



CIVIL ENGINEERING ASSOCIATION FEST - 2024

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ABOUT US

- **The Civil Engineering Association (CEA) was formed with the primary aim of exposing potential civil engineers to the challenges of the profession.**
- **With both students and faculty as its members, the organization is one of the most active Civil Engineering Associations in India.**
- **CEA organizes activities like lectures by distinguished practitioners of the profession, video shows, competitions and socially relevant projects for the students throughout the year.**
- **The CEA activities of a year culminate in the CEA Fest. Civil Engineering Association Fest of IIT Madras is the largest student run civil engineering fest in India .**



THEME OF CEA FEST 2K24

 March 29th - 31st

PUNARNAVAN

- "Punarnavan" signifies breathing new life into C&D Waste by transforming it through eco-friendly processes within the construction industry.
- It represents an opportunity to give , revitalizing them into valuable resources through recycling and upcycling techniques.



CIVIL ENGINEERING ASSOCIATION

WORKSHOPS

22nd January 

4:00 - 5:00PM 

- ETABS Workshop
- SAP2000 Workshop
- Building Infrastructure
- Modelling (BIM) Workshop



CIVIL ENGINEERING ASSOCIATION

OUR EVENTS

 23rd January

 4:00 - 5:00PM

- FoldStruct
- BuildScape
- Tera Quake
- Concrete Challenge
- Route X
- AquaBytes
- Hydro Innothon
- Civil Consultant
- Aquanomics
- Bon Auto Routier
- Potential Professor
- Civil Discourse
- Sustainable Campuses
- Researcher's Conclave
- Jar Test
- Ideathon



TECHNICAL EVENTS



FOLDSTRUCT

"Test, fail, and try again - that's how innovations rise", FoldStruct is an engineering challenge like no other. Drawing from the ancient art of origami, teams will design and construct structures using only paper and their creativity. This exciting competition puts your ingenuity to the test. You'll be tasked with meeting specific architectural criteria that emphasize fundamental principles. Let your imaginative solutions shine at this engineering challenge. Exercise your ingenuity, form your team, and start folding!

BUILDSCAPE

Are you fascinated by the intricate webs of support that hold up megastructures like stadiums and airports? Have you ever wondered how seemingly slender beams can withstand immense loads? If so, Build Scape is your calling! This electrifying event invites you to step into the shoes of a structural engineer and master the art of designing truss construction that reinvents modern design. "Reimagine, Redesign and Reconstruct"





TERA QUAKE

Tera Quake is a flagship event of the Geotechnical department of Civil Engineering, which is designed to showcase the application of geotechnical engineering principles to solve real-world problems. The event is a platform for students to showcase their creativity, innovative thinking, and problem-solving skills in the field of geotechnical engineering. One of the key tasks of the event is to construct an embankment using recycled materials.

JAR TEST

Alchemists wanted! Innovate sustainable water purification in our Jar test battle. You're the wizard, concocting all-natural coagulants from plants that remove contaminants without harming the planet. Ditch traditional chemicals and get creative with eco-options - leafy, fruity, flowery formulas. Experiment with different blends and doses to optimize your purification magic. Make it strong enough to kick contaminant butt using the least chemicals. If your green potion purifies efficiently while respecting Mother Nature, you'll pioneer the future of water treatment. Take the challenge. Craft cheeky chemistry and build a sustainable water legacy



PRODUCT DEV

20th-23rd Jan



HYDRO INNOTHON

Hydro Innothon is a dynamic ideathon focusing on the critical intersection of saltwater intrusion, food security, and water security in the context of climate change.

Participants, either individually or in teams of up to three, will devise innovative solutions or problem statements within water resource engineering.

Through presentations, they will propose actionable measures to mitigate these challenges, with judging based on the relevance and suitability of solutions.

This event serves as a catalyst for collaborative problemsolving, aiming to address pressing issues impacting coastal ecosystems and agricultural landscapes

ANALYTICAL COMPETITIONS

 20th-23rd Jan



AQUA BYTES

Aquabytes, an analytics competition focuses on developing a hydrological modeling framework to inform reservoir operations and flood mitigation strategies.

