



## MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

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

### CIRCULAR

Date: 03/07/2019

All the 2<sup>nd</sup>/I Sem Year students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Autonomous Robotics -I & II, 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 08/07/2019. For further details, please contact Centre of Excellence, MREC(A)

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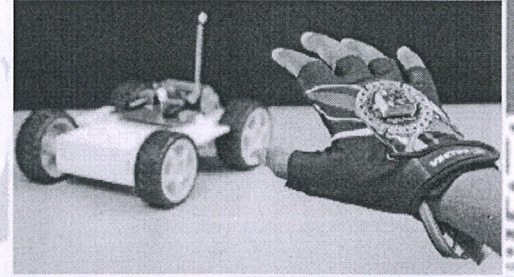
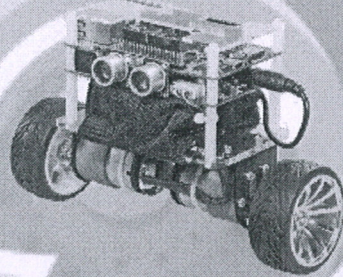
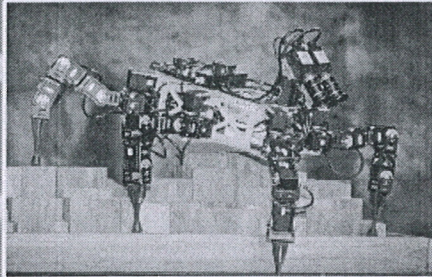
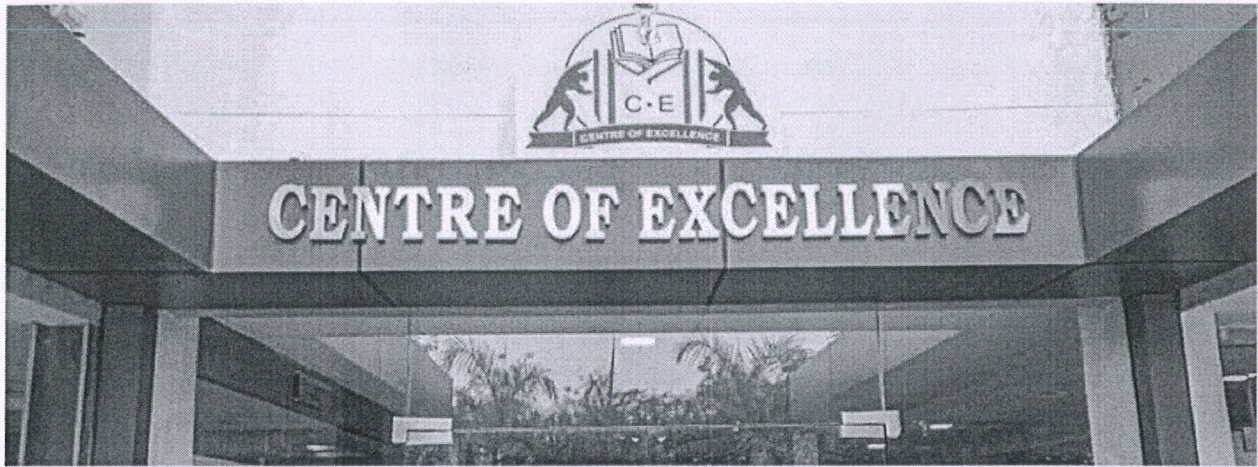
1. All HOD's-for information & circulation among staff
2. To be displayed in all notice board
3. Controller of Examination
4. Confidential Section Exam Branch
5. Group Admin Officer
6. Library
7. Physical Director-for necessary action
8. Security Officer-for necessary action
9. Transport Manager-for necessary action
10. TEQIP Coordinator & Academic Cell
11. Admin Office
12. System Admin
13. Placement Cell
14. PA to Principal for Filling

