

IIBE STUDENT CHAPTER



ANNUAL NEWSLETTER

JNTUA COLLEGE OF ENGINEERING

DEPARTMENT OF CIVIL ENGINEERING
ANANTHAPURAMU, ANDHRA PRADESH

Vision

To foster a dynamic platform for aspiring bridge engineers by promoting academic excellence, innovation, and professional development. The Indian Institute of Bridge Engineers (IIBE) Student Chapter at the Department of Civil Engineering, JNTUA College of Engineering, envisions empowering students with cutting-edge knowledge, hands-on experience, and leadership skills to address real-world challenges in bridge design, construction, and maintenance, while contributing to sustainable infrastructure development for the nation.

Mission

To bridge the gap between academic learning and real-world bridge engineering practice by providing JNTUA College of Engineering students with opportunities for professional development, networking with industry experts, and hands-on experience in bridge design, construction, and maintenance, in affiliation with the Indian Institute of Bridge Engineers.

List of Programs Organized/Attended - 2024

S.No	Title of Workshop	Expert	Designation & Organization	Date(s)
1	Modern Day Bridges & Metro Structures	Er Vinay Gupta	President Indian Institution of Bridge Engineers	15.09.2023
		Er R K Jai Gopal	Chairman IIBE, Karnataka Centre.	
		Er Arvind Salecha	Hon' Secretary, IIBE Karnataka Centre.	
2	IIBE Student Chapter Inauguration	Inaugurated by Prof G Ranga Janardhan, Hon'ble Vice Chancellor, JNTUA		29.12.2023
3	A Technical Talk on Planning of MRT Systems, A Study - Bangalore	Sri N P Sharma	Chief Engineer (Rtd.), BMRCL	29.12.2023
4	One day Workshop on Classic Case Studies of Rehabilitation of Bridges at Bengaluru	IIBE Centre Bengaluru		21.03.2024
5	Webinar on Corrosion of Steel Reinforcement in Concrete Bridges, Fundamentals to Monitoring Methods	Dr U Raghu Babu	Asst. Professor, SRIT Ananthapuramu.	04.04.2024

List of Programs Organized/Attended - 2024

S.No	Title of Workshop	Expert	Designation & Organization	Date(s)
6	BIM Workshop	Dr N Sunil	Asst. Professor, Department of Civil Engineering, GITAM Vishakapatnam	02.05.2024
7	Design and Construction of Tunnels	Prof K S Rao	Emeritus Professor, IIT Delhi	03.08.2024 & 04.08.2024
8	Five Day Workshop on Introduction to Bridge Design Software - MIDAS Civil		NIT Hamirpur	19.08.2024 to 23.08.2024
9	Analysis and Design of Tunnels	Prof K S Rao	KSR Geotechnical Testing and Research Solutions Pvt. Ltd., Sonipat, Haryana	26.08.2024 to 31.08.2024
10	Modelling of Bridges using MIDAS Civil	Mr Mohammad Hashmath	Technical Commercial Engineer, MIDAS IT, Chennai	04.10.2024
		Kamal Nayan Munigonda	Structural Engineer, Technical Support. MIDAS IT. Chennai.	

List of Programs Organized/Attended - 2024

S.No	Title of Workshop	Expert	Designation & Organization	Date(s)
11	Design of Steel Composite Bridges	Sri B Jithendra	Senior Engineer, ARCADIS, Hyderabad.	19.10.2024
12	Hands-on Training Workshop on Modelling of Tunnels using Midas GTS NX	Mr Mohammad Hashmath	Technical Commercial Engineer, MIDAS IT, Chennai	29.10.2024
		Mr Rohit Swaminathan	Structural Engineer, Technical Support, MIDAS IT, Chennai.	



INAUGURATION OF IIBE STUDENT CHAPTER

We are delighted to announce the grand inauguration of the IIBE Student Chapter, which took place on **December 29, 2023**. This landmark event marks the dawn of a new era, providing students with unparalleled opportunities to engage, learn, and thrive in the field of civil engineering. Together, we are set to build a dynamic platform for innovation, knowledge sharing, and professional growth.

