INAUGURATION REPORT (30/08/2024)

The Civil Engineering Department of Marian Engineering College marked the beginning of the academic year 2024-25 with an inaugural ceremony held on 30th August 2024. The event, organized in collaboration with prestigious engineering societies such as the Institution of Engineers (India), American Society of Civil Engineers (ASCE), Indian Geotechnical Society (IGS), AMETOS and Civil Engineering Association, was a momentous occasion. The participation of these professional bodies reflected the department's commitment to fostering strong industry connections and encouraging students to engage with the broader engineering community.

The event began at 2:00 PM with a solemn prayer, invoking blessings for the success of the department and its students in the coming year. This was followed by the *Welcome Address* delivered by Dr. Rani V., Head of the Department of Civil Engineering at Marian Engineering

College.



Dr. Rani warmly welcomed the attendees, which included faculty members, students, alumni, and the esteemed chief guest, Dr. Binumol Tom, Professor of Architecture at RIT Kottayam. She emphasized the importance of the inauguration as a platform to inspire students and faculty alike to pursue excellence in the field of civil engineering. She also highlighted the department's achievements from the past year and its future plans to enhance the learning experience for students.

Following the welcome speech, Dr. Abdul Nizar M., the Principal of Marian Engineering College, delivered the Presidential Address. Dr. Abdul Nizar acknowledged the hard work of the faculty and students that had contributed to the success of the department. He outlined the college's vision of providing quality education and ensuring that students are well-prepared for the challenges of the professional world. His speech also emphasized the need for students to stay connected with professional bodies like the IEI, ASCE, and IGS to remain updated on the latest industry trends and practices. Dr. Nizar encouraged students to take advantage of the resources available through these organizations, which play a significant role in shaping their engineering careers.

The next part of the ceremony was the *lamp lighting*, a symbolic gesture representing the dispelling of darkness and the pursuit of knowledge. Key dignitaries, including the principal, the HOD, and the chief guest, participated in the

lamp lighting, signifying the formal commencement of the academic year. college community as they embarked on a new

Following the ceremonial proceedings, the event moved to the *honoring of alumni*. This segment of the program recognized the achievements and contributions of alumni who have excelled in their respective fields. By highlighting the successes of former students, the department underscored the strong foundation it provides for future civil engineers. The honored alumni were celebrated for their professional accomplishments and their



The inauguration ceremony concluded with the *Vote of Thanks* delivered by *Prof. Kannan K.*, Assistant Professor in the Civil Engineering Department. Prof. Kannan expressed gratitude to all those who made the event a success, including the chief guest, faculty members, and students. He extended special thanks to the organizing committee for their hard work and dedication in ensuring the smooth running of the event. He also acknowledged the support of the professional societies and the alumni who contributed to the program.

SESSION REPORT



Dr. Binumol Tom, the chief guest for the inauguration event, delivered an insightful and thought-provoking session focusing on *topography-informed building practices* in Kerala, with a special emphasis on Wayanad. As an expert in architecture, Dr. Binumol shared her knowledge

on how traditional architectural practices in Kerala were deeply influenced by the region's unique natural geography, particularly the hilly terrain and rich environmental context of Wayanad.

The session began with a discussion on the role of topography in shaping architectural design. Dr. Binumol emphasized the importance of understanding the land's topography before beginning any construction. She explained how the slopes, elevations, and natural contours of Wayanad have historically guided the design of sustainable and climate-resilient structures. Traditional builders in Kerala, especially in Wayanad, adapted their designs to the land's natural features rather than attempting to alter the environment.

Dr. Binumol then explored the indigenous building practices of Wayanad. She highlighted the use of vernacular materials such as laterite stone, bamboo, and timber in traditional constructions. These materials were not only locally sourced but also eco-friendly, offering natural cooling properties and structural durability. She pointed out that the use of such materials helped minimize the carbon footprint while ensuring the longevity of the structures. These lessons from the past, she argued, could serve as valuable insights for modern architects and engineers in pursuit of sustainable construction methods.

Another key highlight of the session was Dr. Binumol's explanation of *climate-responsive architecture* in Wayanad. She described how traditional building designs were inherently suited to the region's climate, particularly the heavy monsoon rains. Elevated foundations, sloped roofs, and well-planned drainage systems were integral to traditional homes, ensuring resilience against harsh weather conditions. She suggested that modern constructions in Kerala and other similar regions could learn from these elements to design buildings that are more resistant to climate impacts.

