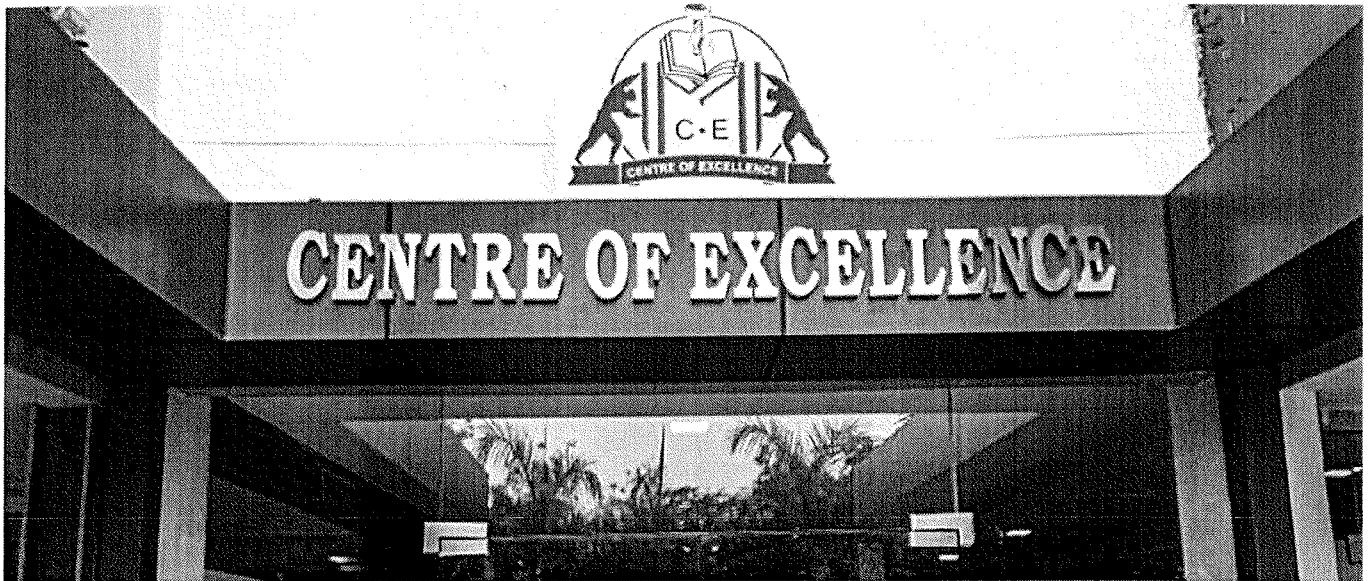


# Design for Additive Manufacturing (Introduction to 3D Modeling)



**MALLA REDDY ENGINEERING COLLEGE**  
**MAIN CAMPUS, AUTONOMOUS INSTITUTION**  
Maisammaguda, Dhulapally (Post) via Kompally,  
Secunderabad-500100 Medchal - Malkajgiri District Telangana, India



## **ADITIVE MANUFACTURING**

Design for Additive Manufacturing(PDC)& (CREO)


Solid Based Additive Manufacturing(FDM)& (LOM)

Liquid Based Additive Manufacturing (SLA)

Powder Based Additive Manufacturing (SLS)  
Rapid Prototyping - I , Rapid Prototyping - II

**Course Duration -: 4 Months**

**Learn Aditive Manufacutring  
& Develop Your Designing Skills.**

	<b>MALLA REDDY ENGINEERING COLLEGE (Autonomous) CENTRE OF EXCELLENCE</b>	<b>B. Tech</b>  <b>IV Semester</b>
<b>Course Name: Design for Additive Manufacturing</b>		<b>Duration: 30 Hours</b>

### Course Objective:

*In This training course, Students will learn part modelling techniques in PTC Creo to develop 3D models for 3D Printing.*

### Module-I

Introduction to PTC Creo- Getting Started with Creo Parametric: Sketcher- Drawing a Sketch Using tools available in the Sketch Tab, Creating Fillets, Dimensioning the Sketch, Working with Constraints, Deleting, Trimming Mirroring the Sketched Entities.

### Module-II

Creating a 3D model by using the Extrude features: Extruding a Sketch, Depth options and Removing Material by Using the Extrude Tool

### Module-III

Creating a 3D model by using the revolving feature, helical sweep and sweeps with variable sections.

