

# MECHANICAL NEWS LETTER

DECEMBER-2022

## MECHANICAL ENGINEERING

universal engineering college , Thrissur



### VISION

Provide excellent engineering education to create competent and innovative mechanical engineers to cater the society with strong ethical values

### MISSION

- To produce technically skilled and innovative engineering graduates through experienced faculty and robust infrastructure.
- Foster the students to achieve lifelong learning and to become competitive through proper curriculum delivery and holistic development strategies.
- To inculcate multidisciplinary approach in engineering and to prepare them for global skill set
- Mould the students to be socially, ethically and environmentally responsible citizens

# MECHANICAL NEWS LETTER

## INTRODUCTION TO ARDUINO BASICS



**Mr. James C Philip**  
(Programmer, MC Technologies)



01/07/2022  
10:00 AM

Department of Mechanical Engineering

## INTRODUCTION TO ARDUINO BASICS

The Department of Mechanical Engineering, Universal Engineering College, conducted an introductory Arduino Basics workshop on 1 July 2022 from 10:00 AM to 12:00 PM at the Robotics Lab. The session was facilitated by Mr. James C. Philip and attended by Mechanical Engineering students. The workshop focused on introducing students to microcontroller fundamentals, covering the Arduino board architecture, pin configurations, and digital and analog I/O. Participants received hands-on training in basic coding using the Arduino IDE and learned how to connect sensors and actuators.

Through live demonstrations and mini-projects such as LED blinking and sensor monitoring, students were able to practically apply their learning. The programme concluded with an interactive Q&A session and feedback, followed by a vote of thanks. Overall, the workshop successfully enhanced students' understanding of Arduino hardware, basic programming, and hardware–software integration.



## REFLECTION 2023

The Department of Mechanical Engineering, Universal Engineering College, organized a motivational programme titled “Reflection 2023” on 7 July 2022 from 10:00 AM to 12:30 PM at the Seminar Hall, B-Block. The session was conducted by Ms. Chesly Joy, Assistant Professor, ECE, UEC, and attended by Mechanical Engineering students. The programme focused on self-discovery, personal growth, and emotional well-being. Through storytelling, interactive activities, and reflections, students were encouraged to analyze their academic and personal journeys, identify their strengths, and set meaningful goals. The session also emphasized the importance of emotional



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**REFLECTIONS  
2023**



**Mrs. Chesly Joy**  
(Assistant professor  
department of ECE)

07/07/2022  
TIME: 10:00 AM

B-BLOCK  
SEMINAR HALL

Department of Mechanical Engineering



intelligence, resilience, and a growth mindset. An interactive Q&A and experience-sharing session allowed students to actively participate and learn from peers. Overall, the programme successfully enhanced student motivation, self-awareness, and peer bonding in a supportive learning environment.

## MOTIVATION AND PLACEMENT TRAINING

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**MOTIVATION & PLACEMENT TRAINING**

