



**Mar Baselios Christian College of Engineering
and Technology**
Kuttikanam, Peermade – 685531

**DEPARTMENT OF MECHANICAL
ENGINEERING**

&

**ASSOCIATION OF RADIANT MECHANICAL
ENGINEERS (ARME)**



CAD POINT WORKSHOP REPORT
2022-2023

Report on the Mechanical and Civil Engineering Workshop

Introduction

The Department of Mechanical Engineering, in collaboration with the department association ARME (Association of Radiant Mechanical Engineers), organized a comprehensive workshop focusing on Computer-Aided Design (CAD), SolidWorks, and various analysis software applications. This workshop, which spanned six days, was designed to enhance the skills and knowledge of the students pursuing their third semester in Mechanical and Civil Engineering. The workshop took place from the 11th to the 16th of September 2023 and was conducted by CAD Point Kuttikkanam, an institution well-regarded for its expertise in these fields.

Workshop Overview

The six-day workshop aimed to provide students with practical knowledge and hands-on experience in CAD, SolidWorks, and various analysis software tools. It was tailored to equip students with essential skills that are not only valuable in their academic pursuits but also highly relevant in their future careers as engineers.

Day 1: Introduction to CAD

The workshop commenced on the 11th of September with an introduction to Computer-Aided Design (CAD). The day began with an inaugural address by the department heads and a representative from CAD Point Kuttikkanam, who highlighted the importance of CAD in modern engineering practices. The students were introduced to the basics of CAD software and its applications. They gained an understanding of 2D and 3D modeling and were familiarized with common CAD tools.

Day 2: SolidWorks Essentials

On the second day, the focus shifted to SolidWorks, a widely used parametric CAD software. The participants learned about the SolidWorks interface and its various tools. They were introduced to creating 3D models and assemblies, as well as basic simulations. The hands-on training was especially valuable, as it allowed students to apply the theoretical knowledge gained on the first day.

Day 3: Advanced SolidWorks Techniques

The third day delved into more advanced features of SolidWorks. The students learned about parametric modeling, advanced sketching, and assembly modeling. Furthermore, they explored the concept of finite element analysis (FEA) and its applications in engineering design.

Day 4: Structural Analysis

Day 4 of the workshop focused exclusively on structural analysis software. Students were introduced to software like ANSYS and Abaqus, which are instrumental in simulating and analyzing the behavior of structures under different loads and conditions. They learned about finite element analysis (FEA) principles and how to apply them to real-world engineering problems.

Day 5: Fluid Dynamics and Heat Transfer Analysis

The penultimate day was dedicated to understanding fluid dynamics and heat transfer analysis. The students gained insights into software like Fluent and COMSOL Multiphysics, which are essential for simulating fluid flow and heat transfer in various engineering applications. This section of the workshop also included practical sessions, enabling students to simulate scenarios related to fluid flow and heat transfer.

Day 6: Project Work and Conclusion

The final day was reserved for project work and practical applications of the knowledge acquired during the workshop. Students were divided into groups and tasked with applying CAD, SolidWorks, and analysis software to solve real engineering problems. This hands-on experience allowed them to integrate the skills they had learned throughout the week. The day concluded with project presentations, where students showcased their solutions and received feedback from their peers and instructors.

Students Feedback and Insights

The workshop received positive feedback from participants. Students expressed their appreciation for the practical approach to learning and the opportunity to work with industry-standard software. They also noted that the hands-on experience was invaluable in reinforcing their understanding of the topics covered.

One of the participants, a third-semester Mechanical Engineering student, shared their thoughts, saying, "This workshop has been an eye-opener for me. I had previously learned about CAD and analysis software in theory, but this workshop allowed me to apply that knowledge in a real-world context. The hands-on sessions were the highlight, as they gave us the confidence to use these tools in our future projects and careers."

