



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**SKILL DEVELOPMENT PROGRAM REPORT - 2023-24**

As a part of the skill development program, 3<sup>rd</sup> semester students were given training in solid modeling, finite element analysis and Computer aided manufacturing using Autodesk Fusion 360 software in a 3 days program.

**Objectives of the program**

- ✓ To impart practical skills, hands on training, soft skills etc.
- ✓ To enhance the employability of students.

The program schedule is as follows.

**Schedule for Skill Development Program**

Date	Program Description	Time	Name of Expert with details
21/02/2024	Inauguration	9.30 to 10.30 AM	---
	Introduction to Modeling	11.00 to 1.00 PM	Mr. Maruthi G V Director, Product Design & Manufacturing, Medini Technologies, Bangalore.
	Hands on training Session (Basic sketching on Modeling)	2.00 to 4.00 PM	
22/02/2024	Hands on training Session (Conversion of 2D to 3D Sketching on solid Modeling)	9.30 to 1.00 PM	
	Hands on training Session (Assembly of machine Components)	2.00 to 4.00 PM	
23/02/2024	Hands on training Session (Finite element analysis)	9.30 to 1.00 PM	
	Hands on training Session (Computer aided manufacturing)	2.00 to 3.30 PM	
	Valedictory Function	3.30 to 4.00 PM	---

**Brief report about Skill development program**

**Day-1 (21/02/2024)**

The training was started on 21/02/2024 morning at 9.30 AM in the Mechanical Seminar Hall, Second Floor, New Building, in KSIT campus, with an inaugural function. The Principal, Dr. Dilip Kumar K, HOD, Dr. Girish T R, Chief Guest, Mr. Maruthi G V, Director, Product Design & Manufacturing, Medini Technologies, skill development program coordinator, Dr. Saleem Khan, teaching staff of the Mechanical Department, and students of III semester were present for the inaugural function. Mr. Rajesh G L, Assistant Professor, welcomes the dignitaries. The Principal, Dr. Dilip Kumar K, briefed the students on skill development program. A chief guest of the skill development program, Mr. Maruthi G V, Director, Product Design & Manufacturing, Medini Technologies, addressed the gathering on the need of solid modeling, finite element analysis and computer aided manufacturing using Fusion 360 software for Industry expectation. Inaugural function was ended with vote of thanks given by Dr. Saleem Khan, Skill Development program coordinator to dignitaries and participants.

Before starting the Day 1(Morning Session), an expert, Mr. Maruthi G V, Director, Product Design & Manufacturing, Medini Technologies delivered a lecture on importance of solid modeling, finite element analysis and computer aided manufacturing using Fusion 360 software for Industry need.

The Day-1 afternoon session was hands-on training for the students, the students practiced the basic sketching of solid modeling using Fusion 360 software.

**Day-2 (22/02/2024)**

The Day-2 morning session was again a hands-on training session for students, the students practiced how to convert 2D sketching to 3D Sketching.

The Day-2 afternoon session was continued with hands-on training session for students, the students practiced assembly drawing of machine components like screw jack and plumber block.

**Day-3 (23/02/2024)**

The Day-3 morning session was hands-on training on finite element analysis, the students were solved a stepped bar problem using Fusion 360 software and compared the result with manual method.

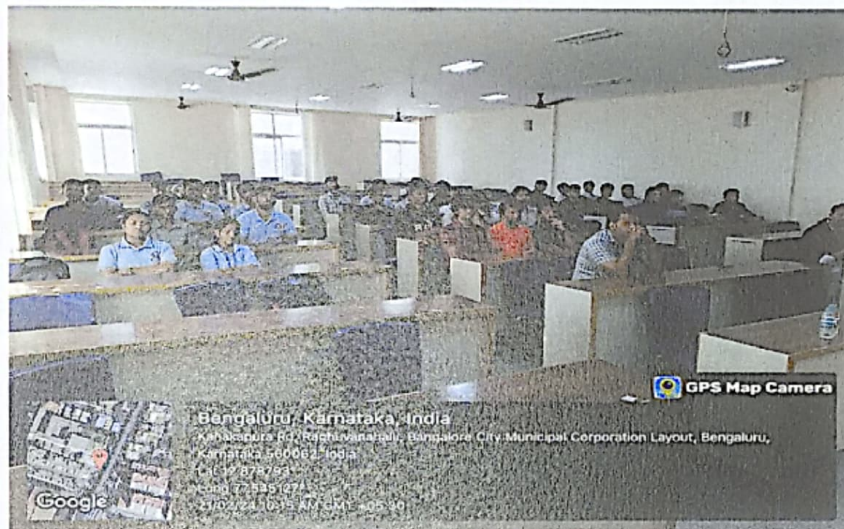


## Skill Development Program Report 2023-24

---

The Day-3 afternoon session was continued with hands-on training session; the students practiced computer aided manufacturing using Fusion 360 software. In addition, students were learned how to generate program for manufactured component. All the sessions were very interesting and informative.