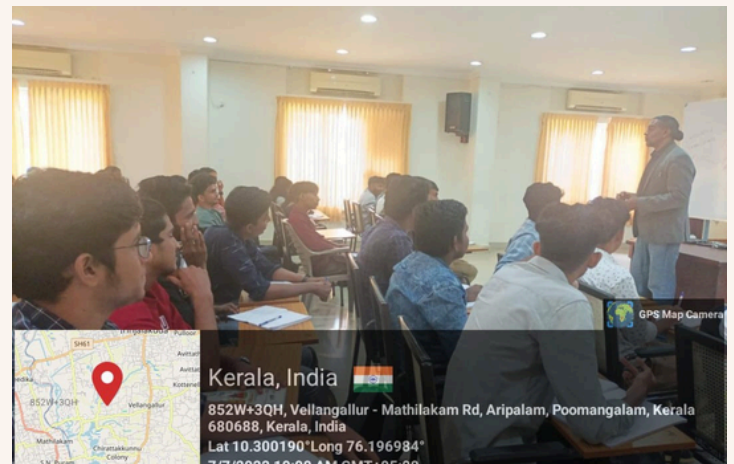
07 JULY 2022  
10:00 AM - 12:30 PM

Mr. Cliff Marcus  
Dare, Jay's Academy

ARMS

A motivation and placement training session was conducted on 7 July 2022 by the Department of Mechanical Engineering, Universal Engineering College, for final-year Mechanical Engineering students. The session was led by Mr. Cliff Marcus Dare from Jay's Academy and focused on enhancing students' confidence and placement readiness. The programme began with a motivational talk emphasizing attitude, self-belief, and confidence building, followed by a placement training session covering interview techniques.

communication skills, and resume preparation. An interactive mock Q&A session allowed students to practice interview responses and receive constructive feedback. Overall, the session helped students develop a positive mindset, improve their interview and resume skills, and gain confidence to face recruitment processes effectively.



# SOFTSKILL ADD- ON COURSE

The Department of Mechanical Engineering, Universal Engineering College, conducted a Soft Skill Add-on Course on 19 September 2022 at the Seminar Hall, B-Block for Mechanical Engineering students. The programme was led by Mrs. Nirmala Parameswaran, a certified JCI Trainer. The course focused on developing essential professional and interpersonal skills through sessions on communication skills, team building and leadership, goal setting, and self-motivation. Interactive activities and practical examples

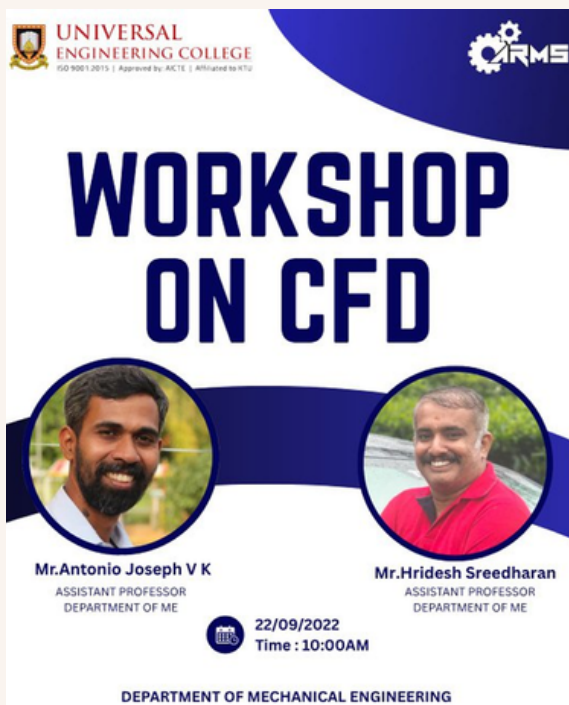


encouraged student participation and self-reflection.

Overall, the programme helped students enhance communication and leadership abilities, improve teamwork, and build confidence and motivation to better prepare for their future careers



## WORKSHOP ON CFD



A CFD (Computational Fluid Dynamics) workshop was conducted by the Department of Mechanical Engineering, Universal Engineering College, on 22 September 2022 at the CAD Laboratory. The program aimed to introduce Mechanical Engineering students to the fundamentals and practical applications of CFD. The workshop featured sessions on CFD fundamentals, meshing techniques, and boundary condition setup, handled by Mr. Antonio Joseph and Mr. Hridayesh S, Assistant Professors from the Mechanical Engineering department. A hands-on simulation session on flow over an airfoil provided participants with practical exposure to CFD

software and result interpretation. The workshop successfully bridged theoretical fluid mechanics concepts with practical simulation tools, enhancing students' computational and analytical skills essential for modern engineering applications.