Conclusion

The six-day workshop on CAD, SolidWorks, and analysis software, organized by the Department of Mechanical Engineering and ARME, in collaboration with CAD Point Kuttikkanam, was a resounding success. It provided students with valuable insights into the practical applications of these essential engineering tools and gave them a competitive edge in their academic and future professional endeavors.

The event not only enhanced their technical skills but also fostered collaboration, critical thinking, and problem-solving abilities. It is evident that such workshops play a crucial role in bridging the gap between theoretical knowledge and real-world engineering challenges. The experience gained here will undoubtedly benefit the students as they progress in their academic and professional journeys.

As the curtain falls on this successful workshop, the organizers look forward to more such initiatives that will continue to enrich the educational experience of engineering students and prepare them for the challenges of the future.

Students Feedback

CADPOINT STUDENTS FEEDBACK FORM-2023

Name of Student.....Sbin..... Collage Name.....MBO.....
WhatsApp No.....9744036335..... Date of Feedback.....13/09/23.....
E-mail ID-...Sbinblesson42@gmail.com Branch.....ME.....
Academic year.....2022-23..... Semester.....S3.....

PLEASE RATE YOUR EXPERIENCE

1. The quality of instruction was good, and the training met my expectations

Strongly Agree Agree Disagree

2. Trainer was knowledgeable and met the training objectives

Strongly Agree Agree Disagree

3. The Trainer was well prepared and able to answer your questions

Strongly Agree Agree Disagree

4. Does the workshop help your skill development

Yes NO

5. Your overall experience

Excellent Happy Average Fair Poor

CADPOINT STUDENTS FEEDBACK FORM-2023

Name of Student... Shuhaib Faisal Collage Name... M.B.C.C.E.T.
WhatsApp No... 8590674454 Date of Feedback... 13/09/23
E-mail ID- Shuhaibfaisal8049@gmail.com Branch... Mechanical
Academic year... 2022 - 2023 Semester... S3

PLEASE RATE YOUR EXPERIENCE

1. The quality of instruction was good, and the training met my expectations

Strongly Agree Agree Disagree

2. Trainer was knowledgeable and met the training objectives

Strongly Agree Agree Disagree

3. The Trainer was well prepared and able to answer your questions

Strongly Agree Agree Disagree

4. Does the workshop help your skill development

Yes NO

5. Your overall experience

Excellent Happy Average Fair Poor

CADPOINT STUDENTS FEEDBACK FORM-2023

Name of Student.....TOM JOSE..... Collage Name...MBC CET..
WhatsApp No.....6238944069..... Date of Feedback..16-09-23
E-mail ID-.....5726@Mbcpeetmadala.com Branch..MECHANICAL..
Academic year.....2022-26..... Semester.....S2.....

PLEASE RATE YOUR EXPERIENCE

1. The quality of instruction was good, and the training met my expectations

Strongly Agree Agree Disagree

2. Trainer was knowledgeable and met the training objectives

Strongly Agree Agree Disagree

3. The Trainer was well prepared and able to answer your questions

Strongly Agree Agree Disagree

4. Does the workshop help your skill development

Yes NO

5. Your overall experience

Excellent Happy Average Fair Poor

CADPOINT STUDENTS FEEDBACK FORM-2023

Name of Student... Adithyans Collage Name... MCCLET
WhatsApp No... 7025544133 Date of Feedback... 16-09-2023
E-mail ID... ajinsamboddy133@gmail.com Branch... MECH
Academic year... 2022-2026 Semester... 3

PLEASE RATE YOUR EXPERIENCE

1. The quality of instruction was good, and the training met my expectations

Strongly Agree Agree Disagree

2. Trainer was knowledgeable and met the training objectives

Strongly Agree Agree Disagree

3. The Trainer was well prepared and able to answer your questions

Strongly Agree Agree Disagree

4. Does the workshop help your skill development

Yes NO

5. Your overall experience

Excellent Happy Average Fair Poor

GALLERY





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