

July 17 2018

REVERSE ENGINEERING WITH 3D SCANNER

Department : Mechanical Engineering
Type of Event : Seminar
Event Title : 3D Printing - Introduction
Date & Time : 17.07.18 – 10 am to 11.30 am
Venue : Conference Hall
Organizer : Mechanical Department
Coordinator : Mr B N Philip

Details of Participants : Second year and First year students

Profile of the Chief Guest

Name of the Guest Speaker : Mr Subburaj
Organization : CADDAM Technologies
Designation : Manager – Technical

Event Agenda

- Welcome address by Mr B N Philip, HOD-Mech
- Concepts of Design, Drawing and Manufacturing
- Concept of Reverse Engineering
- 3D scanning with live demo
- Vote of thanks by 2nd year student

The gathering was welcomed by Mr Philip, Head of mechanical Department. He gave valuable insights into the current applications and areas where 3D printing is used nowadays and how this seminar will be useful for the students.

Reverse engineering is the process by which a man-made object is dismantled to reveal its designs and architecture. The reverse-engineering process involves measuring an object and then reconstructing it as a 3D model. The physical object can be measured using 3D scanning technologies like CMMs, laser scanners, structured light digitizers, or Industrial CT Scanning

(computed tomography). The measured data alone, usually represented as a point cloud, lacks topological information and is therefore often processed and modeled into a more usable format such as a triangular-faced mesh or a CAD model.

The seminar audience was welcomed by Mr Philip, Head of Mechanical Department. Mr Subburaj briefed the gathering on the various aspects of design, drafting and manufacture. He also explained what is Normal engineering Vis-a-Vis Reverse engineering.

A live demo was conducted with the help of a second year student. His face was scanned with a 3D scanner and his 3D image was captured. Then the image was converted into a mesh with 3D parameters. The students were excited about the technology and the scope of its applications. Coupled together with 3D printing, 3D scanning would be a game changer in the years to come with its numerous applications in all fields.

A Vote of Thanks was proposed by a second year student.