# PLACEMENT PREPARATION PROGRAMME

The Department of Mechanical Engineering, Universal Engineering College, organized a placement preparation programme on 28 September 2022 at the Seminar Hall, B-Block for final year Mechanical Engineering students. The session was conducted by Mr. Cliff Marcus Dare from Jay's Academy. The programme focused on resume building, interview readiness, aptitude, and logical thinking essential for campus recruitment. Through interactive sessions and mock interview activities, students gained practical exposure to real Placement scenarios.



## PLACEMENT PREPARATION PROGRAMME



Mr.Cliff Marcus

Dare, Jay's Academy

28 SEPTEMBER 2022  
TIME : 10:00 AM-12:30PM

The programme enhanced students' confidence, communication skills, and overall preparedness for interviews, providing valuable guidance on personal branding and professional conduct.

# PYTHON ADD- ON COURSE



## PYTHON ADD-ON COURSE



Dr. SREERAJ R  
PROFESSOR & HOD  
DEPARTMENT OF CSE



📅 13/10/2022

🕒 10:00 AM

The Department of Mechanical Engineering, Universal Engineering College, conducted a Python Add-On Course on 13 October 2022 in the Computer Lab for Mechanical Engineering students. The programme was handled by Dr. Sreeraj R, Head of the Department of Computer Science and Engineering, UEC. The course introduced students to fundamental Python programming concepts, including syntax, data structures, file handling, and commonly used libraries. Through interactive sessions and live coding exercises, participants gained practical exposure to Python applications in data processing, automation, and



engineering problem-solving. The programme provided a strong foundation for integrating programming skills into mechanical engineering applications.

## CAD MASTER 2022

A 3D Modeling Competition Conducted by Techno CAD Club

**CAD MASTER**  
3D Modeling Competition for Final Year ME Students of UEC  
Organised by Techno CAD Club  
Dept. of Mechanical Engineering

**21<sup>st</sup> October**  
2.00PM - 4.00PM

**CAD LAB  
B BLOCK**

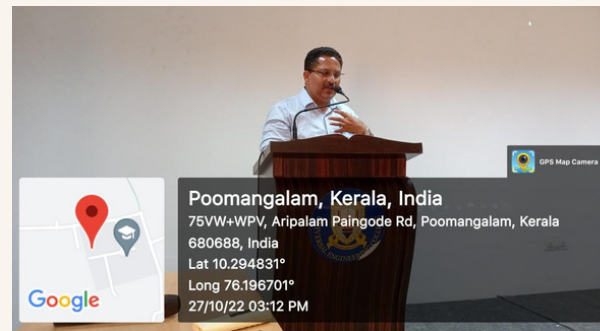
Universal Engineering College  
Vallivattom P.O, Vellangallur Road, Thrissur | www.uec.ac.in

The Techno CAD Club of the Mechanical Engineering Department at Universal Engineering College organized CAD Master 2022, a 3D modeling competition for final-year mechanical students, on 21 October 2022 at the CAD Lab, B-Block. A total of 18

students registered, and 14 participated. Amal P M secured the first prize (Rs. 1000), Athul Dileep won the second prize (Rs. 500), and Shelus P B achieved the third

prize (Rs. 300). The prize distribution

ceremony was held on 27 October 2022 at the Seminar Hall, B-Block. The event was welcomed by Dr. Prem Sankar, inaugurated by Principal Dr. Jose K Jacob, who also distributed certificates and cash prizes, and concluded with a vote of thanks by Mr. Vimal N A, Faculty Coordinator of the Techno CAD Club.