Technical Talk on Planning MRT Systems



Technical talk on "Planning MRT Systems" The session illuminated crucial strategies and challenges in the planning and execution of Mass Rapid Transit systems. Through detailed discussions and expert insights, the presentation captivated attendees, inspiring them to further explore and engage with this vital and innovative field of civil engineering.

One Day Workshop on Classic Case Studies of Rehabilitation of Bridges at Bengaluru



We attended a specialized workshop dedicated to the rehabilitation of bridges, offering participants invaluable practical knowledge and innovative methodologies. This comprehensive session provided hands-on techniques to enhance the durability and functionality of aging bridge structures, equipping attendees with the essential skills to address real-world challenges in civil engineering.

Webinar on Corrosion of Steel Reinforcement in Concrete Bridges, Fundamentals to Monitoring Methods



This webinar offered a comprehensive exploration of corrosion mechanisms, delving into their effects on concrete bridges. Attendees gained valuable insights into the latest monitoring techniques designed to ensure structural integrity. The session equipped participants with the essential knowledge to identify, assess, and mitigate corrosion-related issues, ultimately enhancing the longevity and safety of bridge structures.

BIM Workshop



We hosted an extensive workshop on Building Information Modelling (BIM), introducing participants to the latest advancements in digital construction and design. The session highlighted BIM's transformative applications in civil engineering projects, offering participants a thorough understanding of its capabilities. This hands-on workshop emphasized practical techniques, equipping attendees with the skills to integrate BIM into their projects, thereby enhancing efficiency, accuracy, and collaboration in the construction industry.

Design and Construction of Tunnels



Esteemed Prof. K. S. Rao shared his extensive expertise in tunnel design and construction. Participants were treated to an in-depth exploration of modern tunnelling techniques and best practices, gaining valuable insights and practical knowledge from a leading authority in the field. This enriching experience equipped attendees with the skills and understanding necessary to excel in contemporary tunnelling projects.

Five-Days Workshop on Introduction of Bridge Design Software at NIT Hamirpur



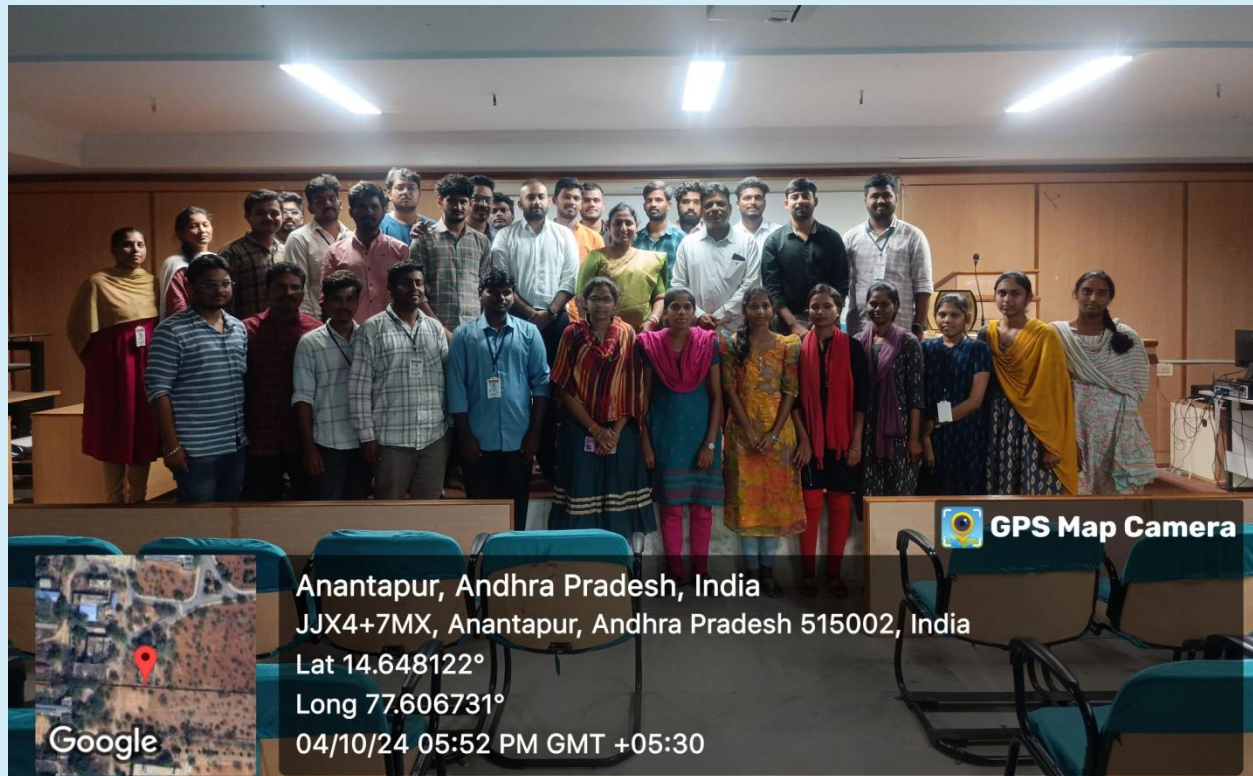
This workshop offered an immersive introduction to MIDAS Civil, empowering participants to master its application in bridge design and analysis. Key topics included load modelling, structural analysis, and optimization techniques, supported by interactive sessions and real-world project simulations. Industry experts provided insights into best practices, troubleshooting, and customization, ensuring a comprehensive learning experience. By the end, attendees were equipped with practical skills to drive innovative, efficient bridge designs, making the program an essential steppingstone for students and professionals in civil engineering.

