

Event Details:

TITLE: Tinkerers' Lab, Nirma University

DATE: 9/11/2023

Duration: 6 Hour

BRIEF:

The event centered on a comprehensive workshop encompassing 3D printing, CAD design, and the design and manufacture of rovers. The event spanned a total duration of 6 hours.

The workshop commenced with an introductory session that provided insights into the Tinkerers' Lab and IEEE SBNU. Subsequently, it featured an orientation to 3D printing, with the distribution of 3D printing guidebooks to the participants. Attendees were then guided to the Cad-Cam center in the W block, where they engaged in CAD design work for the rover, utilizing Solidworks. Notably, the workshop included the design of the rover's chassis and Rocker-bogie system using Solidworks, offering a comprehensive understanding of rover functionality. Further, participants actively manufactured the chassis, wheels, and suspension components using a laser cutting machine. The assembly process involved the integration of these elements through the use of adhesives and nut-bolts. Additionally, the workshop provided participants with in-depth insights into the workings of 3D printers, complete with a live demonstration.

Throughout the workshop at Tinkerers' Lab, the participants displayed exceptional curiosity and enthusiasm, actively engaging in the learning process.

KEY OUTCOME

The workshop effectively informed participants about the resources and opportunities available at Tinkerers' Lab, empowering them to implement their creative ideas and visions. Attendees gained fundamental knowledge of CAD design, manufacturing techniques, and the utilization of machine tools to bring their design concepts to life.



