

## About the Course

3D printing is used by designers for more than 30 years as a proto typing tool to reduce the product realization time. In the last decade it gained attraction as an inevitable manufacturing technology for various fields such as Defence, Medical, Aerospace and Automobile. It empowers the innovators with enormous design freedom to manufacture customized products. The versatility of 3D printers is evident in variety of ways they are used today. It has the potential to democratize the production of components, and goods from food to medical supplies. In future, 3D printing machines could make their way into homes and offices.

This faculty development program will introduce you to 3D Printing and enable you to gain knowledge and skill in this promising technology by interacting with experts in the field.

## Guidelines to Participants

- No registration fee for participants.
- Number of participants is limited to 200.
- Participants will be selected on first - come first - serve basis.
- Selected candidates will be intimated by e-mail
- Confirmation of participation by email is compulsory.

## Resource Persons

Experts in this field from academia & industry such as IIT, IIITDM, CIPET, Anna University, VIT, Crescent and Mono Tech. systems.

## Chief Patron

Mr. BSA. Arif Buhary Rahman

Chancellor

Mr. Abdul Qadir Abdul Rahman Buhari

Pro-Chancellor

B.S. Abdur Rahman Crescent Institute of Science & Technology

## Patron

Dr. A. Peer Mohamed

Vice-Chancellor in-charge

B.S. Abdur Rahman Crescent Institute of Science & Technology

## Co-patron

Dr. A. Azad

Registrar

Dr. S. Rasool Mohideen

Dean (School of Mechanical Sciences)

B.S. Abdur Rahman Crescent Institute of Science & Technology

## Convener

Dr. H. Siddhi Jailani

Head (Dept. of Mechanical Engineering)

B.S. Abdur Rahman Crescent Institute of Science & Technology

## Coordinator

Dr. P.D. Jeyakumar, Asso. Prof.

Dr. A. Arockia Julias, Asst. Prof.

B.S. Abdur Rahman Crescent Institute of Science & Technology

Previous workshop conducted on how to build your own 3D Printer



**AICTE (ATAL) Sponsored**

Five Days Online  
Faculty Development Programme

on  
**3D Printing & Design**

**07<sup>th</sup> to 11<sup>th</sup> December, 2020**



**Organized by**

Department of Mechanical Engineering  
B.S. Abdur Rahman



**Crescent**

Institute of Science & Technology  
Deemed to be University u/s 3 of the UGC Act, 1956  
GST Road, Vandalur, Chennai 600 048

**Sponsored by**

**AICTE Training &  
Learning (ATAL) Academy**



## About the Institution



B.S. Abdur Rahman Crescent Institute of Science & Technology (Estd. u/s 3 of the UGC Act. 1956, India), formerly Crescent Engineering College is acclaimed throughout India for its quality in teaching and research. The institution is committed to focus on three dimensions of higher education Viz., quality teaching, innovative research and appropriate applications of knowledge through extension, outreach and consultancy activities. The institution is located on the Chennai - Trichy National Highway, 7km from Tambaram and 2km from Vandalur Railway Station and 17km from the Chennai International Airport.

## About the Department



Department of Mechanical Engineering started in 1984, is one of the oldest departments of this institution with a glorious past and continuing success. The programmes of the department are accredited by the National Board of Accreditation (NBA). Modern multimedia teaching technologies are used to supplement lectures and enhance the quality of teaching. We induce a high degree of professionalism to our students.

The Department is equipped with state of the art facilities such as Robo Lab, 3D Printer, CNC machines, CMM, EDM, Cryogenic chamber, Pin-on-disc apparatus, Roughness Tester and Computerised engine testing facility. Major software including LS Dyna, Hyper works, ANSYS, NX, CATIA, Creo and Matlab are available for the academic and research purpose. The Department of Mechanical Engineering offers the following programmes:

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

## Course Content

- ❑ Introduction to 3D printing & Design
- ❑ CAD for 3D printing
- ❑ Additive Manufacturing Techniques
- ❑ Identification of Products & Techniques
- ❑ Materials for 3D Printing
- ❑ Product Orientation and Topology
- ❑ Process Parameters
- ❑ Post Processing Techniques
- ❑ 3D Printer Components
- ❑ Build your own 3D Printer
- ❑ Applications of 3D Printing (Bio-Medical, automotive, aerospace etc.)
- ❑ Demo of Additive Manufacturing (Virtual)

## Registration

Registration has to be done only through ATAL academy. Please visit <https://atalacademy.aicte-india.org/login>. Log in as participant and locate 3D printing & design during December 07<sup>th</sup> to 11<sup>th</sup> 2020 with application number: 1584003063

## Dates to Remember

Last date for Registration	: 25.11.2020
Intimation of Selection	: 27.11.2020
Confirmation by Participants	: 01.12.2020

## Contact Details

Dr. PD. Jeyakumar, Asso. Prof.,  
Dr. A. Arockia Julias, Asst. Prof.,  
Department of Mechanical Engineering,  
B.S. Abdur Rahman Crescent Institute of Science & Technology,  
Vandalur, Chennai - 600 048.  
Mobile: 94441 83049  
E-mail: [ajulias@crescent.education](mailto:ajulias@crescent.education)

## About ATAL

The Government of India in association with All India Council for Technical Education (AICTE) launched the AICTE Training And Learning (ATAL) academy with a vision to empower faculty to achieve goals of Higher Education such as access, equity and quality. ATAL Academy have started unique faculty development programs in various thrust areas of modern technology. More than 600 such programs have already been conducted in various AICTE approved institutions benefitting around 75,000 faculties, research scholars & PG students.

## Eligibility

The faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from Government, Industry (Bureaucrats / Technicians / Participants from Industry etc.) and staffs of host institutions are eligible to attend the program.

## Online Platform

The entire programme will be conducted through online mode. The details of online platform and meeting link will be communicated to the selected candidates through their registered e-mail. Assessment on topics covered will also be done through online mode.

## Certificate

E-certificate will be provided by ATAL Academy through their website after successful completion of FDP. Minimum 80% attendance and 60% marks in assessment conducted at the end of the program are required to earn certificate.