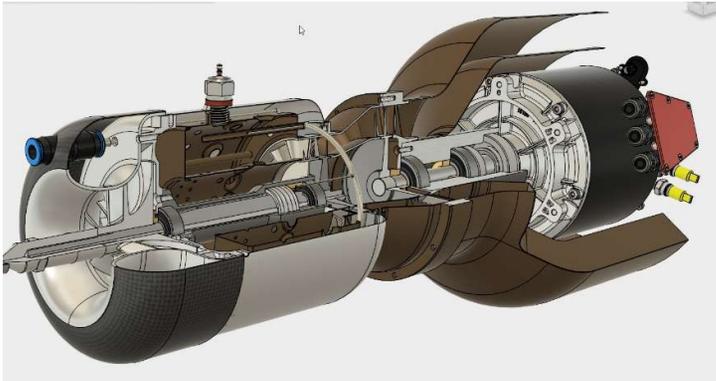




Certificate Course
ON
FUSION 360

From 10th September 2018 to 15th September 2018



ORGANIZED BY

DEPARTMENT OF MECHANICAL ENGINEERING
AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,
(Approved by AICTE, Permanently Affiliated to JNT University Kakinada,
ACCREDITED BY NAAC and Recognized under 2(f) & 12 (b) by UGC, New Delhi)
Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

AVANTHI EDUCATIONAL SOCIETY

Avanthi Educational Society under the Leadership of Sri M. Srinivasa Rao garu as chairman was started in the Year 1991. Within a short span of its establishment, the group has made a remarkable stride in the field of education offering various courses at Under Graduate, Post Graduate, Pharmacy & Engineering levels. This milestone is achieved as the institution carved itself to impart quality and career oriented education, countering the challenges of the modern world through planning, dedication, determination, prompt execution and with the innovative ideas of our advisory board.

Today, Avanthi Educational Society is proud to have a strength of over 16000 students with 15 institutions under its ambit. It is the path of glory towards the success during the last 19 years. The institution has been adjudged many times as the second-best educational institutions in the twin cities and 16th best in all over India through the impartial survey made by the renowned magazine "India Today".

AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

AIET started in the year 1999 and offers various courses at Engineering and PG level. The college is providing with rooms, computer centre, laboratories and seminar hall with audio-visual equipments. Industry Institute interaction is conducted regularly to emphasize on the latest trends in the present market.



It is very near to Narsipatnam. Frequent bus facilities are available both from and to Visakhapatnam and Narsipatnam. Very safe and secure hostel facility is available for Girl students. These are the additional facilities besides excellent academic atmosphere in the college campus.

DEPARTMENT OF MECHANICAL ENGINEERING

Mechanical Engineering department was started in the year 2005 with intake strength of 60 seats, this was increased to 120 students in 2012 and this was increased to 180 students in 2013. The department has well qualified and trained faculty members. It has well equipped laboratories and workshops and includes a CAD/CAM laboratory where students are imparted training in advanced production techniques and design and analysis of machine elements.

The department of Mechanical Engineering has been contributing its humble share of the Mechanical Engineering graduates for national needs. Several of the graduates who have passed out of this department are occupying responsible positions in various Engineering Industries like Hindustan Shipyard Limited, Renault Nissan, Varun Motors, Tata Consultancy Services, HP and IBM and holding responsible positions in the premier educational institutes in and outside India.

CHIEF PATRON

Smt .M.Gnaneswari
President ,
Avanathi Educational Society

PATRON

Dr. C P V N J Mohan Rao
Principal,
Avanathi Institute Of Engineering And Technology

CHAIRMAN

Sri. V. Harikiran
Head of the Department
Mechanical Engineering

ABOUT WORKSHOP

In the context of current developments of advanced scientific phenomenon and their utilization in the action of complex engineering machines, an extraordinary demand has been imposed by design engineers on the materials that suit the need of interaction among the elements of safety, reliability, and economics of production, and even those of art and aesthetics. Under these constraints, it is essential that the design engineer takes into account the possibility or probability of failure and suitable measures to avoid them totally or to minimize the damages if they become inevitable. The course briefly discusses the fundamentals of metallurgical failure, why do materials fail, failure investigation and prevention, as well as the fracture mechanism and corrosion related failures.

TOPICS TO BE COVERED

Product design process, Shape your ideas using sketching, Fusion 360 interface and shortcuts, Part modeling best practices, Develop a 3D model using reference image, Advanced part modelling features, Top Down Assembly Design, Design a multi component product for 3D printing.

