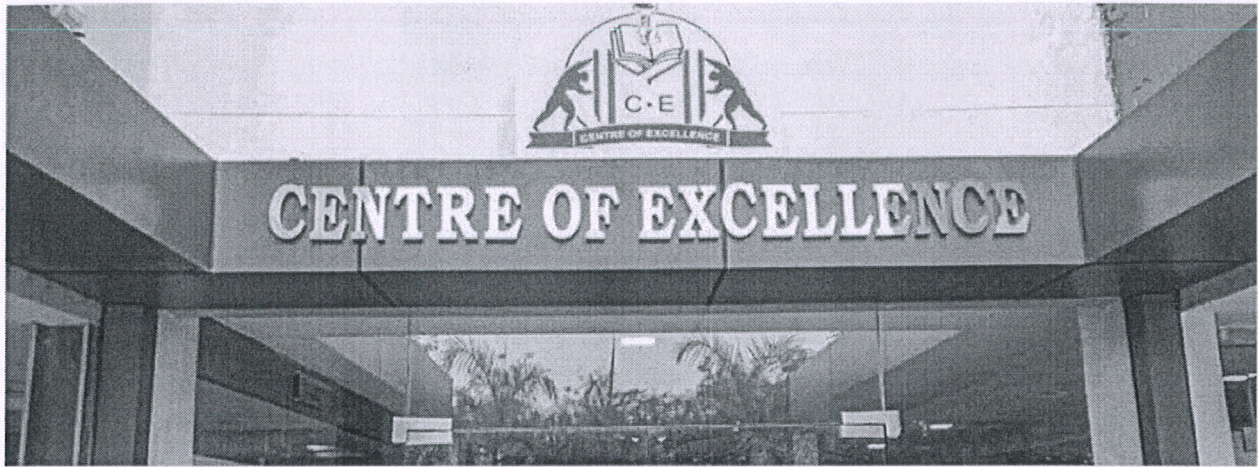
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**MALLA REDDY ENGINEERING COLLEGE**  
**MAIN CAMPUS, AUTONOMOUS INSTITUTION**  
Maisammaguda, Dhulapally (Post) via Kompally,  
Secunderabad-500100 Medchal - Malkajgiri District Telangana, India



## 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>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  
-I

Date:09/07/2018 to  
10/11/2018

Registered Students

SL.No	Roll No	NAME	BRANCH
1.	17J41A0165	B RAMU NAIK	CE
2.	17J41A0175	CHALLA RAJU	CE
3.	17J41A0188	GUGULOTHU YAMUNA	CE
4.	17J41A0191	K N S NITESH	CE
5.	17J41A1240	POCHUGARI PAVAN KALYAN REDDY	IT
6.	17J41A1247	RAAVI LOKESH	IT
7.	17J41A1253	SHIVAM ZANWAR	IT
8.	17J41A1237	NUNE SAI KIRAN	IT
9.	17J41A1243	POOJA HOTKER	IT
10	17J41A0244	NOMA ZAREEN	EEE
11	17J41A0250	SAINI SAI PREETHAM	EEE
12	17J41A0235	MOHAMMAD ABDUL SUMAIR MUSTHAF	EEE
13	17J41A0240	NADIPELLI RAHUL RAO	EEE
14	17J41A0364	AVADUTHA SURAJ	ME
15	17J41A0369	BHARGAVA RACHAKATLA	ME
16	17J41A0376	CHAKKAPALLY KIRAN KUMAR	ME
17	17J41A0383	GANGULA SAIKIRAN REDDY	ME
18	17J41A0389	KODETI SUNDEEP	ME
19	17J41A0465	BOGGULA CHAKRADHAR REDDY	ECE
20	17J41A0472	CHEEKATLA BHANU SHIVA SAI KIRAN	ECE
21	17J41A0478	ERELLI HARISH	ECE
22	17J41A0487	KHAITAN UTTAM	ECE
23	17J41A0491	KORUTLA SRIKANTH	ECE
24	17J41A2544	THATIPAMULA SHIVA SAI	MINING
25	18J45A2518	MITTA NAVEENKUMAR	MINING
26	17J41A0561	ANDE RAMYA SRI	CSE
27	17J41A0583	GOWARAVARAPU AKHIL KUMAR	CSE
28	17J41A0585	JETTY JYOTHSNA	CSE
29	17J41A0591	KOTHAPALLY AKSHITHA	CSE
30	17J41A0599	NAGOLU MANASA	CSE

*Raveedh*

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*

**MITTA NAVEENKUMAR**

*has Successfully Completed Autonomous Robotics -I Course Offered  
by Centre of Excellence, MREC(A) on 10/11/2018 bearing with  
Roll No. 18J45A2518 and Branch MINING.*

Dr. Yogesh Madaria  
CONVENOR

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

Dr. S. Sudhakara Reddy  
Conference Chair & Principal





# MALLA REDDY ENGINEERING COLLEGE

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## Certificate Of the Course Completion

*This is to Certify that*

**NAGOLU MANASA**

*has Successfully Completed Autonomous Robotics -I Course Offered  
by Centre of Excellence, MREC(A) on 10/11/2018 bearing with  
Roll No. 17J41A0599 and Branch CSE.*

Dr. Yogesh Madaria  
CONVENOR

Principal  
Malla Reddy Engineering College  
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Dr. S. Sudhakara Reddy  
Conference Chair & Principal





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## Certificate Of the Course Completion

*This is to Certify that*

**RAAVI LOKESH**

*has Successfully Completed Autonomous Robotics -I Course Offered  
by Centre of Excellence, MRECA(A) on 10/11/2018 bearing with  
Roll No. 17J41A1247 and Branch IT.*

Dr. Yogesh Madaria  
CONVENOR

Principal  
Malla Reddy Engineering College  
Maisammaguda, Dhulapally,  
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Dr. S. Sudhakara Reddy  
Conference Chair & Principal





# MALLA REDDY ENGINEERING COLLEGE

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## Certificate Of the Course Completion

*This is to Certify that*

**KODETI SUNDEEP**

*has Successfully Completed Autonomous Robotics -I Course Offered  
by Centre of Excellence, MREC(A) on 10/11/2018 bearing with  
Roll No. 17J41A0389 and Branch ME.*

Dr. Yogesh Madaria  
CONVENOR

Principal  
Malla Reddy Engineering College  
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Dr. S. Sudhakara Reddy  
Conference Chair & Principal





# MALLA REDDY ENGINEERING COLLEGE

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## Certificate Of the Course Completion

*This is to Certify that*

**KORUTLA SRIKANTH**

*has Successfully Completed Autonomous Robotics -I Course Offered  
by Centre of Excellence, MRECA on 10/11/2018 bearing with  
Roll No. 17J41A0491 and Branch ECE.*

Dr. Yogesh Madaria  
CONVENOR

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

Dr. S. Sudhakara Reddy  
Conference Chair & Principal