Analysis and Design of Tunnels at KSR Geotechnical Testing and Research Solutions Pvt Ltd



This six-day workshop offered comprehensive training on the analysis and design of tunnels, emphasizing advanced geotechnical principles and modern engineering techniques. Participants engaged in hands-on sessions and explored real-world case studies, gaining practical insights to address tunneling challenges effectively. The program provided valuable skills and knowledge for professionals in structural and geotechnical engineering.

Modelling of Bridges using MIDAS Civil



This focused workshop equipped participants with essential skills for developing accurate and efficient bridge models for structural analysis. Through practical sessions and expert guidance, attendees learned advanced modeling techniques and best practices. The program offered valuable insights to enhance precision and efficiency in bridge design projects.

Design of Steel Composite Bridges



This intensive workshop provided participants with hands-on experience in using MIDAS Civil, a leading bridge design and analysis software. The program covered essential topics such as load modeling, structural analysis, and design optimization, supplemented by real-world case studies. Practical sessions and expert-led discussions equipped attendees with advanced skills to apply the software effectively. By the end of the workshop, participants were well-prepared to utilize MIDAS Civil for innovative and efficient bridge design solutions, making it invaluable for both students and professionals.

List of Programs Organized/Attended - 2025

S.No	Title of Workshop	Chief Guest / Expert	Designation & Organization	Date(s)
1	1st IIBE Student Chapter Annual Meet	Prof H Sudarsana Rao	Hon'ble Vice Chancellor (i/c), JNTUA	05.12.2024
2	A Lecture on Introduction to Bridge Engineering	Sri M Shyam Sundar	AICTE Doctoral Fellow, JNTUA CEA	13.12.2024
3	Design and Evaluation of Transportation Infrastructure Facilities – Challenges and Opportunities	Dr M Amarnath Reddy	Professor in Civil Engineering, IIT Kharagpur	18.12.2024.
4	One Day Workshop on Bridge Foundation Designs by Limit State Part - 2, IRC - 78 - 2020, Quality Control of Bridge Foundations and Introduction of UHPFRC Long Span Girders.	Organized by Indian National Group International Association of Bridge and Structural Engineering, Karnataka Centre, Bengaluru.		09.01.2025
		Venue NGO Hall, Cubbon Park, Bengaluru - 01		

List of Programs Organized/Attended - 2025

S.No	Title of Workshop	Chief Guest / Expert	Designation & Organization	Date(s)
5	Internship Experiences – A Talk Series – Tunnelling: Methods, Design Principles and Application	Mr G Vishnuvardhan Reddy	II M.Tech SEBT Intern PIU – Shimla NHAI	25.01.2025

1st IIBE Student Chapter Annual Meet



The inaugural Student Chapter Annual Meet was a celebration of a year filled with learning, collaboration, and innovation. The event highlighted key activities, achievements, and the collective progress made by our members. It provided a platform to recognize exceptional contributions and shared future plans, fostering a deeper sense of community. The meet also served as an inspiration for continued engagement in shaping the future of civil engineering excellence. We look forward to even greater accomplishments in the year to come.