For Registration, please contact Mrs. V. Sumapriya, Assistant Professor,
Department of Mechanical Engineering.



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Tamaram, Makavarapalem, Narsipatnam (RD), Visakhapatnam-531113

DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Date: 04/09/2018

We are happy to inform you that, Department of Mechanical Engineering, AIET is organizing six day certificate course on "Fusion 360" from 10th Septemeber, 2018 to 15th September, 2018 in physical mode for all II B. Tech students. Interested candidates are directed to enrol above course on or before 09/09/2018. For further details contact Course Coordinator Mrs. Suma Priya, Assistant Professor, Mechanical Engineering.

Resource Person Details:

1. Sri Sudheer Sabbathi,
Trainer,
APSSDC.

V. Hanikiran

HOD of Mechanical Engineering Department

Copy to: Principal, AIET

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam - 531113.



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DEPARTMENT OF MECHANICAL ENGINEERING

A six-day workshop on

FUSION - 360

10th September to 15th September 2018

Syllabus of the Workshop:

Chapter-1

- Workshop and It Works Overviews, Product design process, Shape your ideas using sketching, Fusion 360 interface and shortcuts, Capturing design intent through Sketch tools.

Chapter-2

- Part modelling best practices, develop a 3D model, Create engineering and construction features

Chapter-3

- Reverse engineer and 3D model a physical part

Chapter-4

- Advanced part modelling features

Chapter-5

- Create a multi cross section component, Direct modelling and Export file, applying materials, decals and rendering

Chapter-6

- Top-Down Assembly Design, design a multi component product for 3D printing, Generating manufacturing drawings

EXPECTED OUTCOMES

- This workshop will provide insight on Autodesk Fusion 360
- It will strengthen participants skills in Design to resolve various engineering problems.
- Workshop will help to understand application of Fusion 360 modules in the multidisciplinary areas such as Manufacturing, Design and Quality check inspection and so on.

V. Suma priya
COORDINATOR

[Signature]
HOD

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam - 531113.



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DEPARTMENT OF MECHANICAL ENGINEERING

FUSION 360

From 10th September 2018 to 15th September 2018

Schedule

DAY - 1 (10.09.2018)

09:00AM-09:30AM - Inaugural Session

09:30AM-10:30AM – Introduction about the workshop and Fusion 360 Fundamentals

10:30AM-11:30AM – usage of various types of tools in Fusion 360 and their applications and create,
save various types of Solid Edge documents.

11:30AM-12:00PM – Explanation about Differentiate and switch between a selection of workbenches

12:00PM-12:30PM - Perform various tasks concerning 3D Navigation and geometry selection

12:30PM-01:00PM - Create and constrain sketches and describe the functional capabilities and general
usage of Part Design

01:00PM – 01:30PM – Lunch Break

01:30PM – 03:30PM - Generative Shape Design & Assembly Design

03:30PM – 04:00PM – Doubts Clarification session

DAY – 2 (11.09.2018)

09:00AM-09:30AM – About CATIA V5 Sketcher Module

09:30AM-11:30AM – Title bar, Menu Bar, Specification Tree, Navigation Tab, Drawing area, DAY1
Sketcher, Profile tool bar, Constraint tool bar.

11:30AM-11:40PM – Tea Break

11:40AM-01:00PM – Operation tool bar, Sketch tools and Sketch analysis

01:00PM – 01:30PM – Lunch Break

01:30PM – 04:00PM - Exercises-10 No's practice session

DAY – 3 (12.09.2018)

09:00AM-09:30AM – Introduction to Fusion 360 Part Design and utility of part design

09:30AM-11:30AM – Creating and modifying sketch-based features, Perform Boolean operations
such as Trim/Quick Trim

11:30AM-11:40PM – Tea Break

11:40AM-01:00PM – Explaining how to Manage profiles using the sketcher workbench,
Apply draft, Thickness and fillets to sketch based features

01:00PM – 01:30PM – Lunch Break

01:30PM – 04:00PM - Practice session and Doubts clarification session.

DAY – 4 (13.09.2018)

09:00AM-09:30AM – Introduction to areas for the part design workbench while interacting with
sketcher and reference elements to create modifiable parts.

