

Centre for Entrepreneurship

TINKERERS' LAB WORKSHOP



TINKERERS' LAB
NIRMA UNIVERSITY

IEEE NU
STUDENT BRANCH

NIRMA UNIVERSITY
INSTITUTE OF TECHNOLOGY
NAAC ACCREDITED 'A+' GRADE

PRESENTING

3D

PRINTING WORKSHOP

RoverXcraft

How Machines Roam

NOVEMBER 04, 2023

All the participants will be provided with a Student's kit for the workshop.

For queries, contact: Aryan Shah - 9427942072 , Dhruv Jaimini - 8238463155

Event Details:

Title: Tinkers lab Workshop

Event Date: 28/10/2023

No. of participants: 60 students

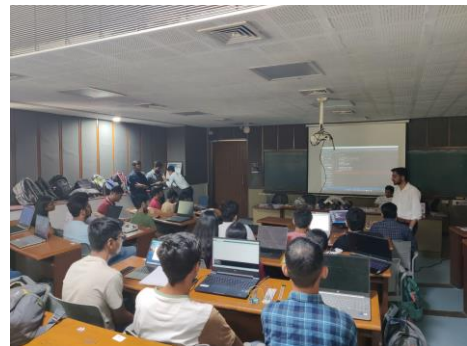
Venue: Incubation Centre

The amount of success that ISRO brought to India during Chandrayaan 3 Mission is humongous and the ripples of its glory can be seen amongst the youth of India. Taking advantage of the situation, it was apt to conduct the



“RoverXCraft” workshop, which was aimed at the first and second year students wherein they went through the entire process of working of rover and starting from scratch to building the entire circuit.

Being the first workshop organised by Tinkerers' Lab, it started with Bhavin Sir giving an introduction to Tinkerers' Lab: its purpose, and the tools and the facilities that it provides to everyone at Nirma University. Further, the participants were taught about technologies used in Pragyaa Rover and then about various types of sensors like the MQ2 Gas Sensor, Ultrasonic sensor, LM35 temperature sensor, and the DHT11 sensor along with their conceptual working and practical applications. Curiosity of the students made room for active participation and indeed made the workshop more engaging and lively, evidently standing apart from classroom learning. The Arduino microcontroller was introduced to the participants in a fundamental way and they were taught about its significance due to the wide range of applications it is used in.



There was the highest amount of enthusiasm when it was time to write the code for the Arduino board for the integration of the different sensors and the motors. It was amazing to see the participants understand the codes and implement them with equal ardour as the Tinkerers' Lab team, and successfully completing the entire circuit for the RoverXCraft. At the end, there was a small session held that helped students to understand what is soldering and how to solder. This is the first step for all students in their engineering journey ahead.

The healthy amount of discussions and active participation from all participants is the greatest factor in making this workshop a huge success.

