

No:6, MunuAdhi Nagar, Sankarapuram, Near Wallajabad, Kancheepuram- 631 605.

## REPORT ON

# "TWO DAYS WORKSHOP ON 3D PRINTING"

Department of civil Engineering in Adhi College of Engineering and Technology Conducted a two days workshop on 13/08/18 and 14/08/18. Inaugural function started at 10a.m on 13/08/18. After that splitted into two batches and each batches 75 members.

3D workshop conducted by Adithya 3Dprinters and organized by Mrs.P.Vasanthi(HOD), Ms.T.Ishwariya(Co-Ordinator) and other civil department staffs.

3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file.

3D printing is a Advanced Technology and lot of opportunities in this field. We learned lot of things in this workshop. It is used in the all fields such as all streams of engineering, medical and other works.

## STEPS IN 3D PRINTING

- ✓ Design the model in software
- ✓ Digital file
- ✓ Printing Machine
- ✓ Printing material

## **SOFTWARES USED**

- ✓ Revit
- ✓ 3Ds max
- ✓ Fusion
- ✓ Catia
- ✓ Solidworks

We used revit software for making design in workshop.

# **MATERIALS USED**

- ✓ ABS plastic
- ✓ PLA
- ✓ Glass filled polyamide
- ✓ Epoxy resins
- ✓ Silver
- ✓ Titanium
- ✓ Steel
- ✓ Wax

These are the materials used in the 3D printing, but in the workshop used material is ABS plastic and PLA which is in the form of wire.

# **TYPES OF 3D PRINTING**

- ✓ Fusion Deposition Modeling(FDM)
- ✓ Stereolithography(SLA)
- ✓ Jetting Processes
- ✓ Selective Laser Sintering
- ✓ Metal printing

We used Fusion Deposition Modeling which used in the form of wire convented into required shape.

# **USES**

- ✓ All engineering fields
- ✓ Automotive industry
- ✓ Biomedical industry
- ✓ Aerospace industry

In these workshop Civil and Mechanical engineering students participated and learned about it. It's effective workshop for us and used in future jobs.



Introduction about 3D PRINTING and applications



Explained practically about process of 3D printing



Software class for making design