



*Certificate Course  
on*

### ***Solid Edge Foundation***

*From 16<sup>th</sup> September 2019 to 21<sup>st</sup> September 2019*



**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, NewDelhi)  
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,  
Avanthi Educational Society

#### **PATRON**

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

#### **CHAIRMAN**

Sri. V. Harikiran  
Head of the Department  
Mechanical Engineering

### **ABOUT WORKSHOP**

With the increasing demand of variety of products, the industry of manufacturing is aiming to produce quality and economical products. This process depends on many parameters and intermediate correlations. New and innovative designs need to be developed to meet the demands of the customer and industry. The Design software have become powerful tool for the continuous improvement of quality in designing the products. The faculty members in the engineering institutions should have potential in the area of design and impart their knowledge to the students so that the students graduated are fruitful to the society.

### **TOPICS TO BE COVERED**

- Solid Edge Fundamentals
- Part Design
- Assembly Editing and designing the assemblies
- Drafting
- Solid Edge Simulation

For Registration, please contact Mr. A.N.S.Surya Prakash, Assistant Professor, Mechanical Engg.



# AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

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

## DEPARTMENT OF MECHANICAL ENGINEERING

### CIRCULAR

Date: 08/09/2019

We are happy to inform you that, Department of Mechanical Engineering, AIET is organizing six day certificate course on "Solid Edge Foundation" from 16<sup>th</sup> September, 2019 to 21<sup>st</sup> September, 2019 in physical mode for all II B. Tech students. Interested candidates are directed to enrol above course on or before 15/09/2019. For further details contact Course Coordinator Mr. A. N. S. Surya Prakash, Assistant Professor, Mechanical Engineering.

Resource Person Details:

1. M. Visalakshi,  
Trainer,  
APSSDC.

  
V. Hanikiran

HOD of Mechanical Engineering Department

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

Copy to: Principal, AIET



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### DEPARTMENT OF MECHANICAL ENGINEERING

A six-day workshop on

### SOLID EDGE FOUNDATION

16<sup>th</sup> September – 21<sup>st</sup> September 2019

#### Syllabus of the Workshop:

##### **Chapter-1**

- Introduction to Solid Edge Software

##### **Chapter-2**

- Part Design (Profile/Sketcher, 2D, Part Design)

##### **Chapter-3**

- Assembly (Assembly methods, Relationships)

##### **Chapter-4**

- Editing and Designing the Assemblies (EXPLORE, RENDER, ANIMATE tools)

##### **Chapter-5**

- Drafting (2D to 3D design workflow and view types- tools for faster display and response on large assemblies)

##### **Chapter-6**

- 3D sections, view styles and shortcuts
- Viewing tools: modify the look and content of the views w/o leaving the draft file.

#### EXPECTED OUTCOMES

- To understand how to create a 2D parametrically constrained sketch
- To create a 3D model using sketch driven features
- Create a 3D model using Synchronous driven features
- Combine individual parts into assemblies and build a BOM
- Create a 2D draft file driven from part and assembly files.

  
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

#### Solid Edge Foundation

*From 16<sup>th</sup> September 2019 to 21<sup>st</sup> September 2019*

#### Schedule

##### DAY - 1 (16.09.2019)

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

09:30AM-10:30AM – Introduction about the workshop and Solid Edge Fundamentals

10:30AM-11:30AM – usage of Various types of tools in Solid Edge 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 (17.09.2019)

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

09:30AM-11:30AM – Title bar, Menu Bar, Specification Tree, Navigation Tab, Drawing area, DAY 1  
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 - Excercises-10 No's practice session

##### DAY – 3 (18.09.2019)

09:00AM-09:30AM – Introduction to Solid Edge 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 (19.09.2019)**

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 (20.09.2019)**

09:00AM-09:30AM – Solid Edge 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 (21.09.2019)**

09:00AM-09:30AM – Solid Edge Generative Shape Design - Creating Drawings and Creating Views

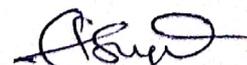
09:30AM-11:30AM – Dimensioning Toolbar, Dimensioning Modifications, Editing, Deleting &  
Updating Views

