



J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY
(UGC Autonomous)

Accredited by NAAC&NBA, Approved by AICTE & Permanently Affiliated to JNTUH
Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana 500075



DEPARTMENT OF MECHANICAL ENGINEERING
SAEINDIA COLLEGIATE CLUB OF JBIET

WORKSHOP ON
TINKERING TO MANUFACTURING WITH RAPID PROTOTYPING

(In Aid Under AICTE – SPICES)

26-09-22 TO 30-09-22

Day	Date	Session 1	Lunch	Session 2
		10.00 AM – 12.30 AM		1.30 PM – 4.00 PM
1	26/09/2022	Inauguration and Introduction to Tinkering to Manufacturing with rapid prototyping Mr. Siddhant Patnaik & Mr. Sanjay Kumar Baral	Lunch	Types of 3D Printing Process Mr. Sanjay Kumar Baral
2	27/09/2022	3D Printing software Mr. Subbadarshanam Rachagolla	Lunch	Practice on 3D Printing software Talla T D Tirumala Rao
3	28/09/2022	Conversion to STL file Talla T D Tirumala Rao	Lunch	Import the file to machine Mr. Subbadarshanam Rachagolla
4	29/09/2022	Preparing the machine setup Mr. Subbadarshanam Rachagolla	Lunch	Build-up of the prototype Mr. Subbadarshanam Rachagolla and Talla T D Tirumala Rao
5	30/09/2022	Global Effects on Manufacturing Mr. Subbadarshanam Rachagolla and Talla T D Tirumala Rao	Lunch	3D Printing Benefits Mr. Subbadarshanam Rachagolla and Talla T D Tirumala Rao



J.B.INSTITUTE OF ENGINEERING & TECHNOLOGY

(UGC Autonomous)

Accredited by NAAC&NBA, APPROVED BY AICTE& PERMANENTLY AFFILIATED TO JNTUHMoinabad,Hyderabd.www.jbiet.edu.in



SAEINDIA COLLEGIATE CLUB OF JBIET PRESENTS

WORKSHOP ON TINKERING TO MANUFACTURING WITH RAPID PROTOTYPING (HANDS ON TRAINING)

In Aid Under AICTE - SPICES

DATE : 26 SEP 2022 - 30 SEP 2022

VENUE: MINING AUDITORIUM

Registration Link

<https://forms.gle/KBvvEqJD7TKgEny68>

No Registration
Fee

Participation
Certificate
will be
provided

ORGANIZED

BY

SAEINDIA COLLEGIATE CLUB OF JBIET
MECHANICAL ENGINEERING DEPARTMENT



SCAN ME

CHIEF PATRON

Shri J.V.Krishna Rao
Secretary, JBES

PATRON

Dr.P.C.Krishnamachary
Principal, JBIET

CONVENOR

Dr.Anoop Kumar Shukla
HOD-ME, JBIET

CO-CONVENOR

J.Nagaraju
Asst. Prof, MED, JBIET

FACULTY COORDINATORS

J.Narendra, Asst Prof, MED
P.Sreenivasulu, Asst Prof, MED

Organizing Team

Mr.VASAM SRINIVASA RAO, Asst. Prof
Mr.MOHD. RAFEEQ UR RAHMAN, Asst. Prof
Mr.S.BADULLA, Asst. Prof
Mrs.V.V KRISHNA VANDANA, Asst. Prof

Mrs.PATANGAY SEEMA RANI, Asst. Prof
Mr.G.GOPINATH, Asst. Prof,
Mr.SHAIK ASHRAF, Asst. Prof
Mr.JAMMULA SHYAM SUNDER, Asst. Prof

Mr.MAHESH.MG, Asst. Prof
Mr.A.SAI KUMAR, Asst. Prof
Mr.G.NARASIMHULU, Asst. Prof
Mr.K.SRINIVAS, Asst. Prof

STUDENT COORDINATORS :- G. Bheemesh-81428919172, K. Tejaram - 9398120854

PROGRAM EVALUATION COMMITTEE



J.B. INSTITUTE OF ENGINEERING & TECHNOLOGY
(UGC Autonomous)
Accredited by NAAC&NBA, Approved by AICTE & Permanently Affiliated to JNTUH
Bhaskar Nagar, Moinabad Mandal, Hyderabad, Telangana 500075



F. No. JBIET/ME/29/SAE/02/01/2021-22

Date: 26/09/2022

DEPARTMENT OF MECHANICAL ENGINEERING

SAEINDIA COLLEGIATE CLUB OF JBIET


CIRCULAR

The following faculty have been appointed as a Program Evaluation Committee(PEC) Member for the AICTE-SPICES Sponsored “Workshop on Tinkering to Manufacturing with Rapid Prototyping”. The PEC Members are requested to monitor the Workshop for smooth conduction and Evaluation.

