

American Society of Mechanical Engineers (ASME) **MBCET Chapter,** **Annual Report (2024-2025)**

Faculty Co-ordinator

- **Dr. Jishnu Chandran R.** (Jan 2025- Jun 2025)
- **Mr. Bobin Saji George** (July 2024- Dec 2024)

Dr. Jishnu Chandran R., is Assistant Professor at the Dept. of Mechanical Engineering, Mar Baselios College of Engineering and Technology, Thiruvananthapuram. He has three years of Post-Doctoral research experience at the Vellore Institute of Technology. He received his doctoral degree from the Indian Institute of Space Science and Technology in Mechanical Engineering with specialization in Computational Fluid Dynamics. He completed his M-Tech in Thermal Sciences from NIT Calicut and B-Tech is in Mechanical Engineering from the Mar Baselios college of Engineering and Technology, Thiruvananthapuram (University of Kerala). His areas of expertise are in Computational Fluid Dynamics, Thermal and Fluids, Thermodynamic modelling, and Multi-phase flows, etc. His major research areas are CFD Solver development for complex flow systems, Transcritical CO₂ Refrigeration, Two-phase ejector flows, Transient and Compressible flows, Engineering systems for Sustainable development, etc. He has published around 13 SCI/Scopus indexed papers in reputed international journals, along with 5 conference papers and 3 Scopus-indexed book-chapters. He has also carried out one-year Master's internship project at the Vikram Sarabhai Space Centre, Thiruvananthapuram. He is a life member of ISTE and also serve as reviewer for esteemed journals such as Physics of Fluids, Journal of Mechanical Science and Technology.

ASME MBCET Chapter Activities (2024-2025)

1. Organized a two-day Autodesk certified CAD Workshop on Autodesk Inventor for UG mechanical Engineering students. The workshop was jointly organized by the Dept. of Mechanical Engineering, MBCET and the ASME MBCET chapter in association with InterCad systems Pvt. Ltd. **Date:** Mar 22nd and 23rd, 2025. **Venue:** CAD Lab, MBCET.

2. Delivered a presentation to first year Mechanical UG students on the activities of ASME and ASME MBCET chapter, advantages and exposure to ASME student members, and on the procedure to followed to complete free student member registration for first year students. **Date:** Apr 28th, 2025. **Venue:** First year ME1 and ME2 Class rooms, MBCET.

ASME MBCET Chapter CAD Workshop Details

Workshop Brochure



MAR BASELIOS
COLLEGE OF ENGINEERING AND TECHNOLOGY
AUTONOMOUS
Mar Ivanios Vidyamangal P.O., Nalanchira P.O., Thiruvananthapuram - 695 015 | Kerala



Department of Mechanical Engineering, MBCET
In association with
ASME, MBCET Chapter
&
interCAD Systems Pvt. Ltd.
Organizes

AUTODESK
Certified
CAD
Workshop

DATE: 22 & 23 MARCH 2025
VENUE: CAD LAB, MBCET

**HANDS-ON TRAINING
FOR ALL PARTICIPANTS**

**Registration limited to
30 participants**

Registration Fee: ₹1200

Program Coordinators:
Dr. Jishnu Chandran R.
Ms. Ruby Maria Syriac

Contact: +91 9447929116
Email: jishnuchandran.r@mbcet.ac.in

Workshop Syllabus



Syllabus for Autodesk Inventor

DAY 1

Module 1: Introduction to Autodesk Inventor

- Overview of Autodesk Inventor and its interface.
- File management and project creation.
- Work environment settings.
- Concept of parametric modeling.

Module 2: Sketching Essentials

- Understanding sketch planes.
- Creating and editing 2D sketches.
- Geometric and dimensional constraints.
- Tools: Line, Circle, Arc, Rectangle, and Spline.
- Advanced sketch tools: Trim, Offset, Fillet, and Chamfer.