Introduction to Bridge Engineering



Bridge engineering involves the design, construction, and maintenance of bridges to ensure safe and efficient transportation. Engineers assess factors such as load, materials, and environmental conditions when planning a bridge. Various types of bridges—beam, arch, and suspension—are chosen based on site and function. The field combines structural principles with aesthetic considerations. Ultimately, bridge engineering supports infrastructure development and enhances connectivity.

Design and Evaluation of Transportation Infrastructure Facilities – Challenges & Opportunities



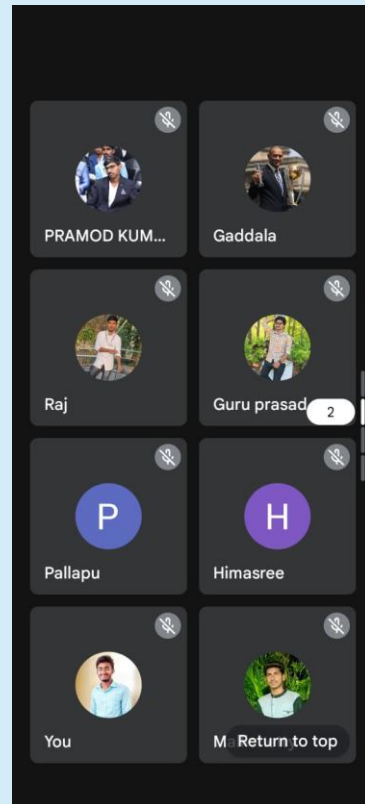
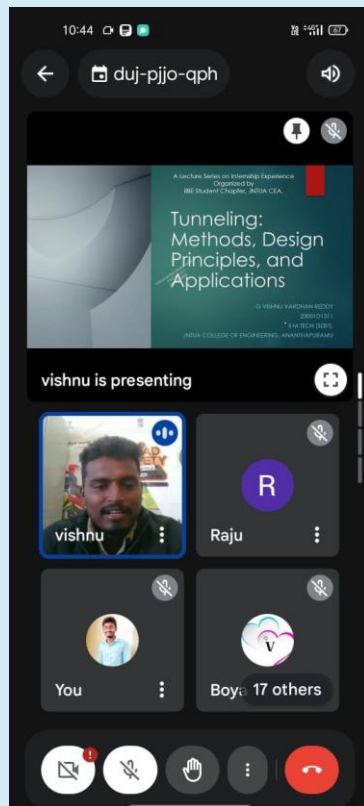
Designing transportation infrastructure faces challenges like traffic congestion, environmental concerns, and fluctuating demand. Engineers must balance cost, sustainability, and durability while adapting to technological advancements. Opportunities include smart technologies, sustainable practices, and innovations in materials and design. These solutions can transform infrastructure to meet future urbanization needs.

One Day Workshop on Bridge foundation Designs by Limit State Part-2, IRC-78-2020, Quality Control of Bridge Foundations and Introduction of UHPFRC Long-Span Girders at Bengaluru



The workshop provided practical insights into bridge engineering, covering IRC-78-2020 design standards, quality control for durability, and Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) applications. Students engaged with experts, examined case studies, and explored real-world challenges, bridging the gap between theory and practice.

Internship Experiences – A Talk Series – Tunnelling: Methods, Design Principles and Application



Internship Experiences – A Talk Series:
Tunnelling focused on tunneling methods, design principles, and applications. Experts shared insights on excavation techniques, support systems, and real-world challenges. The session helped students understand modern tunneling practices, geotechnical considerations, and industry advancements, bridging academic knowledge with practical engineering experience.