

Report on one day workshop on 3D Printer



B.S. Abdur Rahman
Institute of Science & Technology
Deemed to be University by U3 of the UGC Act, 1956

One Day Workshop on Building your own 3D Printer (ASME Sponsored) 29th October, 2018

Patron

Tan Sri Dato' Sri Prof. Ir. Dr. Sahol Hamid Bin Abu Bakar
Vice Chancellor

Co-Patron

Dr. A. Azad
Registrar

Convenor

Dr. S. Rasool Mohideen
Professor & Dean (SMS)

Co-ordinators

Dr. M. Thirumurugan
Associate Professor

Mr. K. Saran Kumar
Assistant Professor

by

Department of Mechanical Engineering
B S Abdur Rahman Crescent Institute of Science & Technology

Registration Fees:

Students/Research Scholars/Faculty from Institutions: Rs.350 / participant

Online Registration:

1. <https://goo.gl/forms/lxsflheT7UaYuZE12>
2. https://docs.google.com/forms/d/e/1FAIpQLSenLDdwe2o1Z4oRmhLEZc78ljsNA16tJ0R8U4bM2mWBX25vA/viewform?usp=sf_link

Address for Correspondence:

Co-ordinators

Dr. M. Thirumurugan,
Associate Professor,
Department of Mechanical Engineering,
BSACIST.

Mr. K. Saran Kumar,
Assistant Professor,
Department of Mechanical Engineering,
BSACIST.

Mobile: +91 9941131913

Email: thirumurugan@crescent.education

Mobile: +91 9043923424

Email: sarankumar@crescent.education

ABOUT THE INSTITUTE

B.S. Abdur Rahman Crescent Institute of Science and Technology, a Deemed to be University in Chennai is a 4-Star rated QS World University Rankings varsity with over 34 years of Academic Excellence. The institute aspires to be a leader in Education, Training and Research in Engineering, Science, Technology and Management, and play a vital role in the Socio-Economic progress of the Country.

B.S. Abdur Rahman Crescent Institute of Science and Technology, Vandalur is located in the outskirts of Chennai city on the G.S.T. Road, (Chennai-Trichy National Highway) 7 km from Tambaram and 2 km from Vandalur Railway Station and 17 km from the International Airport. Being adjacent to the Arignar Anna Zoological Park, it is easily accessible by city buses.

ABOUT THE DEPARTMENT

MECHANICAL ENGINEERING

The department of Mechanical Engineering started in 1984, is one of the oldest department of this Institution. A high degree of professionalism is inducted to the students through student chapters of professional associations such as American Society of Mechanical Engineers (ASME), Society of Automotive Engineers (SAE), Indian Society for Heating Refrigeration and Air-conditioning (ISHRAE) and Society of Mechanical Engineers. The department organizes programmes to provide the students with industrial and practical experience through training and project work in industries to meet the industrial requirements and face real life situations. The Department of Mechanical Engineering offers the following programmes at undergraduate and postgraduate level:

- ▲ B.Tech. Mechanical Engineering
- ▲ B.Tech. Mechanical Engineering (Part Time)
- ▲ M.Tech. CAD/CAM
- ▲ M.Tech. Manufacturing
- ▲ M.Tech. CAD/CAM (Part Time)
- ▲ M.Tech. Manufacturing (Part Time)
- ▲ Ph.D. - Full Time/Part Time

ABOUT THE WORKSHOP

Rapid prototyping is a group of techniques used to quickly fabricate a scale model of a physical part or assembly using three-dimensional computer aided design (CAD) data. Construction of the part or assembly is usually done using 3D printing or "additive layer manufacturing" technology. The first methods for rapid prototyping became available in the late 1980s and were used to produce models and prototype parts. Today, they are used for a wide range of applications and are used to manufacture production-quality parts in relatively small numbers if desired without the typical unfavorable short-run economics. 3D printing is a process in which material is joined or solidified under computer control to create a three-dimensional object, with material being added together (such as liquid molecules or powder grains being fused together). Objects can be of almost any shape or geometry and typically are produced using digital model data from a 3D model. In the current scenario, 3D printing has been used in manufacturing, medical, industry and sociocultural sectors which facilitate it to become successful commercial technology.

TOPICS

- 9.30 to 10.00 - Inauguration
- 10.00 to 10.30 - Introduction
- 10.30 to 11.00 - Break
- 11.00 to 12.30 - CAD Modelling & Electronics accessories
- 12.30 to 1.30 - Lunch
- 1.30 to 4.00 - Hands-on Training to build 3D Printer

The department of Mechanical Engineering organized a one day workshop on **"Building your own 3D Printer"** sponsored by ASME on the 29th of October 2018. The workshop was inaugurated by Dr. S. Rasool Mohideen, Professor and Dean (School of Mechanical Sciences). The coordinators Dr. M. Thirumurugan, Associate Professor, faculty advisor ASME and Mr. K. Saran Kumar, Assistant Professor of Mechanical Engineering conducted the workshop.



The workshop focused on imparting the background knowledge required to build a 3D printer on their own from CAD modeling to Electrical circuitry. An hands on training session was conducted in the afternoon in association with M/s Monotech Ltd. The workshop attracted more than 25 student participants from various departments.