Module 3: Part Modeling

- Creating basic 3D models (Extrude, Revolve, Loft, Sweep).
- Modifying parts using Fillet, Chamfer, Shell, and Hole features.
- Patterning (Rectangular, Circular, and Mirror).
- Using Work Features (Planes, Axes, and Points).

DAY 2

Module 4: Assembly Modeling

- Creating assemblies.
- Adding components and managing relationships.
- Constraints (Mate, Flush, Angle).
- Assembly analysis: Interference detection and dynamic simulation.
- Using design accelerators for gears, belts, and shafts.

Module 5: Sheet Metal Design

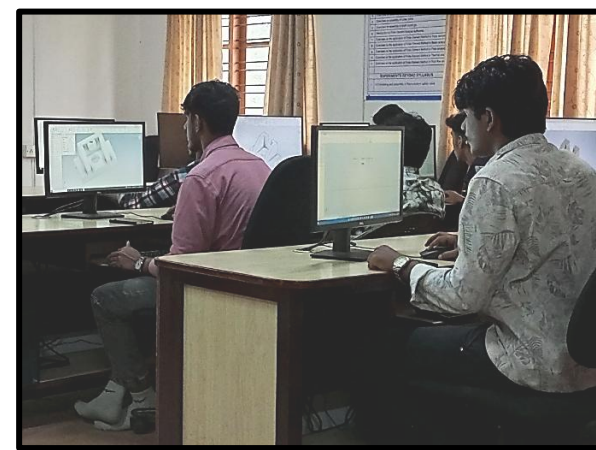
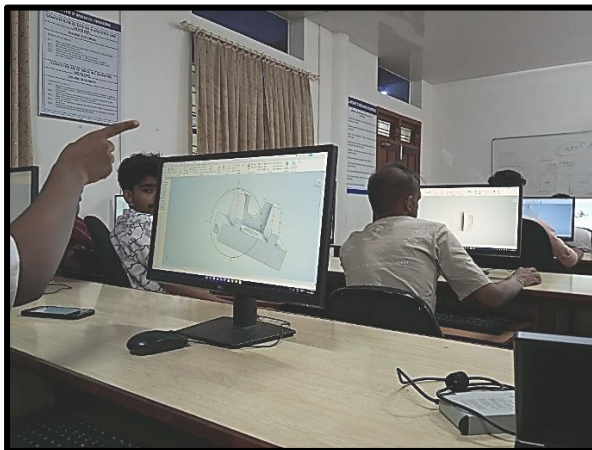
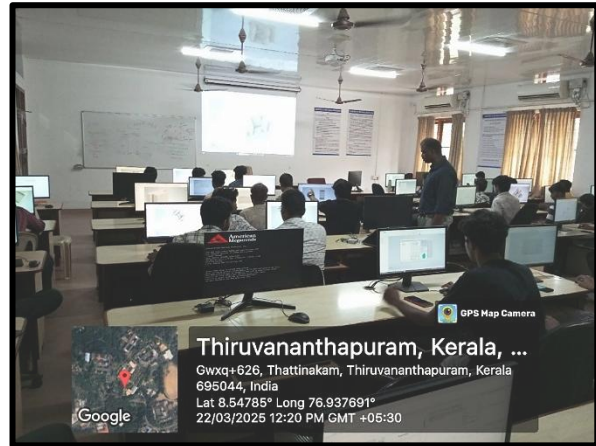
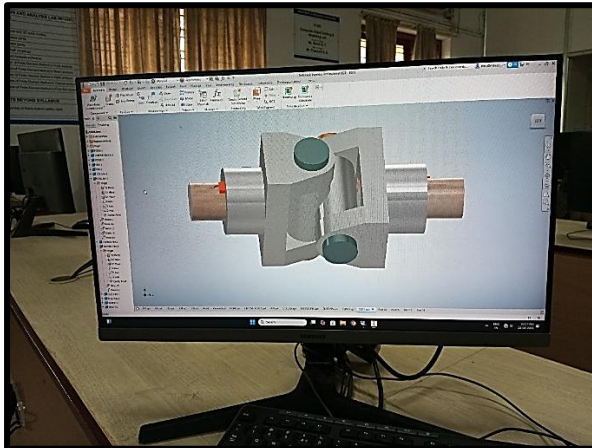
- Creating sheet metal parts.
- Flange, Hem, and Fold tools.
- Flat pattern generation.
- Sheet metal rules and styles

