



ADITYA COLLEGE OF ENGINEERING & TECHNOLOGY

Affiliated to JNTUK, Kakinada * Approved by AICTE, New Delhi * Accredited by NAAC

Recognized by UGC Under section 2(f) and 12 (B) of UGC Act 1956

ADB ROAD, ADITYA NAGARA, SURAMPALEM-533437

Department of Electronics & Communication Engineering

Date: 12.02.2020.

To
The principal
Aditya College of Engineering & Technology
Surampalem

Respected sir,

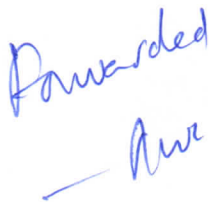
[Through Head of the Department]

Sub: Request for your approval to organize a certification course on "ROBOTICS" – reg.

It's our greatest pleasure to bring to your kind notice that, we the Department of Electronics & Communication Engineering would like to train our 3rd year B.Tech students in the, **ROBOTICS** with the help of our staff; as the present world is moving over the software design & simulations and also is a part of the Electronics & Communication Engineering. It will be more helpful to the students in theoretical and technical point of view. In this regard we are requesting your permission for further proceedings.

Resource Person : Mr. CH Venumadhav.
Industry person, Hyderabad.
Honorarium : Rs. 10000/-


Course Coordinator


Principal


PRINCIPAL
Aditya College of
Engineering & Technology
SURAMPALEM- 533 437



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CIRCULAR

All the 3rd year students are here by informed that a program is arranged to enhance the knowledge on **ROBOTICS**, as per the schedule from 2nd March, 2020. All interested students can attend the program and utilize the opportunity. The schedule is attached.

Course Coordinator: Mr. K PARVATEESAM.

+917036358658

Head of the Department

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Department of Electronics & Communication Engineering Schedule of ROBOTICS Syllabus:

Day-1:

- FN Inauguration of the Program and speakers talk about the objectives of the event
- AN Introduction to robots.

Day-2:

- FN Introduction to computer programming.
- AN Practice session.

Day-3:

- FN Introduction to computer programming.
- AN Practice session

Day-4:

- FN Introduction to computer circuits.
- AN Practice session

Day-5:

- FN Introduction to computer circuits
- AN Practice session

Day-6:

- FN Early Robotic Topics, Sensors, Actuators and Manipulators
- AN Practice session

Day-7:

- FN Introduction to Robot mechanics.
- AN Practice session

Day-8:

- FN Introduction to Robot mechanics.

- AN Practice session

Day-9:

- FN Advanced topics on Robotics.
- AN Practice session

Day-10:

- FN Assessment test
- AN Valedictory

K. Parth
Course Coordinator

A. W. S. S. S.
Head of the Department

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Department of Electronics & Communication Engineering

ROBOTICS Syllabus

1. **Introduction to Robotics:** Introduction to Robotics, The Engineering Design Process, Best practices in engineering design.
2. **Introduction to computer programming:** Fundamentals of computer languages and machine logic, loops, iterations, Variables, arithmetic operations and logical operations, libraries.
3. **Introduction to computer circuits:** Electricity, voltage and current. Fundamentals of electric circuits, Ideal sources and resistors, Ohm's law and Kirchhoff's law, Capacitors and RC circuits.
4. Early Robotic Topics, Sensors, Actuators and Manipulators
5. **Introduction to Robot Mechanics:** Power and torque, Acceleration and velocity, Design models for ground mobile robots, Design models for mechanic arms and lifting systems, Fundamentals of kinematics.
6. **Advanced topics on Robotics:** Sensing distance and direction. Line Following Algorithms. Feedback Systems. Other topics on advance robotic techniques.

K. Parth
Course Coordinator

A. W. Kumar
Head of the Department

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