Dr. Binumol also stressed the idea of *building in harmony with nature*. She emphasized that traditional builders in Wayanad had a deep

understanding of the environment, which allowed them to create structures that seamlessly blended with the landscape. This approach was not only aesthetically pleasing but also functional in terms of preserving natural resources and promoting environmental sustainability. Modern engineers and architects, she urged, should look to these practices for guidance in creating eco-friendly and terrainsensitive constructions. Throughout the session, Dr. Binumol presented several case studies of traditional homes and public structures in Wayanad. These buildings, many of which have stood for centuries, demonstrated the effectiveness of using local materials and designs that adapted to the region's topography. One notable example was the use of *earth berming*, where buildings were partially constructed into the land, improving their thermal efficiency while reducing environmental impact.

In conclusion, Dr. Binumol's session was an eyeopener, especially for students and professionals in the civil engineering and architectural fields. She urged the audience to reconsider modern building practices in light of the sustainable, topographybased methods used in Kerala's past. Her call to integrate traditional knowledge with modern engineering technologies struck a chord with the attendees, leaving them with valuable insights on how to approach future construction projects with greater environmental awareness and sustainability.

By focusing on the rich architectural heritage of Wayanad, Dr. Binumol's session offered a compelling reminder that sometimes the solutions to modern challenges can be found in the practices of the past.

Overall, the inauguration of the Civil Engineering Department for the academic year 2024-25 was a well-organized and inspiring event. It highlighted the department's commitment to academic excellence and professional development, setting



a positive tone for the year ahead. The involvement of industry bodies and the recognition of alumni accomplishments reinforced the strong connections between the academic community and the engineering profession, motivating students to strive for success in their studies and future careers.

AMETOS REPORT (14/08/24)

The AMETOS Civil Association and IGS Student Chapter of Marian Engineering College successfully organized two technical talks as part of their ongoing efforts to enhance the academic and professional growth of students. These talks, held on 14th august, were aimed at deepening participants' understanding of specialized civil engineering topics.

The first session, featuring Dr. Vishnu B R, took place at 9:30 AM. Hosted by Aishwarya Sunil, the event commenced with a prayer led by the Department Choir Team. Ann Marian then introduced Dr. Vishnu, highlighting his academic and professional achievements.



Dr. Vishnu's presentation, on the topic "Unlocking the Potential of B-tech Projects", provided



advanced insights into civil engineering, fostering a stimulating discussion among attendees. A Q&A session followed, facilitated by Arya J S, where participants engaged directly with Dr. Vishnu to clarify concepts. Feedback from Devika Praveena emphasized the relevance and value of the session, noting its positive impact on the academic and professional development of attendees. Anupam expressed gratitude to Dr. Vishnu and the organizers, and the event concluded with closing remarks from Aishwarya Sunil.

The second technical talk, held at 10:45 AM, featured Mr. Harishankar P and followed a similar structure. Hosted by Arya J S, the session began with a prayer before Madhavi Pradeep introduced Mr. Harishankar, outlining his professional expertise. Mr. Harishankar's talk on the topic "Skill Sets that Construction Industry needs", was designed to expand the participants' technical knowledge in civil engineering.



The interactive session included a Q&A facilitated by Devika L B, providing attendees the chance to delve deeper into the topic. Feedback from Advity Srivastava highlighted the session's key takeaways and emphasized the benefits gainedby the participants. Sarang extended a vote of thanks to Mr. Harishankar and the organizing team, with the event concluding under the guidance of Arya J S.



Both technical talks were well-organized, featuring structured segments for introductions, technical presentations, participant interaction, and reflective feedback. These events demonstrated the commitment of the AMETOS Civil Association IGS Student Chapter to fostering an and environment of continuous learning and professional development. Attendees left with a deeper understanding of civil engineering concepts and a sense of academic enrichment. The positive feedback received affirmed the success of the events in contributing to the participants' growth, and we look forward to organizing similar sessions in the future as part of our dedication to academic and professional excellence.