09:30AM-11:30AM – Tree Structure, Introduction to tool bars, Sketch Based Features

11:30AM-11:40PM – Tea Break

11:40AM-01:00PM – Dress-up Features, Transformation Feature, Reference elements

01:00PM – 01:30PM – Lunch Break

01:30PM – 04:00PM - Practice session and Doubts clarification session.

DAY – 5 (14.09.2018)

09:00AM-09:30AM – Fusion 360 Generative Shape Design

09:30AM-11:30AM – Create wireframe elements, Create surfaces, Fillet features

11:30AM-11:40PM – Tea Break

11:40AM-01:00PM – Trim elements, Manage the Specific tree, CatLog templates

01:00PM – 01:30PM – Lunch Break

01:30PM – 04:00PM - Practice session and Doubts clarification session.

DAY – 6 (15.09.2018)

09:00AM-09:30AM – Fusion 360 Generative Shape Design - Creating Drawings and Creating Views

09:30AM-11:30AM – Dimensioning Toolbar, Dimensioning Modifications, Editing, Deleting &
Updating Views

11:30AM-11:40PM – Tea Break

11:40AM-01:00PM – Dress up elements, Annotations Toolbar, Creating PDF's

01:00PM – 01:30PM – Lunch Break

01:30PM – 04:00PM - Practice session and Doubts clarification session.

V. Suma priya

COORDINATOR


HOD

Head of the Department
Department of Mechanical Engg.
Avanathi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam - 531113.



AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

TAMARAM (V), MAKAVAAPALEM (M),

VISAKHAPATNAM - 531113

DEPARTMENT OF MECHANICAL ENGINEERING

Workshop on FUSION 360

From 10-09-2018 to 15-09-2018

STUDENTS ATTENDANCE LISTS

S.NO	ROLL NUMBER	NAME OF THE STUDENT	10.09.2018	11.09.2018	12.09.2018	13.09.2018	14.09.2018	15.09.2018
1	17811A0301	ALLU BHANUTEJA	✓	✓	✓	X	✓	✓
2	17811A0302	ALLU DURGA PRASAD	✓	✓	✓	✓	✓	✓
3	17811A0303	ALLU HARI BABU	✓	✓	✓	✓	✓	✓
4	17811A0305	BANDARU KALYAN KUMAR	✓	✓	✓	✓	✓	✓
5	17811A0307	BESETTY VINAY	✓	✓	✓	✓	✓	✓
6	17811A0310	BONDA SWAMY	✓	✓	✓	✓	✓	✓
7	17811A0313	DADI YUGANDAR	✓	X	✓	✓	✓	✓
8	17811A0315	DOSURU PAVAN	✓	✓	✓	✓	✓	✓
9	17811A0317	GANGULAKURTHI SURYA CHARAN	✓	✓	✓	✓	✓	✓
10	17811A0320	GORLI RAJESH	✓	✓	✓	✓	✓	✓
11	17811A0324	JERRIPOTHULA MADHAN MOHAN	✓	✓	✓	✓	✓	✓
12	17811A0327	KASIREDDI SATEESH	✓	✓	✓	✓	✓	✓
13	17811A0331	KOLLI CHIRANJEEVI	✓	✓	✓	✓	✓	✓
14	17811A0334	KONDALA BHANU	✓	✓	✓	✓	✓	✓
15	17811A0336	KOVAGANA RAJESH	✓	✓	✓	✓	✓	X
16	17811A0339	MAMIDI SAI	✓	✓	✓	✓	✓	✓
17	17811A0341	NAKKA ANIL	✓	✓	✓	✓	✓	✓
18	17811A0344	NANEPALLI MOHAN	✓	✓	X	✓	✓	✓
19	17811A0347	PALURI VENKATA SAI YASWANTH	✓	✓	✓	✓	✓	✓
20	17811A0352	SAKALA AVINASH KUMAR	✓	✓	✓	✓	✓	✓
21	17811A0357	SHAIK MUBEEN	✓	✓	✓	✓	✓	✓
22	17811A0361	VASIREDDI SWAMY	X	✓	✓	✓	✓	✓
23	17811A0363	VIROTHI HEMANTH SATYA KUMAR	✓	✓	✓	✓	✓	✓
24	18815A0302	AMALAKANTA PAVAN	✓	✓	✓	✓	✓	✓
25	18815A0304	BALLA SAIBABA	✓	✓	✓	✓	✓	✓
26	18815A0307	BHESETTI HEMA SANYASI NAIDU	✓	✓	✓	✓	X	✓
27	18815A0310	CHADARAM RAKESH SIVARAJ	✓	✓	✓	✓	✓	✓

