

AICTE-SPICES sponsored
Workshop and Training Programme on
“Humanoid Robot: Concept and Development”

Date of the event: - 24/02/2022-25/02/2022

Venue of the event: - Meghnad Saha Seminar Hall, Department of ME, SKIT Jagatpura, Jaipur

Level of the event: - College level

Notice of the event: -



**Swami Keshvanand Institute of Technology,
Management & Gramothan, Jaipur**

Notice

16.02.2022

It is to notify that **Robotics Club-SKIT** has planned to organize “**Workshop and Training Programme on Humanoid Robot :“Concept and Development”** under the **AICTE-Scheme for Promoting Interests, Creativity and Ethics among Students (SPICES)**.

It is well known that a humanoid robot has substantial advantages when working in environments where human beings live. The main advantage is that a humanoid robot can act as human beings in such an environment without any previous adjustment for the robot. On the other hand, human friendly and functional machinery become more necessary as robots are used closer to human beings to care. So by keeping in mind all this it is essential to let you explore this workshop and get trained in this field. It is highly expected to participate in this workshop cum training on humanoid robot.

Date: 24/02/2022- 25/02/2022

Reporting Time: 12:00 Noon

Venue: Meghnad Saha Seminar Hall, Department of Mechanical Engineering

There is no registration fee.

Interested students may join the workshop and follow the guidelines issued for COVID-19

Brij Mohan Sharma
Robotics Club- Faculty Coordinator

Sudesh Garg
Robotics Club- Faculty Co-Coordinator

Prof. (Dr.) Dheeraj Joshi
Head, Department of ME
SKIT, M&G, Jaipur

Event brochure / banner:-



Details speakers:- Mr. Saurabh Singh Jat, Senior student Coordinator, Robotics Club

Objective of the event:-

It is well known that a humanoid robot has substantial advantages when working in environments where human beings live. The main advantage is that a humanoid robot can act as human beings in such an environment without any previous adjustment for the robot. On the other hand, human friendly and functional machinery become more necessary as robots are used closer to human beings to care.

So the objective of the event to get trained the students about the Bipedal Humanoid Robot with 18 degrees of freedom joints. It is actuated using 18 Metal Gear Standard Servo Motors. This Humanoid Robot is controlled by Raspberry Pi 4/Node MCU with the help of 16 channels SERVO CONTROLLER. It can also be controlled by PC using USB or smart phone via bluetooth. To make a Humanoid Robot which is capable of doing different types of movements like walking, sitting, push-ups, squats etc.

Details(Execution):-

In this two days workshop the student get benefited by learning the basics of the Humanoid Robot and also get hands on training on development of Humanoid robot. The session was taken by the Saurabh Singh Jat (Senior Student Coordinator, Robotics Club). He also explained the tasks/ functions that can be accomplished by humanoid Robot. Speaker started giving all the necessary information about humanoid robot Arduino, Servos, Electronics Circuits etc. After this, speaker briefed about its Developing Algorithms and Writing Codes.

Date	Time	Topic	Delivered by
Feb. 24, 2022	12.30 pm to 2.30 pm	<ul style="list-style-type: none"> • Learning About Arduino • Learning Servos • Neutralising Servos • Checking servos • Assembling robot's legs • Fitting servo motors • Configuring servos using arduino 	Saurabh Singh Jat Senior Student Coordinator, Robotics Club
Feb. 25, 2022	12.30 pm to 2.30 pm	<ul style="list-style-type: none"> • Completing Electronics Circuits • Managing Power Supply • Developing Algorithms • Writing Codes • Uploading Codes • Testing the Robot 	Saurabh Singh Jat Senior Student Coordinator, Robotics Club

Feedback of the event:-

Participants enjoyed all the sessions. They also get exposure about the humanoid robot and learnt the algorithms and coding to control the movement of neck, hands and legs of humanoid bot.

Glimpses of event:-