The Skill development program ended with valedictory function.



**Students gathered for Inaugural function**



**Hands on training session**

## Conclusion

The student's undergone training in "Introduction to Modeling and Design for Manufacturing" using Fusion 360 software. Students practiced basic sketching of solid modeling, conversion of 2D to 3D sketching, assembly drawings of machine components, finite element analysis and computer aided manufacturing.

## Program Outcomes

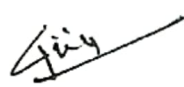
At the end of the program, the following PO's are attained


PO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1
	2	3	3	2	2								3

## Justification of PO mapping

- ✓ The basic procedure to draw orthographic views, which requires basic engineering knowledge, problem analysing skills and tool usage to draw views, hence it maps with PO1.
- ✓ The procedure to create 3 dimensional parts and assembly, generate 2 dimensional views from 3 dimensional parts which requires strong problem solving & analyzing technique, Engineering Knowledge hence it maps with PO2, PO3, PO4, PO5, & PSO1

  
Program Coordinator

  
HOD  
Head of the Department  
Dept. of Mechanical Engg.  
K.S. Institute of Technology  
Bengaluru - 560 109

  
Principal  
PRINCIPAL  
K.S. INSTITUTE OF TECHNOLOGY  
BENGALURU - 560 109.





KAMMAVARI SANGHAM (R) - 1952

**K. S. GROUP OF INSTITUTIONS**  
**K. S. INSTITUTE OF TECHNOLOGY**

( Approved by AICTE, New Delhi; Affiliated to VTU, Belagavi, Karnataka; Accredited by NAAC & NBA [CS, EC & MECH] )

#14, Raghuvanahalli, Kanakapura Road, Bengaluru - 560109

Tel: 080-28435722 / 24 Web : [www.ksit.edu.in](http://www.ksit.edu.in)



The Management, CEO, Principal & Staff  
Cordially invite you for the Inaugural Function of

**3 Day's Faculty Development Programme**

[ 21<sup>st</sup> February 2024 to 23<sup>rd</sup> February 2024 ]

**“Introduction to Modelling & Design  
For Manufacturing”**

Organized by Department of Mechanical Engineering

In Association With Medini Technologies  **Medini**

**on 21<sup>st</sup> February at 9.30 AM**  
**in Mechanical Seminar Hall, KSIT**

Chief Guest

**Sri. Maruthi G V**

Director, Product Design & Manufacturing  
Medini Technologies, Bengaluru

Will Grace the Occasion

**Dr. K. V. A. Balaji**

CEO, KSGI

**Dr. Dilip Kumar K**

Principal / Director, KSIT

**Dr. Saleem Khan**

FDP Coordinator,  
Assistant Prof., ME Department

**Dr. Girish T R**

Associate Prof. & Head,  
ME Department

## Management Committee

**Sri. R. Rajagopal Naidu**  
President

**Dr. M. Rukmangada Naidu**  
Vice President

**Sri. B. Lokanadha Naidu**  
Vice President

**Sri. R. Leela Shankar Rao**  
Hon. Secretary

**Sri. V. Rajendra Naidu**  
Joint-Secretary

**Sri. S. Venugopal Naidu**  
Joint-Secretary

**Sri. T. Neerajakshulu Naidu**  
Treasurer

**Sri. M. Yogamurthy**  
Internal Auditor

**Sri. M. Sudhakar**  
Chairman, Legal Cell

**Sri. N. M. Krishnamurthy**  
Chairman, Finance Committee

**Sri. A. V. Nagaraj**  
Chairman, Building Committee

**Sri. N. Krishnama Naidu**  
Chairman, Hostel Committee

**Sri. D. Jagadish Kumar**  
Chairman, Transport Committee

**Sri. T. N. Manjunath**  
Chairman, Environment Committee

**Sri. G. Ramana Babu**  
Director

**Sri. G. V. Ramesh**  
Director

**Sri. V. Ramesh Kumar**  
Director

**Sri. J. M. Chandra Shekar (Babu)**  
Director

**Sri. P. Prabhakar Naidu**  
Director

## Academic Advisory Board

**Dr. H. P. Kincha**  
Chairman

**Dr. K. N. Balasubramanya Murthy**  
Member

**Dr. Y. N. Srikanth**  
Member

**Dr. Shyam Vasudeva Rao**  
Member

**Dr. K. V. A. Balaji**  
Chief Executive Officer