AMETOS REPORT (16/08/24)

The **AMETOS** Civil Engineering Association of Marian Engineering College, in collaboration with INTERCAD Systems Pvt Ltd, organized a session titled "Introduction to CAD and BIM" on 16th August 2024 at 3:00 PM. The event aimed at introducing S3 Civil Engineering students to two of the most essential technological tools used in the construction industry: Computer-Aided Design (CAD) and Building Information Modeling (BIM). These tools have revolutionized the way civil engineering projects are designed, executed, and managed.

The primary objective of the session was to provide students with a foundational understanding of CAD and BIM, focusing on their relevance and applications in civil engineering. The session aimed to highlight the importance of adopting these technologies in academic projects as well as in professional careers, preparing the students to meet the demands of the evolving construction industry.

The event commenced with an opening ceremony led by the student coordinator of the AMETOS Civil Engineering Association. The students were welcomed with an introduction to the significance of the event and its importance for their academic and professional development. A brief background on INTERCAD Systems Pvt Ltd, an industry leader in providing software solutions for CAD and BIM, was also provided.

The session was inaugurated by the Head of the Civil Engineering Department, who emphasized the need for modern civil engineers to be proficient in emerging technologies such as CAD and BIM. The Head highlighted the role of these tools in improving project precision, reducing errors, and ensuring better project outcomes. The session was divided into two key segments:

1. Introduction CAD to (Computer-Aided Design): The first part of the session focused on Computer-Aided Design (CAD), which is a crucial tool for creating precise engineering drawings and models. The speaker from INTERCAD Systems Pvt Ltd explained the basics of CAD, its applications in civil engineering, and it offers the advantages over traditional manual drafting techniques.

The students were provided with examples of how CAD is used in various stages of construction projects—from conceptual design to execution. They also learned how CAD can be integrated with other engineering tools to optimize design workflows.

2. Introduction to BIM (Building Information Modeling): The second part of the session introduced students to Building Information Modeling (BIM), a powerful tool that enhances collaboration and coordination between various stakeholders in a construction project. speakers from INTERCAD Systems Pvt Ltd conducted an interactive demonstration using industry- leading CAD and BIM software. The students were shown realtime applications of both tools, providing them with hands-on experience. The interactive demonstration included:

- A live walkthrough of a CAD project, where the students were able to see the process of creating detailed floor plans and structural diagrams.
- A BIM model showing the integration of various construction elements and real-time updates on design changes.

After the theory sessions, the

The demonstration highlighted how both CAD and BIM work together to provide a comprehensive solution for modern construction projects.

Q&A Session:

The session concluded with a highly engaging Q&A session, where students posed questions about the practical application of CAD and BIM in their coursework and future careers. The speakers addressed the challenges students may face when learning these tools and provided insights into the best resources for gaining proficiency.

Some of the questions included:

- How can students integrate CAD into their academic projects?
- What are the key differences between CAD and BIM in terms of real-world applications?
- What certifications or courses should students pursue to master these technologies?

The speakers also encouraged students to explore internships and workshops to gain further exposure to these technologies and provided information about certification programs available through INTERCAD Systems Pvt Ltd.

Feedback and Conclusion:

The students provided positive feedback, appreciating the practical insights and interactive nature of the session. They noted that the event gave them a clear understanding of the relevance of CAD and BIM in modern civil engineering practices.

The event concluded with a vote of thanks by the student coordinator, expressing gratitude to INTERCAD Systems Pvt Ltd for their valuable contribution and to the AMETOS Civil Engineering Association for organizing the event. The Head of the Department emphasized the importance of continued learning and encouraged students to actively explore these tools in their future projects.

The session left the students with a deeper understanding of the significance of CAD and BIM in shaping the future of the construction industry, and a strong motivation to enhance their skills in these areas

AMETOS REPORT [16/08/24] (2)

On 16th August 2024, the AMETOS Civil Engineering Association of Marian Engineering College organized an insightful session titled "Introduction to BIM" in collaboration with Career Tech, a leading training institute in the construction industry. The event was targeted at S5 Civil Engineering students, aiming to introduce them to Building Information Modeling (BIM), a transformative tool in the construction and design industry. The seminar sought to familiarize students with fundamental the concepts, practical applications, and career opportunities associated with BIM.

The primary goal of the session was to equip students with an understanding of BIM and its growing importance in the construction industry. The session aimed to between theoretical bridge the gap knowledge and practical applications, enabling students to recognize how BIM can be integrated into various stages of civil engineering projects. The focus was on building students' awareness of BIM's capabilities in improving efficiency, reducing project risks, and enhancing collaboration across all project phases.