Creating Holes, Rounds, Chamfers, Ribs, Shell..etc

### Module-IV

Understanding the Orientation of Datum Planes -Default Datum Planes

Create patterns, mirror and rendering

File conversion- Convert 3D Models into STL, OBJ and AMF Files.


### Module-V

Introduction to Assembly- Inserting Components in an Assembly and Modifying the Components of an Assembly-Automatic, Default, Coincident, Distance..etc

### Course Outcomes:

After completing this course students will be able to:

- Create, modify and visualize the various 3D models in CADsoftware.
- Design and assembly of mechanical components using CADsoftware.
- Convert various file formats for 3D Printing.

  
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**Maisammaguda, Dhulapally,**  
**TPost Via Kompally, Sec'bad-500 100**



MALLA REDDY ENGINEERING COLLEGE  
(Autonomous)  
Maisammaguda(H), Gundlapochampally Village,  
Medchal Mandal, Medchal-Malkajgiri District,  
Telangana State - 500100

Course: Design for  
Additive  
Manufacturing(Introduction to 3D Modeling)  
Date: 01/09/2020 TO  
01/02/2021

Registered Students

SL.No	Roll No	NAME	BRANCH	COURSE COMPLETED
1.	19J41A0126	GYARA SRINIJA	CE	YES
2.	19J41A0127	JANGILI VINAY	CE	YES
3.	19J41A0128	JINKIRI SUJITH	CE	YES
4.	19J41A0129	KAMMARI SAI KIRAN	CE	YES
5.	19J41A0130	KATINENI ANKURA	CE	YES
6.	19J41A0131	KATROTH SRAVANTHI	CE	YES
7.	19J41A0132	KUMMARIPALLY MAHENDER	CE	YES
8.	19J41A0133	KUNDETI NIKHIL RANGA RAO	CE	YES
9.	19J41A1225	GUBBA SAI SHARAN	IT	YES
10.	19J41A1226	GUNDAGANI YASHWANTH	IT	YES
11.	19J41A1227	GUNGI VAISHNAVI	IT	YES
12.	19J41A1228	JUVVISETTY MEGHANA	IT	NO
13.	19J41A1229	K SRIKANTH	IT	YES
14.	19J41A1230	KARNE RAKESH KUMAR	IT	YES
15.	19J41A1231	KARNI DILEEPKUMAR	IT	YES
16.	19J41A1232	KAVALI SAVITCHANDRA	IT	YES
17.	19J41A0226	G.SRIKANTH	EEE	YES
18.	19J41A0227	G.PRUDHVI	EEE	YES
19.	19J41A0228	J.SHARATH KUMAR	EEE	YES
20.	19J41A0229	J.GOVARDHAN	EEE	YES
21.	19J41A0230	K.NARESH	EEE	YES
22.	19J41A0231	K.SWATHI	EEE	YES
23.	19J41A0232	KANNEBOINA AKHIL	EEE	YES
24.	19J41A0233	K.SONIYA	EEE	YES
25.	19J41A0234	K.CHANDRA SHEKAR	EEE	YES
26.	19J41A0325	KALLEM AKHILNATH REDDY	ME	YES
27.	19J41A0326	KAMBLE ABHISHEK	ME	YES
28.	19J41A0327	KARE SUMITH	ME	YES
29.	19J41A0328	KELOTH PRAVEEN	ME	YES
30.	19J41A0329	KOPPOLU REVANTH KUMAR	ME	YES
31.	19J41A0330	KOTLA PRAVEEN KUMAR	ME	YES
32.	19J41A0331	KUMMARI KRISHNA PRASAD	ME	YES
33.	19J41A0325	KALLEM AKHILNATH REDDY	ME	YES
34.	19J41A0428	KARNATI SHIVANI	ECE	YES
35.	19J41A0429	KATAKAM SAI SHANKER	ECE	YES
36.	19J41A0430	KONDAPARTHI SAI BHARATH	ECE	YES
37.	19J41A0431	KUNTA AKSHARA	ECE	YES
38.	19J41A0432	M BHUVANESHWAR	ECE	YES
39.	19J41A0433	M DEEKSHA	ECE	YES
40.	19J41A0435	MANDALOU SANJAY KUMAR	ECE	YES
41.	19J41A0436	MANDHA NISHANTH NIKHIL	ECE	YES
42.	19J41A0437	MGADDA LOKESH	ECE	YES
43.	19J41A2508	BHUKYA NAVEEN	MINING	YES
44.	19J41A2509	BHUKYA VIVEK	MINING	YES
45.	19J41A2510	BODA SIDDU	MINING	YES
46.	19J41A2511	BONGU SASIDHAR	MINING	YES
47.	19J41A2512	CHILUMULA PRAVEEN	MINING	YES
48.	19J41A2513	CHINTHAPALLI SAIPRASAD	MINING	YES
49.	19J41A2514	CHIPPA VIJAY RAJ	MINING	YES
50.	19J41A2515	CHUNARKAR DEEPAK	MINING	YES
51.	19J41A0531	M GOPICHAND	CSE	YES
52.	19J41A0532	MANUPADU SHILPA	CSE	YES