# REPORT ON ONE DAY WORKSHOP ON CADD

A One Day Workshop on CADD was organized by the Technical Club of the Mechanical Engineering Department at Universal Engineering College for S3 Mechanical Engineering students on 02 November 2022. The session, held in the Seminar Hall (B-Block), was conducted by



Mr. Hridesh S, Assistant Professor of the department. The workshop aimed to provide practical exposure to Computer Aided Design and Drafting tools and improve students'

understanding of drafting techniques. It began with an inaugural session emphasizing the importance of CADD in modern engineering. During the technical sessions, the resource person explained CADD fundamentals, including

interface navigation, drawing tools, dimensioning, and basic modeling concepts. Students received hands-on practice through demonstrations and interactive activities, enhancing their understanding of real-world applications in product design and manufacturing. The workshop concluded with a feedback session, and students appreciated the initiative. Overall, the event was successful in strengthening students' technical knowledge and practical skills in CADD

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## ONE DAY WORKSHOP

### ON CADD

COMPUTER AIDED DESIGN AND DRAFTING

FOR S3 MECHANICAL

**RESOURCE PERSON**

**MR. HRIDESH S**  
ASSISTANT PROFESSOR  
DEPT. OF MECHANICAL ENGINEERING

**WEDNESDAY**  
**02**  
**NOVEMBER**

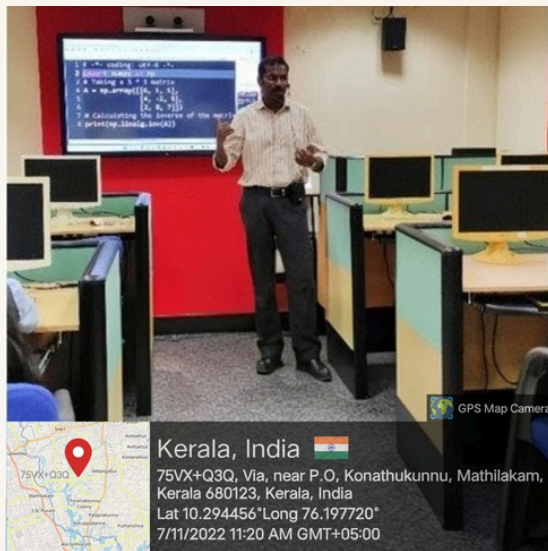
**VENUE**  
SEMINAR HALL  
B-BLOCK

TC  
Techno CAD  
TECHNICAL CLUB OF MECHANICAL ENGINEERING DEPARTMENT



# TECHNICAL TALK ON ARTIFICIAL INTELLIGENCE

The Department of Mechanical Engineering, Universal Engineering College, organized a technical talk on Artificial Intelligence on 7 November 2022 at the Seminar Hall, B-Block for Mechanical Engineering students. The session was delivered by Dr. Sreeraj R, Head of the Department of Computer Science and Engineering, UEC. The talk introduced students to the fundamentals of Artificial Intelligence and machine



learning, highlighting their applications in manufacturing,

predictive maintenance, and design optimization. The session also addressed ethical considerations and future trends in AI, motivating students to adopt interdisciplinary learning and innovative thinking in modern engineering practices.

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QRMS

## Technical Talk on AI

Dr. SREERAJ R  
PROFESSOR & HOD  
DEPARTMENT OF CSE

07/11/2022  
10:00 AM

DEPARTMENT OF MECHANICAL ENGINEERING

## HVAC SYSTEM DESIGN WORKSHOP

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QRMS

## HVAC SYSTEM DESIGN WORKSHOP

Mr. Rony S Benjamin  
Managing Partner, Hozon  
Engineering & Contracting

11 NOVEMBER, 2022  
TIME : 10:00 AM-12:30PM

The Department of Mechanical Engineering, Universal Engineering College, organized a workshop on HVAC System Design on 11 November 2022 at the Seminar Hall, B-Block for Mechanical Engineering students. The session was conducted by Mr. Rony S Benjamin, Managing Partner of Hozon Engineering.

The workshop provided a comprehensive introduction to heating,



ventilation, and air conditioning (HVAC) systems, covering system types, load



calculations, component selection, and design considerations. Emphasis was placed on energy efficiency, industry practices, and design integration. A live demonstration on system layout and duct distribution offered students practical insights into real-world HVAC design applications in residential and commercial buildings.