Program Evaluation Committee

S. No	Member Name	Position in PEC
1	Dr. Niraj Upadhayaya	Chairman
2	Dr. R. Himanshu Sharma	Member Secretary
3	Dr. P. Swarnalathamma	HOD – S&H
4	Mr. K. Roshan	HOD – ECM
5	Mr. A. Sai Kumar	Subject Expert

Copy to: All Members of PEC
File copy of SAE


Principal
PRINCIPAL
J.B. INSTITUTE OF
ENGINEERING & TECHNOLOGY
Bhaskar Nagar, Yankapally (V)
Moinabad (M), R.R.D. Dist., 500 075

PROGRAM EVALUATION COMMITTEE

REPORT ON THE EVENT

Day 1, Session 1:

Date:26th September,2022

Topic: Inauguration and Introduction to Tinkering to Manufacturing with rapid prototyping

Resource Person: Mr. Sanjay Kumar Baral, Assistant Trainer, Skyy Rider Institutions & Siddhant Patnaik, Manager-Business Development, Skyy Rider Institutions.

Workshop was inaugurated on 26th Sep 2022 by **Dr. P. C. Krishnamachary Principal, JBIET, Hyderabad** along with **Dr. Niraj Upadhayaya, Dean R&D of JBIET, Dr. Towheed Sulthana, HOD, ECE JBIET(A), Dr. Salauddin, Dean of Academics, Dr. P. Srinivasa Rao, HOD, CSE Department, and Dr. Anoop Kumar Shukla, Professor, ME Department.**

Mrs. Seema Rani has welcomed all the dignitaries and delegates. In his welcome speech, she highlighted the importance and objectives of organizing this workshop programme. As conceptual understanding of the various research methods, tools and techniques is an essential prerequisite to conduct empirical research in different areas like manufacturing, science, technology etc. So, it is essential to develop an academician that is capable of early identifying the thrust areas of manufacturing. Tinkering to Manufacturing knowledge is very essential in modern age to make student industry ready. They can do different designing and analysis with printing the prototype.



Day 1. Session 2:

Topic: Types of 3D Printing Process

Resource Person: Mr. Sanjay Kumar Baral, Assistant Trainer, Skyy Rider Institutions.

Mr. Sanjay Kumar Baral, explained the participants with the objective i.e., importance of Tinkering to manufacturing with rapid prototyping (3D Printing). He discussed about various Classifications of 3D printing and techniques which are very useful for the researchers.



Day 2, Session 1:

Date: 27thSeptember,2022

Topic: 3D Printing software

Resource Person: Mr. Subbadarshanam Rachagolla, KARO3D

Theory session on 3D printing Technology Software was taught by Mr. Subbadarshanam Rachagolla. He explained how to download the Cura software, further he explained the applications of the Cura software



Day 2, Session 2:

Date: 27thSeptember,2022

Topic: Practice on 3D Printing software

Resource Person: Talla T D Tirumula Rao, Design Engineer

On Day 2 session 2, Talla T D Tirumula Rao showed the tools of the Cura Software such as how to add the specific printer & changing the Orientation, Size according to the 3D printer.



Day 3, Session 1:

Date: 28th September, 2022

Topic: Conversion to STL file

Resource Person: Talla T D Tirumula Rao, Design Engineer

On Day 3, the Session welcome note was presented by Mrs. P. Seema Rani, Assistant Professor, JBIET. After then, Through PPT client gave an idea about and emphasized on different platforms to convert CAD Model to stl. File and some exercises were shown.



Day 3, Session 2:

Date: 28th September, 2022

Topic: Import the file to machine

Resource Person: Mr. Subbadarshanam Rachagolla, KARO3D

On Day 3, the Session 2 welcome note was presented by Mrs. P. Seema Rani, Assistant Professor, JBIET. After then, through his presentation the resource person explained modifications of CAD file to stl. file and how to generate codes to import in the 3D Printer.



Day 4, Session 1 & 2:

Date: 29th September, 2022

Topic: Preparing the machine set up & Build-up of the prototype

Resource Person: Mr. Subbadarshanam Rachagolla, KARO3D and Talla T D Tirumula Rao, Design Engineer

Mr. Subbadarshanam Rachagolla, KARO3D and Talla T D Tirumula Rao, Design Engineer started his session on 3D printing processes and elaborated the machine set up and explained different parts of 3D Printer and working of it. The design to be printed is loaded in the SD Card where it is inserted in the machine to print the prototype.



Day 5, Session 1:

Date:30th September, 2022

Topic: Global Effects on Manufacturing

Resource Person: Mr. Subbadarshanam Rachagolla, KARO3D and Talla T D Tirumula Rao, Design Engineer

The resource person Mr. Subbadarshanam Rachagolla explained global effects which are effecting the conventional manufacturing. The 3D Printing became the best way of manufacturing now a days in Bio-Medical applications. The production cost has come down and accurate dimensional measurement of product is obtained.



Day 5 Session 2:

Date:30th September,2022

Topic: 3D Printing Benefits

Resource Person: Mr. Subbadarshanam Rachagolla, KARO3D and Talla T D Tirumula Rao, Design Engineer

Welcome note was presented by the P. Seema Rani Asst.Proff., JBIET. The resource person Mr. Subbadarshanam Rachagolla explained the 3D printing benefits. He explained the wastage in conventional manufacturing which can be avoided in the 3D printing. Thus saving time and money. He also explained the conventional prototyping was time consuming and not cost effective. The 3D Printing prototyping save the time and cost effective. Thus the reduced manufacturing cost of the product.

