

#### (Autonomous)

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

#### **CIRCULAR**

Date: 08/08/2019

All the 1st /I Year/Sem students are hereby informed that the Malla Reddy Engineering College (Autonomous) is planning to organize Value Added Courses like Robotic Process Automation-I, Graphic Designing - I ( Photoshop & Illustrator), Green Matte Studio - Audio Effects/Transitions, Scrach Programming in Centre Of Excellence. In this regard Interested students are hereby directed to register for this Courses on or before 13/08/2019. For further details, please contact Centre of Excellence, MREC(A)

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

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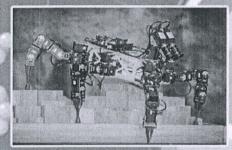
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- 2. To be displayed in all notice board
- 3. Controller of Examination
- 4. Confedenttial Section Exam Branch
- 5. Group Admin Officer
- 6. Library
- 7. Physical Director-for necessary action
- 8. Security Officer-for necessary action
- 9. Transport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

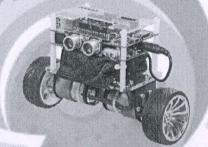


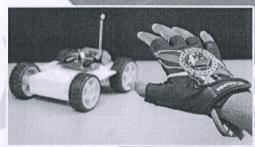
# MALLA REDDY ENGINEERING COLLEGE MAIN CAMPUS, AUTONOMOUS INSTITUTION

Maisammaguda, Dhulapally (Post) via Kompally, Secunderabad-500100 Medchal – Malkajgiri District Telangana, India









## ROBOTTIC'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.



## **SYLLABUS**

#### MALLA REDDY **ENGINEERINGCOLLEGE** (Autonomous) CENTRE OF EXCELLENCE

## ROBOTICS PROCESS AUTOMATION-I

## **MODULEI:** Introduction to Robotics

Introduction to robots, history, etymology, new technologies Types of robots, 4-D Conditions & Laws of robots, Mathematics of triangle, circle, angle & delay relationships, Concept of a tricycle robot model, Practical understanding Delay, projection and movement,

#### MODULE-II: Robotics Systems

Robotics System - Block diagram & description, Hands on session on Robot Chassis Design & Assembly Manual robot , Design with OCU

## MODULE-III: Introduction to basic electronics

Introduction to basic electronics (Analogue & Digital), Voltage, Current & Ohm's Law, Multi-meter basics and how to use it, Voltage Divider Rule - Concept, Equation & Application, Hands on session on voltage & Current measurement, Arduino robot development Platform

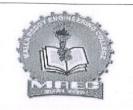
#### MODULE-IV:DPDT Design

Action Planning table of DPDT control, DPDT-Connection, Hands on session on DPDT based Robot Design, OCU Design

#### **MODULEV: Electronic Components**

Resistors - Types, Colour Coding & Applications, Capacitors Requirement analysis - Types, Identification & Applications, Inductors - Basics & Applications, Diodes - Types, Identification & Applications, Transistors - NPN, PNP, Identification & Applications, DMM

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## MALLA REDDY ENGINEERING COLLEGE (Autonomous)

Maisammaguda(H), Gundlapochampally Village, Medchal Mandal, Medchal-Malkajgiri District, Telangana State - 500100 Course:Robotics and Automation-I

Date:13/08/2019 to 31/11/2019

#### Registered Students

SL.No	Roll No	NAME	BRANCH
1.	19J41A0106	ANUJ ROY	CE
2.	19J41A0107	ARE ABHINAV	CE
3.	19J41A0108	BAGANAGARI DHANUSH GOUD	CE
4.	19J41A1203	AILY NEERAJ	IT
5.	19J41A1204	ALIMI ADITYA	IT
6.	19J41A1205	ALLURI ROHITH REDDY	IT
7.	19J41A0207	B.VARSHA	EEE
8.	19J41A0209	B.SANDEEP	EEE
9.	19J41A0210	B.HARSHA VARDHAN	EEE
10.	19J41A0220	G.SAI KRISHNA	EEE
11.	19J41A0307	ARUN NAIK KATROTH	ME
12.	19J41A0309	BHUKYA MAHESH	ME
13.	19J41A0310	BHUKYA SIDDU	ME
14.	19J41A0311	BODA ANIL	ME
15.	19J41A0316	DONTHU SANJAY	ME
16.	19J41A0317	EDEM SHIVA SANTOSH PRASAD	ME
17.	19J41A0328	KELOTH PRAVEEN	ME
18.	19J41A0407	BANDI PRIYANKA	ECE
19.	19J41A0408	BANOTH CHAKRI	ECE
20.	19J41A0409	BHUKYA RAJENDER	ECE
21.	19J41A0410	BIJJA ABHINAV	ECE
22.	19J41A0411	BOINI SAI PRAKASH	ECE
23.	19J41A0413	BOYAPATI SREYA REDDY	ECE
24.	19J41A0427	GUDE NARENDER	ECE
25.	19J45A2502	BATHINI VIJAY KUMAR	MINING
26.	19J41A2512	CHILUMULA PRAVEEN	MINING
27.	19J41A0508	BANJA ASHITHA	CSE
28.	19J41A0512	BONASPURAM DIVESH REDDY	CSE
29.	19J41A0524	HITEESHA GELLANKI	CSE
30.	19J41A0530	KUTHATI HARIKA	CSE