## REPORT ON 2-DAY HANDS-ON WORKSHOP ON DRONE TECHNOLOGY

The Robotics Club of Universal Engineering College, in collaboration with ARMS (Autonomous Unmanned Aerial Systems) and the Department of Mechanical Engineering, organized a two-day hands-on workshop on Drone Technology on 15th and 16th November 2022. The workshop aimed to provide students with practical knowledge of drone design, assembly, and operation. The program began with an inaugural session highlighting the importance of drone technology in sectors such as agriculture, surveillance, disaster management, and logistics. Expert trainers introduced students to drone components, working principles,



aerodynamics, and safety measures.

Participants gained hands-on experience in assembling



and calibrating drones, performing pre-flight checks, and troubleshooting. On the second day, students received practical flight training and observed live demonstrations, including take-off, hovering, GPS tracking, and camera integration. The interactive workshop enhanced students' technical skills, bridged the gap between theory and practice, and encouraged further research in robotics and unmanned aerial systems.



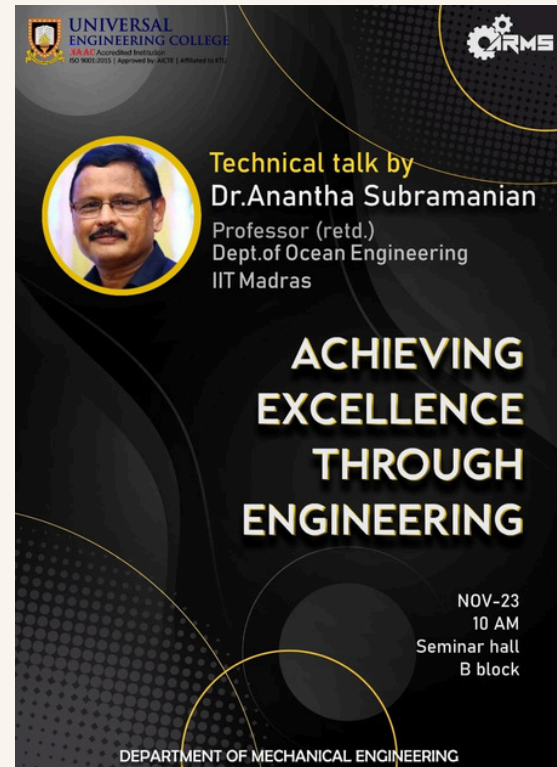
# TALK ON EXCELLENCE IN ENGINEERING

A talk on “Excellence in Engineering” was held on 23 November 2022 at the Mechanical Engineering Department of Universal Engineering College. The session was delivered by Dr. Anadasubramaniam, a professor from IIT, and attended by Mechanical Engineering students. He spoke about the mindset and habits needed to succeed in a competitive global environment, highlighting curiosity, continuous learning, ethical responsibility, and interdisciplinary collaboration. Through real-life examples and



research insights, he motivated students to pursue academic and professional excellence. The session concluded

with an interactive Q&A, and key takeaways included understanding engineering excellence, the evolving role of engineers, and the importance of lifelong learning and ethics



# ISHRAE STUDENT CHAPTER INSTALLATION CEREMONY

The Department of Mechanical Engineering at Universal Engineering College, Irinjalakuda organized the ISHRAE Student Chapter Installation Ceremony for 2022–23 on 25th November 2022 in association with the ISHRAE Kochi Chapter. The event formally installed the new student office bearers and aimed to strengthen industry–academic collaboration while promoting



HVAC and refrigeration knowledge. The chief guest, Mr. Silas S, Manager – MEP at Bluestar and Former President of ISHRAE Kochi Chapter, delivered a keynote address on the importance of professional

societies and opportunities in HVAC and building services engineering. He also interacted with students, sharing insights on energy-efficient systems and sustainable practices. The program concluded with a vote of thanks, marking a successful start to the chapter’s activities for the academic year.