53.	19J41A0533	MD SAMEERA	CSE	YES
54.	19J41A0534	MOHD ROSHAN HUSSAIN	CSE	YES
55.	19J41A0535	MUKKISA SIDDHARTHA REDDY	CSE	YES
56.	19J41A0536	MUSKU RICHITHA REDDY	CSE	YES
57.	19J41A0537	MUTYAM MADHAVA REDDY	CSE	YES
58.	19J41A0538	NANDALA VAMSHI	CSE	YES
59.	19J41A0539	PALA NITISH KUMAR	CSE	YES
60.	19J41A0540	PANNALA NEHA REDDY	CSE	YES

*Revised*

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**(Post Via Kempally). Sec'bad-500 100**



# MALLA REDDY ENGINEERING COLLEGE

MAIN CAMPUS AUTONOMOUS INSTITUTION



# CERTIFICATE

OF COURSE COMPLETION

*This is to Certify that*

**DEVANSHI POKALKAR**

*has Successfully Completed Design For Additive Manufacturing Course  
offered by Centre of Excellence, MREC(A) on 01/02/2021  
bearing with Roll No. 19J41A1218 and Branch IT.*

**N. RISHIKANTH**  
DEAN (COE)

**Dr. A. Ravendra**  
Principal

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# CERTIFICATE

OF COURSE COMPLETION


*This is to Certify that*

**GAJREE PAVAN**

*has Successfully Completed Design For Additive Manufacturing Course  
offered by Centre of Excellence, MREC(A) on 01/02/2021  
bearing with Roll No. 19J41A0119 and Branch CE.*

**N. RISHIKANTH**  
DEAN (COE)

**Dr. A. Ravendra**  
Principal

  
**PRINCIPAL**  
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Maisammaguda, Dhulapally,  
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## CERTIFICATE

OF COURSE COMPLETION

*This is to Certify that*

**GANDI PRANEETH**

*has Successfully Completed Design For Additive Manufacturing Course  
offered by Centre of Excellence, MREC(A) on 01/02/2021  
bearing with Roll No. 19J41A0320 and Branch ME.*

**N. RISHIKANTH  
DEAN (COE)**

**Dr. A. Ravendra  
Principal**

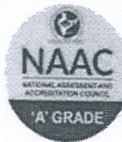
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# MALLA REDDY ENGINEERING COLLEGE

MAIN CAMPUS AUTONOMOUS INSTITUTION



# CERTIFICATE

OF COURSE COMPLETION

*This is to Certify that*

**GUDE NARENDER**

*has Successfully Completed Design For Additive Manufacturing Course  
offered by Centre of Excellence, MREC(A) on 01/02/2021  
bearing with Roll No. 19J41A0427 and Branch ECE.*

**N. RISHIKANTH**  
DEAN (COE)

**Dr. A. Ravendra**  
Principal

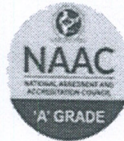
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## CERTIFICATE

OF COURSE COMPLETION

*This is to Certify that*

**BAVU REVANTH YADAV**

*has Successfully Completed Design For Additive Manufacturing Course  
offered by Centre of Excellence, MREC(A) on 01/02/2021  
bearing with Roll No. 19J41A2506 and Branch MINING.*

**N. RISHIKANTH  
DEAN (COE)**

**Dr. A. Ravendra  
Principal**

**PRINCIPAL**  
**Malla Reddy Engineering College**  
**(Autonomous)**  
**Maisammaguda, Dhulapally;**  
**(Post Via Komally), Sec'bad-500 100**