The event began with a brief introduction by the student coordinator of the AMETOS Civil Engineering Association. The importance of adopting modern tools like BIM for both academic purposes and professional career growth was emphasized. A representative from Career Tech was introduced, providing background information about the company's expertise in civil engineering software and professional development programs.

The Head of the Civil Engineering Department formally inaugurated the session, underscoring the growing relevance of BIM in the global construction industry and encouraging students to embrace such innovative tools as a means to advance their careers. The event was structured into several parts, each focusing on different aspects of BIM:

1. Introduction **Building** to Information Modeling (BIM): The session with opened а comprehensive introduction to the concept of Building Information Modeling (BIM). The speaker from Career Tech explained that BIM is not just а software but а methodology that encompasses the entire lifecycle of a construction project, from design and planning to construction, operation, and maintenance.

2. BIM Software and Tools: Following the introduction, the speaker demonstrated popular BIM software platforms such as Autodesk Revit and Navisworks, which are widely used in the industry for managing construction projects.

Key software features highlighted included:

- **3D Modeling**: Students were shown how BIM software creates highly detailed 3D models, making it easier to visualize the design and construction of a project.
- Time (4D) and Cost (5D) Management: The session

covered how BIM extends beyond 3D modeling to include project scheduling (4D) and cost estimation (5D), thereby helping engineers track project timelines and budgets in real time.

• Clash Detection: An important feature of BIM, clash detection allows users to identify conflicts between different building components (e.g., structural elements and MEP systems), minimizing errors and reducing costly rework during construction.

The students were guided through a live demonstration of Autodesk Revit, where the

speaker created a model of a multi-story building, showing how different disciplines (e.g., architecture, structural, and MEP) can collaborate within a single BIM environment.

3. The Role of BIM in the Construction Industry: Next, the focus shifted to the role of BIM in the modern construction industry. The speaker illustrated how BIM is transforming the construction sector by:

- Improving project efficiency and coordination: BIM enables all stakeholders, including architects, engineers, contractors, and clients, to access the same model, making communication smoother and decision-making more informed.
- Reducing risks and errors: BIM's ability to simulate various project scenarios before actual construction begins helps identify potential issues, reducing errors and minimizing delays and cost overruns.
- Supporting sustainability goals: BIM is increasingly being used to model and simulate energy-efficient designs, enabling engineers to meet sustainability standards by optimizing material usage and reducing waste.

Career Opportunities in BIM:

An important aspect of the session was highlighting the growing demand for BIM professionals. The speaker from Career Tech provided an overview of the skills required to become proficient in BIM and the career paths available in the field. He emphasized that the construction industry is rapidly transitioning to BIM-based workflows, creating new opportunities for civil engineers with BIM expertise.

Key points covered included:

 Job Roles in BIM: Students learned about various BIM-related job roles, including BIM coordinators, BIM modelers, and BIM managers, each of which plays a critical role in managing project information and ensuring the smooth execution of construction projects.

Certifications and The Training: speaker provided information on certifications offered bv CareerTech and other organizations that can help students gain expertise in BIM and improve their employability. He encouraged students to enroll in BIM certification programs to enhance their skills and become industryready.

Interactive Demonstration and Case Studies:

Following the theoretical discussion. interactive an demonstration was conducted, showing the practical application of BIM in real-world projects. The speaker presented case studies of large-scale construction projects that successfully utilized BIM to improve project delivery and reduce costs.

Key highlights of the demonstration included:

- A detailed walkthrough of a BIM model for a commercial building, showing how data from various disciplines is integrated into a single cohesive model.
- Examples of how BIM can simulate project progress, enabling engineers to foresee construction challenges and mitigate them before actual work begins on-site.
- A demonstration of clash detection and how BIM helps resolve conflicts between structural and MEP elements, ensuring that the project runs smoothly without delays.

The case studies highlighted how BIM was instrumental in reducing project risks, improving collaboration, and ensuring timely completion.

Q&A Session:

The session concluded with an interactive Q&A session, where students posed questions about the application of BIM in their coursework, internships, and future careers. Some of the questions included:

- What are the advantages of mastering BIM early in one's career?
- How can BIM be applied to smallerscale projects typically done by students?
- What are the differences between Revit and other BIM software platforms?