List of participants for CAD Workshop


A total of 27 students participated in the two-day CAD workshop. The participant group comprised of 14 students from 6th semester and 13 students from the 4th semester UG Mechanical Engineering batches. Details of the participants are provided below.

No	Name	Batch	Phone
1	Rohit Biju Krishnan	S6_ME	7994617696
2	Kailas S	S6_ME	8606609467
3	Gowri Sankar J	S6_ME	7012351469
4	Leeyan Prasanth	S6_ME	8089750284
5	Amith S Nair	S6_ME	6238576830
6	Aaron K Shibu	S6_ME	9188693526
7	Akhil Raj	S6_ME	6238175981
8	Abhinavjith	S6_ME	7306978330
9	Adarsh S Prakash	S6_ME	6282029162
10	Abhijith B Nair	S6_ME	8281303382
11	J Anantha Krishnan	S6_ME	9539488797
12	Anzil Asharaf	S6_ME	8156966157
13	Gem Varghese George	S6_ME	6282768933
14	Benshavo B	S6_ME	8075666085
15	Varun Varghese Jose	S4_ME_1	8139064357
16	Sriram Sathish Kumar	S4_ME_1	7012623526
17	Parthiv Krishnan	S4_ME_1	9188543267
18	Abhiram D	S4_ME_1	8590203604
19	Allen Kuriakose Abey	S4_ME_2	8330863885
20	Jeffin Jacob	S4_ME_2	8848536207
21	Neeraj D Manoj	S4_ME_2	9778765789
22	Sanjay Adhinath S	S4_ME_2	7012315024
23	Shreyas Jayakrishnan	S4_ME_2	8921587772
24	Nikin Jothi	S4_ME_2	9072008998
25	Ryan Basil Kottancheril	S4_ME_2	9847377131
26	Vishwabala P	S4_ME_2	8590652130
27	Aaron Biju	S4_ME_2	9714598981

CAD Workshop Images



CAD Workshop Sample certificate



CERTIFICATE OF PARTICIPATION

THANK YOU!

Thank you for participating in this Autodesk® Authorized Academic Partner® event. Autodesk's vision is to help people imagine, design, and create a better world.

Certificate No. **AP1111098226185573241**

AARON BIJU
PARTICIPANT NAME

TWO-DAY WORKSHOP ON AUTODESK INVENTOR
EVENT

ASME MBCEC CHAPTER, MAR BASELIOS COLLEGE OF ENGINEERING AND TECHNOLOGY, THIRUVANANTHAPURAM.
EVENT LOCATION


23-MARCH-2025
DATE

INTERCAD SYSTEMS (PVT) - TRIVANDRUM
AUTODESK AUTHORIZED ACADEMIC PARTNER

Autodesk and the Autodesk logo are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. Autodesk did not provide this training course or any of the training materials. The Autodesk Learning Partner provided all course materials and training. © 2025 Autodesk, Inc. All rights reserved.

AUTODESK
Authorized Academic Partner

CAD Workshop Receipt from InterCAD systems Pvt Ltd.