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





**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**





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

Course:  
Autonomous  
Robotics  
Date:08/07/2019  
to 01/11/2019

Registered Students

SL.No	Roll No	NAME	BRANCH
1.	18J41A0196	ANAGANDULA RAGHU	CE
2.	18J41A0114	B.Chandu yadav	CE
3.	18J41A1201	ALAPATI SIDDHARTHA	IT
4.	18J41A1203	APPIREDDY SAI RAM REDDY	IT
5.	18J41A1210	CHINNOLLA SATHVIK REDDY	IT
6.	18J41A1222	GURRALA SUCHARITHA	IT
7.	18J41A1231	MANNEPALLI VAMSHI	IT
8.	18J41A0207	Burugadda Revati Swapnika	EEE
9.	18J41A0227	Karnati Karthik Reddy	EEE
10.	18J41A0228	Karukla Uday Kiran	EEE
11.	18J41A0304	BODHANAM VARSHITH REDDY	ME
12.	18J41A0323	KASARLA AJAY	ME
13.	18J41A0325	KUMMARI THIRUMALA	ME
14.	18J41A0308	CHALLA YESHWANTH	ME
15.	18J41A0310	DANAM SAISANATH	ME
16.	18J41A0403	A.Nikitha	ECE
17.	18J41A0405	B.sravanthi	ECE
18.	18J41A0413	Dontula Gopala Krishna	ECE
19.	18J41A0423	K Nithin Mohan	ECE
20.	18J41A0425	K. Pravallika	ECE
21.	18J41A0431	Mirza Ibrahim baig	ECE
22.	18J41A0401	Arigela Srinivas	ECE
23.	18J41A0403	A.Nikitha	ECE
24.	18J45A2507	CHEVULA PAVAN	MINING
25.	18J41A2505	BHEEMA NAVEEN	MINING
26.	18J41A0506	BHUKYA BALARAJU	CSE
27.	18J41A0509	BOYA NITHISHA	CSE
28.	18J41A05G2	MUTHOJU VASANTH	CSE
29.	18J41A0556	TRISHA VUDEPU	CSE
30.	18J41A05C7	BASHETTI SAITEJA	CSE

*Raveesh*  
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**  
MAIN CAMPUS, AUTONOMOUS INSTITUTION



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

*This is to Certify that*

**CHINNOLLA SATHVIK REDDY**

*has Successfully Completed Autonomous Robotics I & II*  
*Course Offered by Centre of Excellence, MREC(A) on 01/11/2019*  
*bearing with Roll No. 18J41A1210 and Branch IT.*

**Dr.N.Rishikanth**  
COE Dean

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

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



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



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

*This is to Certify that*

**Dontula Gopala Krishna**

*has Successfully Completed Autonomous Robotics I & II*  
*Course Offered by Centre of Excellence, MREC(A) on 01/11/2019*  
*bearing with Roll No. 18J41A0413 and Branch ECE.*

**Dr.N.Rishikanth**  
COE Dean

*Raveesh*  
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*

**Karukla Uday Kiran**

*has Successfully Completed Autonomous Robotics I & II*  
*Course Offered by Centre of Excellence, MREC(A) on 01/11/2019*  
*bearing with Roll No. 18J41A0228 and Branch EEE.*

**Dr.N.Rishikanth**  
COE Dean

**Principal**  
**Malla Reddy Engineering College**  
**Maisammauda, 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*

**KUMMARI THIRUMALA**

*has Successfully Completed Autonomous Robotics I & II*  
*Course Offered by Centre of Excellence, MRECA on 01/11/2019*  
*bearing with Roll No. 18J41A0325 and Branch ME.*

**Dr.N.Rishikanth**  
COE Dean

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

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





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



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

*This is to Certify that*

**B.Chandu Yadav**

*has Successfully Completed Autonomous Robotics I & II*  
*Course Offered by Centre of Excellence, MREC(A) on 01/11/2019*  
*bearing with Roll No. 18J41A0114 and Branch CE.*

**Dr.N.Rishikanth**  
COE Dean

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

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