Mala Reddy Engineering College

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## SUMMARY Robotics and Automation

Robotics is a multidisciplinary field of science and engineering that is concerned with the design, manufacturing, and use of mechanical robots. Our Course will provide you with a solid knowledge of robotics, covering several types of robots, how they're used in various industries, and the fundamentals of electronics.

Robotics is a branch of engineering that deals with the design and use of robots, as well as the use of computers to manipulate and process them. In industries, robots are employed to speed up the production process. They are also utilized in nuclear research, marine exploration, transmission electric signal service, bio-medical equipment design, and so on. Robotics necessitates the use of computer-aided manufacturing (CAM), mechanical engineering, electrical engineering, biological mechanics, and software engineering.

Robotics and automation the use of control systems and information technologies to minimize the demand for human labor in the creation of products and services is referred to as engineering. Automation is a step beyond mechanization in the context of industrialization.

A robotics engineering specialty may lead to employment possibilities in manufacturing, research and engineering, agricultural, mining, nuclear, power-plant maintenance, and a number of other fields. Furthermore, there is a lot of opportunity for competent professionals and researchers to work on many aspects of robotics R&D. As shown by the current worldwide career trend in robotics, areas as varied as surgery, contemporary warfare, and nanotechnology have seen a significant rise in their need for robotics technical professionals and researchers

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# Certificate Of the Course Completion

This is to Certify that

#### **GUDE NARENDER**

has Sucessfully Completed Robotic Process Automation I
Offered by Centre of Excellence, MREC(A) on 30/11/2019 bearing
with Roll No. 19J41A0427 and Branch ECE.

Dr.N.Rishikanth

Principal College
Principal College
Reddy Engineer in Japan 500100

Dr.S.Sudhakara Reddy Conference Chair & Principal

Mala Kompany



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## Certificate

Of the Course Completion

This is to Certify that

#### **ABHINAV**

has Sucessfully Completed Robotic Process Automation I
Offered by Centre of Excellence, MREC(A) on 30/11/2019 bearing
with Roll No. 19J41A0107 and Branch CE.

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Dr.N.Rishikanth

Principal ing College

Dr.S.Sudhakara Reddy Conference Chair & Principal



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## Certificate

Of the Course Completion

This is to Certify that

#### **ALLURI ROHITH REDDY**

has Sucessfully Completed Robotic Process Automation I Offered by Centre of Excellence, MREC(A) on 30/11/2019 bearing with Roll No. 19J41A1205 and Branch IT

> Malla Reddy Maisammag (Post Via Kompally), Se

Dr.N.Rishikanth

COE Dean

Dr.S.Sudhakara Reddy Conference Chair & Principal



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# Certificate Of the Course Completion

The Course Complete

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This is to Certify that

#### BHUKYA MAHESH

has Sucessfully Completed Robotic Process Automation I
Offered by Centre of Excellence, MREC(A) on 30/11/2019 bearing
with Roll No. 19J41A0309 and Branch ME.

Dr.N.Rishikanth

Principal College

Principal College

Principal Source

Principal

Dr.S.Sudhakara Reddy Conference Chair & Principal



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#### Certificate

Of the Course Completion

This is to Certify that

#### **BIJJA ABHINAV**

has Sucessfully Completed Robotic Process Automation IOffered by Centre of Excellence, MREC(A) on 30/11/2019 bearing with Roll No. 19J41A0410 and Branch ECE

Dr.N.Rishikanth COE Dean

Dr.S.Sudhakara Reddy Conference Chair & Principal

Maisammaguda, Dhulapaily. (Post Via Kompally), Sec'bad-