RECEIPT

No. **270**
Date **24/3/2025**

THE SERVICES DIVISION OF INTERCAD SYSTEMS P LTD.
TECHNOLOGY | LEARNING | CONSULTING

Mr./Smt./M/s. **HOD, Department of Mechanical Engineering, Marbaseleos College of Engineering and Technology, TUPM**

Cash/Cheque/DD No. _____ Dated _____ on _____

_____ (Bank Name) for Rupees **Twenty one thousand six hundred** _____ Only

towards **2 days workshop in Autodesk Inventor for 27 Students (27 x 800)**

Rs. 21,600/-

TLC Corporation
Approved Signatory

: if payment is made by cheque, this receipt is subject to realization

Presentation on activities of ASME and ASME MBCET chapter, and the procedure for free student member registration to first year Mechanical UG students

Presentation slides



Introduction to ASME

- ❖ Founded in 1880
- ❖ Global professional organization
- ❖ Promotes art, science & practice of mechanical engineering
- ❖ Over 100,000 members worldwide

Why ASME? (Advantages)

- ❖ Global recognition & credibility
- ❖ Professional development opportunities
- ❖ Access to the latest tech & research
- ❖ Networking with global experts

Benefits of ASME Membership

- ❖ Free/discounted webinars and online courses
- ❖ Access to technical journals & publications
- ❖ Career resources and job board
- ❖ Discounts on conferences and workshops

Types of Membership

- ❖ Student Membership
- ❖ Professional Membership
- ❖ Early Career Membership
- ❖ Fellow & Honorary Member
- ❖ Each type tailored to career stage

Global Conferences

- ❖ IMECE (International Mechanical Engineering Congress & Exposition)
- ❖ Turbo Expo
- ❖ Offshore Technology Conference (OTC)
- ❖ Great for networking & showcasing research

Competitions for Students

- ❖ ASME E-Fest:
 - Human Powered Vehicle Challenge (HPVC)
 - IAM3D (Innovative Additive Manufacturing 3D Challenge)
 - Student Design Competition (SDC)
- ❖ Apply knowledge & win prizes

Career & Technical Resources

- ❖ ASME Learning & Development Courses
- ❖ Mentorship programs
- ❖ Certification opportunities (e.g., GDTP)
- ❖ Technical communities & codes/standards

ASME for Students & Young Engineers

- ❖ Build resumes with real-world experience
- ❖ Interact with industry professionals
- ❖ Learn leadership & soft skills
- ❖ Travel and represent your institution

How to Join

1. Go to the official ASME website
 - ❖ Visit: <https://www.asme.org>
2. Navigate to "Membership"
 - ❖ Click on "How To Join" at the top.
 - ❖ Then choose "Student Membership".
3. Create an account
 - ❖ Click "Join Now".
 - ❖ You'll be asked to create a **free ASME account** (basic details like name, email, country, university, etc.).
4. Choose "Student Membership"
 - ❖ During registration, select that you are a **student**.

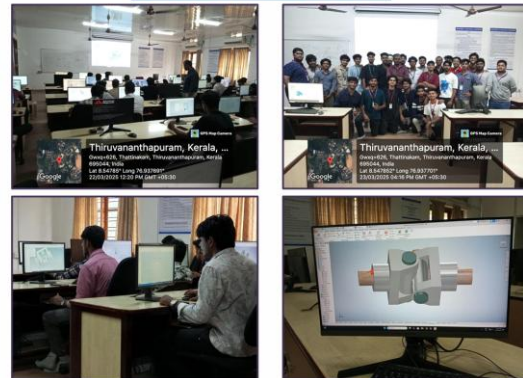
5. Enter your university details

- ❖ Enter your **college/university name** (example: Mar Baselios College of Engineering and Technology).
- ❖ You might have to mention your **expected graduation year**.

6. Complete Registration

- ❖ Review your details.
- ❖ Submit!
- ❖ After this, you'll get:
- ❖ A **student membership ID**.
- ❖ Access to **free resources, technical papers, discounts on events, and eligibility for competitions** (like HPVC, E-Fests, etc.).

Student Activities



Conclusion & Call to Action

- ❖ ASME is a gateway to **endless learning and career growth**.
- ❖ **Get involved:** Join your college chapter or start one!
- ❖ Visit: www.asme.org

Contact for Help

- ❖ Name: J S HEMAND
- ❖ Phone: 8086459802
- ❖ Mail: jshemand.b23me1118@mbcet.ac.in