28	18815A0312	DADI LOKESH	X	✓	✓	✓	✓	✓	✓
29	18815A0314	GANISETTY BHASKARRAO	✓	✓	✓	✓	✓	✓	✓
30	18815A0318	GUDEPU JAWAHARSAIMANI	✓	✓	✓	✓	✓	✓	✓
31	18815A0320	INDALA JAGADEESH	✓	✓	✓	✓	✓	✓	✓
32	18815A0324	KARRI MUKHESH	✓	✓	✓	✓	✓	✓	✓
33	18815A0326	KARRI SRIKANTH	✓	✓	✓	✓	X	✓	✓
34	18815A0330	KOMMOJU DURGA RAJESH	✓	✓	✓	✓	✓	✓	✓
35	18815A0333	KUNDRAPU MADHUBABU	✓	✓	✓	✓	✓	✓	✓
36	18815A0336	MALLA TEJA SAI	✓	✓	✓	✓	✓	✓	✓
37	18815A0339	MITTIPATI RAJESH	✓	✓	✓	✓	✓	✓	✓
38	18815A0342	NAVARA SAI KUMAR	✓	✓	✓	✓	✓	✓	✓
39	18815A0348	POLIPALLI SRINU	✓	X	✓	✓	✓	✓	✓
40	18815A0349	PRAGADA CHANDRA SEKHAR RAO	✓	✓	✓	✓	✓	✓	✓
41	18815A0354	SARAGADAM SURYATEJA	✓	✓	✓	X	✓	✓	✓
42	18815A0356	SENAPATI RAJU	✓	✓	✓	✓	✓	✓	✓
43	18815A0360	SURISETTY ANU VAMSI	✓	✓	✓	✓	✓	✓	✓
44	18815A0363	THALADA RAKESH	✓	✓	✓	✓	✓	✓	✓
45	18815A0366	VANGALAPUDI VEERA BABU	✓	✓	✓	✓	✓	✓	X
46	18815A0368	VILLURI MURALI KRISHNAM NAIDU	✓	✓	✓	✓	✓	✓	✓
47	18815A0371	YALAMANCHILI SRINU	✓	✓	✓	✓	✓	✓	✓
48	18815A0373	YARRAMSETTI LAXMINARAYANA	X	✓	✓	✓	✓	✓	✓
49	18815A0377	KOILADA PAVAN KALYAN	✓	✓	X	✓	✓	✓	✓
50	18815A0380	KUPPLI TEJESWAR REDDY	✓	✓	✓	✓	✓	✓	✓
51	18815A0384	KANITHI SRINIVAS	✓	✓	✓	✓	✓	✓	✓

V. Suma priye

COORDINATOR

HOD

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam - 531113.



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CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Mrs _____ of _____
_____ has participated in the Certificate Course entitled
on “**Fusion 360**” during from 10th September 2018 to 15th September 2018 in Department of
Mechanical Engineering.

Coordinator

HOD

Principal



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DEPARTMENT OF MECHANICAL ENGINEERING

A 6-Day Workshop on

Fusion 360

Dated on - 10th September, 2018 to 15th September 2018



V. Samapriya
COORDINATOR


HOD

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
Makavarapalem, Visakhapatnam-531113.



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DEPARTMENT OF MECHANICAL ENGINEERING

Dt:18/09/2018

BRIEF REPORT

Department of Mechanical Engineering, Avanthi Institute of Engineering and Technology had organized a certificate course on "FUSION 360" from 10th sept 2018 to 15th sept 2018.

We had Mr. Sudheer Sabbathi, Trainer from APSSDC as the speaker to explain each and every detail information about CAD/CAM. He started off with the need for CAD/CAM, he extensively explained the plus points of this technology. One of the major advantages is that it is an additive technology and product Design, Shape our ideas using sketching. Then after he went on to explain the interface and shortcuts, Part Modeling and develop 3D model. He gave the limitations for personal use is limited to 10 active and editable documents. They are generally used for manufacturing and design a product. Some of the topics are focused during the course like CAD/CAM, to generate toolpath that drive machine tools to turn designs into physical parts. He explained Top down assembly and how to design a multi component products. Later he concluded with the real time applications of CAD/CAM in mechanical industries .

V. Suma priya

Coordinator

Head of the Department

Head of the Department
Department of Mechanical Engg.
Avanthi Institute of Engg. & Tech.,
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