The speaker provided practical guidance on how students could start incorporating BIM into their academic projects, even for smaller construction tasks. He also advised them to keep up with industry trends and technologies to stay competitive in the job market.

Feedback and Conclusion:

The students were highly appreciative of the session, providing positive feedback on both the theoretical insights and practical demonstration. They found the content to be highly relevant to their studies and future careers, particularly the emphasis on realworld applications and career opportunities in BIM.

The event concluded with a vote of thanks,

delivered by the student coordinator, expressing gratitude to Career Tech for their contribution and to the AMETOS Civil Engineering Association for organizing the event. The Head of the echoed the Department sentiment, emphasizing of the importance continuously upgrading skills to stay relevant in an evolving industry.

The session ended on a highly motivational note, with students expressing keen interest in pursuing further knowledge and certification in BIM. The success of the event was evident in the enthusiastic participation and the insightful discussions that followed.

AMETOS REPORT (03/10/2024)

The AMETOS Student Chapter of the Civil Department at Marian Engineering College successfully hosted a program titled "How to start entrepreneurship business in civil engineering" on October 3, 2024. The offline program aimed to equip students with valuable entrepreneurship skills. A total of 55 students and 5 faculty members participated in the event, which was conducted at no cost. The program focused on developing key skills such as entrepreneurship, innovation, and communication, empowering students with the knowledge and confidence to pursue their entrepreneurial aspirations in the field of civil engineering.



The program provided a valuable platform for students to explore the possibilities of entrepreneurship in the civil engineering sector. Through interactive sessions, presentations, and discussions, students gained insights into identifying business opportunities, developing business plans, and overcoming challenges in the entrepreneurial journey. The event fostered a collaborative environment where students could share ideas, learn from experienced professionals, and build a strong foundation for their future entrepreneurial endeavors.

AMETOS REPORT (17/10/2024)

On 17th October 2024, the Civil Engineering Department of Marian Engineering College organized an industrial visit to a Sustainable Slaughter House at Kunnukuzhy.

This visit was conducted under the initiative of Ametos civil engineering association and was in collaboration with their MoU partner Turtle Smart Solutions.

The visit aimed to introduce students to practical applications of civil engineering concepts, specifically related to sustainable design and environmental practices in industrial infrastructure.

A slaughterhouse was chosen for its relevance to waste management, energy efficiency, and sustainability in construction—key areas of study

for civil engineering students



KEY OBJECTIVES

Expose students to real-world engineering practices: The site visit provided a practical learning environment for students to witness how civil engineering principles are applied in developing sustainable facilities.

Promote sustainable engineering solutions: By focusing on a sustainable slaughterhouse, the visit emphasized the importance of incorporating eco-friendly practices in industrial designs.

Collaboration with industry partners: students gained insights from professionals engaged in the development of innovative solutions for sustainable infrastructure.

CONCLUSION :The industrial visit was an enriching experience for the students, enhancing their understanding of sustainability in industrial practices. The visit made students understand the practical side of integrating civil engineering with environmental concerns, which is essential for developing future-ready engineers.

AMETOS REPORT (24/01/2025)

Ametos student chapter, Department of Civil Engineering at Marian Engineering College conducted session titled "BIM Enable Construction Management" and is conducted in association with CORE Institute of Technology. BIM, or Building Information Modeling, is a modern and innovative approach in construction management that facilitates efficient project planning and execution. The event is part of the college's initiative to provide its students with exposure to advanced technologies in the field of civil engineering. Marian Engineering College, which is an NBA-accredited institution, emphasizes the integration of cutting-edge tools and methodologies into its curriculum.



Session by Core Institute of Technology on BIM enhanced Construction Management on 24.1.25 organjzed by the Civil Engg Association-Ametos

The session was scheduled for Friday, 24th January 2025, and took place in the S8 Classroom from 11:15 AM to 12:15 PM. The one-hour session provided valuable insights into the application of BIM in construction, a crucial skill set for future civil engineers.

AMETOS REPORT (28/01/25)

The Civil Engineering Department of Marian Engineering College hosted an engaging session on "Introduction to BIM by Intercad", organized by AMETOS. The event aims to provide insights into Building Information Modeling (BIM), a critical technology in modern civil engineering for project planning and management. Scheduled for 28th January 2025 (Tuesday), from 11:15 AM to 12:15 PM in the S6 classroom. Intercad, a reputed firm, spearheading this session to share its expertise and enrich students' understanding of BIM technology, ensuring their alignment with industry trends and standards.