Competitors will acquire and integrate diverse open geospatial datasets, develop and calibrate basin-scale hydrologic models, and evaluate various scenarios for reservoir management during flood events.

CONSULTING

20th-23rd Jan



CIVIL CONSULTANT

- Ready to test your engineering skills and explore the exciting world of civil consulting? This immersive event throws you right into the thick of things, simulating the journey a civil consultant takes on a real project.
- You'll gain valuable insights into the industry, tackle a hands-on challenge, and develop problem-solving skills like a seasoned pro.
- Get ready to roll up your sleeves! Collaborate in teams to tackle a realistic case study simulating a typical civil engineering project.
- You'll navigate through various tasks, mirroring the steps actual consultants encounter in "Project Initiation, Data Gathering & Analysis, Design & Development, Communication & Reporting".

PRIZE ₹1,000

*with merit certificate



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CASE STUDY

 20th-23rd Jan



BON AUTO ROUTIER

Assemble your quickest thinkers and road warriors across business, engineering, and computer science.

Bon Auto Routier is a case study competition, focused on the exciting and rapidly evolving field of Intelligent transportation systems and autonomous vehicles, with a particular emphasis on increasing optimization and efficiency.

Map out improvements to fleet management, safety, routing efficiency, sustainability, and more.

Floor it on crafting an integrated technology strategy that streamlines operations, and reduces costs.

PRIZE ₹1,000

* with merit certificate



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PRESENTATION

26th January 

4:00 - 5:00PM 



POTENTIAL PROFESSOR

- Step up to the lectern and reveal your inner teaching star at our Potential Professor event! This is your time to shine by delivering a knockout mini-lecture on fundamental concepts of civil engineering, wowing the crowd with your smarts and public speaking prowess
- Potential Professor offers a podium for grad students and postdocs alike to test academic aspirations. Receive sage feedback from judges on how to amp up your professorial skillset.

RESEARCHER'S CONCLAVE

Do you dream of captivating audiences with the significance of your work? Then the Researchers Conclave is your stage! This is your chance to participate in a research communication competition, where you'll be challenged to distill the essence of your project and leave everyone spellbound within a mere three minutes. No props, no jargon, just pure communication magic



HACKATHON

 20th-23rd Jan



ROUTE X

Buckle up for Route X - an overnight hackathon fueled by innovation! This high-octane event challenges gearheads and code junkies to optimize automated vehicles using leading opensource simulation software.

Participants will pilot a digital fleet around a complex maze, racing against the clock to plot the sickest routes and dankest algorithms to expertly navigate the urban maze.

We're revving up our engines to see ingenious solutions that balance speed and safety. Who can code a machine with eagle-eye navigation to rule the streets? Get ready to shift your skills into high gear at Route X



DEBATE

20th-23rd Jan



CIVIL DISCLOSURE

Civil Discourse, a high-octane debate event that will challenge your perspectives and ignite your passion for sustainable construction practices.

Brace yourselves for a clash of ideas as you engage in heated discussions on the complex and multifaceted issue of reusable construction waste

PRIZE ₹1,000

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MANAGEMENT

📅 20th-23rd Jan



AQUANOMICS

Embrace data-driven insights and master the intricacies of dam break analysis with Aquanomics.

This exclusive Consulting and Management event empowers you to navigate the challenges and opportunities of dam safety assessments.

With environmental shifts raising the likelihood of disasters, informed preparedness is key. Showcase your exemplary skills in data management and dam break software to predict the future of our dams.



SURVEY

20th-23rd Jan



SUSTAINABLE CAMPUSES

The Sustainable Campuses event spotlights ecoinnovation. his one-of-a-kind initiative invites colleges to flaunt their most functional, out-of-the-box sustainability hacks on campus.

Be it zapping energy wastage or recycling wastewater, each entry gears to upgrade colleges into lean, green, thriving machines! It's time to give your campus an eco-friendly facelift!

CEA's Sustainable Campuses event nudges you to creatively transform campuses into models of conservation.

Craft path-breaking sustainable strategies that inspire others to follow suit!

PRIZE ₹1,000

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CONTACT US

CIVIL ENGINEERING ASSOCIATION

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