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 - Valedictory Session

  
**COORDINATOR**

  
**HOB**

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



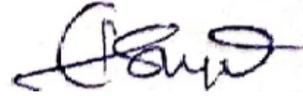
**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY,**  
**TAMARAM (V), MAKAVAAPALEM (M),**  
**VISAKHAPATNAM - 531113**  
**DEPARTMENT OF MECHANICAL ENGINEERING**  
**Workshop on SolidEdge Foundation**  
**From 16-09-2019 to 21-09-2019**  
**STUDENTS ATTENDANCE LISTS**

S.NO	Roll Number	Name of the student	16.09.2019	17.09.2019	18.09.2019	19.09.2019	20.09.2019	21.09.2019
1	18811A0311	GUMMUDU PRAVEEN	✓	✓	✓	✓	✓	✓
2	18811A0312	KAMIREDDY RAJA VIVEK RAGHU VARDHAN	✓	✓	✓	✓	✓	✓
3	18811A0313	KARANAM JAGADEESH	✓	✓	✓	✓	✓	✓
4	18811A0314	KONDRA TRINADH	✓	X	✓	✓	✓	✓
5	18811A0315	KOVVADA MANIKANTA	✓	✓	✓	✓	✓	X
6	18811A0316	LALAM SAMPATH KUMAR	✓	✓	✓	✓	✓	✓
7	18811A0317	LINGETI GNANESWAR	✓	✓	✓	✓	✓	✓
8	18811A0318	LOKAVARAPU NAIDU	✓	✓	✓	✓	✓	✓
9	18811A0319	MARRI SIVA	✓	✓	✓	✓	✓	✓
10	18811A0320	OMMI PARAMESH	✓	✓	✓	X	✓	✓
11	18811A0321	PALIPINI SURYA APPALA RAJU	✓	✓	✓	✓	✓	✓
12	18811A0322	PANTAGOLUSULA NAVEEN	✓	✓	✓	✓	✓	✓
13	18811A0323	PASAGADUGULA VAMSI	X	✓	✓	✓	✓	✓
14	18811A0324	POLIREDDI DIVAKAR	✓	✓	✓	✓	✓	✓
15	18811A0325	PUCHHA RAVI KUMAR	✓	✓	✓	✓	✓	✓
16	18811A0326	RAPARTHI SAI	✓	✓	✓	✓	✓	✓
17	18811A0327	RONGALA GNANESWAR	✓	✓	✓	✓	✓	✓
18	18811A0328	RUTHALA MANIKISHORE	✓	✓	✓	✓	✓	✓
19	18811A0329	RUTTALA KALYAN	X	✓	✓	✓	✓	✓
20	18811A0330	SINGAMPALLI CHANDRA SEKHAR	✓	✓	✓	✓	X	✓
21	18811A0332	SURISSETTI SAI RAM	✓	✓	✓	✓	✓	✓
22	18811A0333	VENUKOTI PRASANTH	✓	✓	✓	✓	✓	✓
23	18811A0334	YAKA DEVA BHASKAR	✓	✓	✓	✓	✓	✓
24	18811A0335	YENNAMSETTI MAHESH	✓	✓	✓	✓	✓	✓
25	18811A0336	VELAGA VASU	✓	✓	X	✓	✓	✓
26	18811A0337	KOTARU TEJA APPALA DURGA PRASAD	✓	✓	✓	✓	✓	✓