The session reflects the institution's vision of being a globally recognized center for civil engineering education, fostering competent, research-oriented, and socially responsible professionals. It aligns with the mission to provide quality technical education, equip students with advanced skills, and inculcate strong ethical values for societal service. By incorporating practical knowledge like BIM, the department ensures students are well-prepared to tackle challenges in civil engineering and excel in their professional careers.

AMETOS REPORT (17/02/25)

The Civil Engineering Association, AMETOS, at Marian Engineering College is organized an industrial visit on Prefab Construction for S8 Civil Engineering students. The visit was scheduled for February 17, 2025, at 10:00 AM and tool place at the KINFRA Vide o Park -Woops Construction Site. This initiative aims to provide students with hands-on exposure to prefabricated construction techniques, which are increasingly being adopted in the construction industry for their efficiency, sustainability, and cost-effectiveness. The visit allowed students to observe and understand the various stages of prefabrication, including design, manufacturing, transportation, and assembly of precast components, thereby bridging the gap between theoretical knowledge and practical implementation.



The Civil Engineering association - AMETOS organized an Industrial visit to Prefab construction site of Wootz Structures Pvt Ltd on 17.2.25 for S8 CE students



Prefab construction is revolutionizing the way buildings are designed and built by significantly reducing construction time, minimizing material waste, and improving quality control. Through this visit, students will gain insights into modern construction methodologies, innovative materials, and structural efficiency, which are crucial for sustainable infrastructure development. This experience will help them understand industry

trends and career opportunities in the field of civil engineering. By interacting with industry experts and witnessing real-world applications of prefab construction, students will be better prepared for the challenges of their professional careers. Such initiatives align with Marian Engineering College's vision of equipping students with advanced skills and technical knowledge to excel in the evolving field of civil engineering.

AMETOS REPORT (25/02/25)

The Civil Engineering Association (AMETOS) of Marian Engineering College, in collaboration with its MoU partner CIVILIANZ, organized a seminar on "Public Sector Career Prospects for Civil Engineering Graduates & GATE Scholarship Exam for Civil Students." The session was led by Gokul Ramanan, Assistant Professor at CIVILIANZ, a renowned institute for civil engineering competitive exams. The seminar aims to provide insights into career opportunities in the public sector for civil engineers, the benefits of the GATE exam, and strategies to secure scholarships. The event was scheduled for February 25, 2025, at 11:15 AM, making it an essential session for students aspiring to build a successful career in government sectors or higher studies through GATE.

Marian Engineering College, a NBA-accredited institution under the Latin Archdiocese of Trivandrum, continues its commitment to shaping competent, research-oriented, and socially responsible professionals. The seminar addressed key aspects of civil engineering careers, guiding students on competitive exam preparation, job prospects in public sector undertakings (PSUs), and scholarship opportunities through GATE. Organized in association with CIVILIANZ, a leading training center for civil engineering exams like GATE, AE, and JE- Civil, this event will be a valuable platform for students to gain industry-relevant knowledge and career guidance.

AMETOS REPORT (04/03/2025)

The Department of Civil Engineering at Marian Engineering College organized a seminar titled "Permit Drawing and Execution of Plan at Site" on March 4, 2025, at 11:15 AM in the CE Seminar Hall. The event was conducted by Ms. Chithra R S, Managing Director of Linear Infrastructure Solutions & Testing (P) Ltd. The seminar aimed to provide valuable insights into the essential aspects of permit drawings and the efficient execution of construction plans on-site. With a focus on real-world applications, the session was designed to enhance students' understanding of the regulatory, technical, and managerial aspects of civil engineering projects.

The event was **organized by the Civil Engineering Association - AMETOS**, which plays a crucial role in fostering professional development among students. Through this seminar, participants gained a comprehensive understanding of how permit drawings are prepared, approved, and implemented in real construction scenarios. Ms. Chithra R S shared her expertise in infrastructure solutions, offering practical knowledge on site execution challenges and best practices. The seminar served as an excellent opportunity for aspiring civil engineers to bridge the gap between academic learning and industry requirements, equipping them with the necessary skills for future careers in the construction sector.