18811A0337	KOTARU TEJA APPALA DURGA PRASAD	✓	✓	✓	✓	✓	✓
27 18811A0338	KANDREGULA YASWANTH	✗	✓	✓	✓	✓	✓
28 18811A0339	GARAGA SRAVAN	✓	✓	✓	✓	✓	✓
29 18811A0340	KALAGA THALUPULESWARA RAO	✓	✓	✓	✓	✓	✓
30 19815A0301	AKKIREDDY JAGADEESH KUMAR	✓	✓	✓	✓	✓	✓
31 19815A0302	ALLA RAVI SHANKAR	✓	✓	✓	✓	✓	✗
32 19815A0303	ALLAMPALLI SATISH	✓	✓	✓	✓	✓	✓
33 19815A0304	BEERA ARUN KALYAN	✓	✓	✓	✓	✓	✓
34 19815A0305	BORA VARMA	✓	✓	✓	✓	✓	✓
35 19815A0306	BUDDHA SUNIL NAGA SATYANARAYANA	✓	✓	✓	✓	✓	✓
36 19815A0307	CHALAPAREDDI NAGADURGAPRASAD	✓	✓	✓	✓	✓	✓
37 19815A0308	CHINTAKAYALA ADI VAMSI	✓	✓	✓	✓	✓	✓
38 19815A0309	CHODIPALLI RAJESH	✓	✓	✓	✓	✓	✓
39 19815A0310	DAMMU SAIKUMAR	✓	✓	✓	✓	✓	✓
40 19815A0311	DUSANAPUDI VENKATA SAI MOHAN KRISHNA	✓	✗	✓	✓	✓	✓
41 19815A0312	EMMILI MADHU	✓	✓	✓	✓	✓	✓
42 19815A0313	GAMPA SIVAJI RAO	✓	✓	✓	✓	✓	✓
43 19815A0314	GANDEPALLI NARESH	✓	✓	✓	✓	✓	✓
44 19815A0315	GANDREDDI UMA MAHESWARA RAO	✓	✓	✓	✓	✓	✓
45 19815A0316	GOLSETTI NARENDRA KUMAR	✓	✓	✓	✓	✓	✓
46 19815A0317	GOLLU GANGADHAR	✓	✓	✓	✓	✓	✓
47 19815A0318	GORLI GANESH	✓	✓	✓	✗	✓	✓
48 19815A0319	GORLI SAI JAGADEESH	✓	✓	✓	✓	✓	✓
49 19815A0320	GUDDATI VAMSI KRISHNA	✓	✓	✓	✓	✓	✓
50 19815A0321	GULLA YAMINI VEERABHADRA PRASAD	✓	✓	✓	✓	✓	✓
51 19815A0322	GURRAM TEJA	✓	✓	✓	✓	✓	✓
52 19815A0323	DOPPA RAJESH	✓	✓	✓	✓	✓	✓
53 19815A0324	KANDREGULA HEMA VENKATKUMAR	✓	✓	✓	✓	✓	✓
54 19815A0325	KANDREGULA KUMAR ARUN VENKAT	✓	✓	✓	✓	✗	✓
55 19815A0326	KANDREGULA SAI SANDEEP	✓	✗	✓	✓	✓	✓
56 19815A0327	KANNURU YERRINAIDU	✓	✓	✓	✓	✓	✓
57 19815A0328	KARRI SAI KUMAR	✓	✓	✓	✓	✓	✓
58 19815A0329	KARRI SATHISH	✓	✓	✓	✓	✓	✓
59 19815A0330	KARRI SHIVA	✓	✓	✗	✓	✓	✓

1	19815A0331	KASPA SIVA KRISHNA	✓	✓	✓	✓	✓	✓
2	19815A0332	KATTOJU S V N GOPAL SATHWIK	✓	✓	✓	✓	✓	✓
62	19815A0333	KOLAGANI NARASIMHA NAIDU	✓	✓	✓	✗	✓	✓
63	19815A0334	KOMMOJU DHILIP MANIDHAR SAI	✓	✗	✓	✓	✓	✓
64	19815A0335	KONDA NAGA RAJU	✓	✓	✓	✓	✓	✓
65	19815A0336	KOONISETTI VARA PRASAD	✓	✓	✓	✓	✓	✓
66	19815A0337	KORUKONDA SRAVAN KUMAR	✓	✓	✓	✓	✓	✓
67	19815A0338	KORUPROLU SYAMALA	✓	✓	✓	✓	✓	✓
68	19815A0339	KOSURI BHARATH VAMSI	✓	✓	✓	✓	✓	✓
69	19815A0340	KOTA GANESH	✓	✓	✓	✓	✓	✓
70	19815A0341	KUNCHA NARESH	✓	✓	✓	✓	✓	✓
71	19815A0342	KUNDIRI VIVEKANANDA	✓	✓	✓	✓	✓	✗
72	19815A0343	KUNDRAPU KRUSHI TEJA	✓	✓	✓	✓	✓	✓
73	19815A0344	KURRA VENKATA DURGA APARNA	✓	✓	✓	✓	✓	✓
74	19815A0345	KODURU SANTHOSH	✓	✓	✗	✓	✓	✓
75	19815A0346	MALASALA SAI VENKATA RAMCHARAN	✓	✓	✓	✓	✓	✓
76	19815A0347	MALLAPUREDDY SIVA SANKAR	✓	✓	✓	✓	✓	✓
77	19815A0348	MANEPALLI SATYA DEVA PRAVEEN CHAKRAVARTHI	✓	✓	✓	✓	✓	✓
78	19815A0349	MINNAKURTHI SATISH	✓	✓	✓	✓	✓	✓
79	19815A0350	MOHAMMAD KHAJA SUBHANI	✓	✓	✓	✓	✓	✓
80	19815A0351	MOLUGU GYANESHWAR	✓	✓	✓	✓	✓	✓
81	19815A0352	MUVVALA ANIL	✓	✓	✓	✓	✓	✓
82	19815A0353	MUVVALA KRISHNA RAO	✓	✓	✓	✓	✓	✓
83	19815A0354	NANDARAPU VASANTH KUMAR	✓	✓	✓	✓	✓	✓
84	19815A0355	NANDAVARAPU CHANDRA SEKHAR	✓	✓	✓	✓	✗	✓
85	19815A0356	PAKKURTI TALUPULA RAO	✓	✓	✓	✓	✓	✓
86	19815A0357	PALLA GANGADHAR	✓	✓	✓	✓	✓	✓
87	19815A0358	PANCHADARLA SAI PAVAN KUMAR	✓	✓	✓	✓	✓	✓
88	19815A0359	PAVAN KALYAN DODDI	✓	✓	✓	✓	✓	✓
89	19815A0360	PEDAGADI RENUKA MOHAN PRASANTH	✓	✓	✓	✓	✓	✓
90	19815A0361	PEDAPUDI ANAND	✓	✓	✓	✓	✓	✓
91	19815A0362	PEDIREDLA SAI	✓	✓	✓	✓	✓	✓
92	19815A0363	PENTAKOTA ARUNKUMAR	✓	✓	✓	✓	✓	✓
93	19815A0364	PERICHARLA LAKSHMIPATHIRAJU	✗	✓	✓	✓	✓	✓

95	19815A0365	PILAKA NAVEEN SAI KUMAR	✓	✓	✓	✓	✓	✓
96	19815A0366	POLUPARTHI VARAHALABABU	✓	✓	X	✓	✓	✓
97	19815A0367	PRAGADA GIRI ANANDA KUMAR	✓	✓	✓	✓	X	✓
98	19815A0368	RAJANA HARISH	✓	✓	✓	✓	✓	✓
	19815A0369	RAVVA RAKESH RAVINDRA	X	✓	✓	✓	✓	✓



**COORDINATOR**



**HOD**

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



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## **CERTIFICATE OF PARTICIPATION**

This is to certify that Mr/Mrs \_\_\_\_\_ of \_\_\_\_\_  
\_\_\_\_\_ has participated in the Certificate Course entitled  
on “**Solid Edge Foundation**” during from 16<sup>th</sup> September 2019 to 21<sup>st</sup> September 2019 in  
Department of Mechanical Engineering.

\_\_\_\_\_  
**Coordinator**

\_\_\_\_\_  
**HOD**

\_\_\_\_\_  
**Principal**



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### DEPARTMENT OF MECHANICAL ENGINEERING

A 6-Day Workshop on

### Solid Edge-Foundation

Dated on - 16/09/2019 to 21/09/2019



  
COORDINATOR

  
HOD

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

Dt: 23/09/2019

**BRIEF REPORT**

**Department of Mechanical Engineering, Avanthi Institute of Engineering and Technology had organized a certificate course on “SOLID EDGE ST10 BASICS AND BEYOND” from 16th sept 2019 to 21st sept 2019**

We had M. Visalakshi, Trainer from APSSDC, as the speaker to explain each and every detail Introduction of Solid Edge fundamentals. She started off with the need of Solid Edge applications, she extensively explained the plus points of this technology, one of the major advantage for users to create quality 3D models from 2D drawings. Then after she went on to explain Generative shape Design & Assembly Design. She gave the limitations that workflows in Solid Edge are not very easy to follow and require previous experience with a specific tool to be able to figure out how to use it. She discussed the general assembly modelling and 2D orthographic view functionality for mechanical designers. Some of the topics are focused during course Trim elements, Catlog templates, Dimensioning tool bar, Editing, and for Designing the Assemblies (EXPLORE, RENDER, ANIMATE TOOLS). She finally explained about Fillet features, Transformation Feature, viewing tools, view styles and shortcuts. She concluded with the real time applications of Solid Edges in industries.

  
**Coordinator**

  
**Head of the Department**

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