

PLACEMENT BROCHURE 2023-24



CIVIL AND ENVIRONMENTAL ENGINEERING



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ABOUT US

The Department of Civil and Environmental Engineering (DCEE) at IIT Patna was established in 2013 with a vision to offer comprehensive programs in civil engineering. We provide both a four-year undergraduate and a two-year postgraduate program, leading to Bachelor's and Master's degrees in Civil Engineering, respectively.

DCEE comprises five distinct disciplines: Structural Engineering, Geotechnical Engineering, Transportation Engineering, Water Resources Engineering, and Environmental Engineering. By adopting an integrated approach, we aim to create a multidisciplinary and application-oriented curriculum. This approach nurtures the creative and analytical abilities of our students, enabling them to effectively tackle real-life challenges.

At DCEE, we prioritize the development of a knowledge-based approach through high-quality academic programs. We continuously update our curriculum to keep pace with the latest advancements in engineering education. Our department is equipped with state-of-the-art research laboratories that facilitate research and experimentation, enabling students to delve into innovative projects.

We are committed to providing holistic and enriching industrial and research training opportunities to our students, preparing them for successful careers in the civil engineering field. To achieve this, we actively collaborate with industries and research organizations. Our students gain practical exposure and hands-on experience, enhancing their professional skills.

DCEE boasts a portfolio of ongoing and approved projects, as well as consultancy works. We consistently invest in setting up and upgrading experimental and computational facilities to support cutting-edge research and innovation.

In summary, the Department of Civil and Environmental Engineering at IIT Patna is dedicated to offering high-quality education, fostering multidisciplinary learning, and equipping students with the skills needed to excel in their professional lives. We strive to be at the forefront of engineering education and research, contributing to the advancement of the civil engineering field.



MESSAGE FROM HOD

Dr. Vaibhav Singhal

The Department of Civil and Environmental Engineering at IIT Patna has continuously evolved and upgraded itself since its establishment in 2013, excelling in academics, research, and cutting-edge laboratories. We take pride in attracting talented and dynamic faculty members, as well as the best students for our Bachelor's, Master's, and Doctoral programs.

From the beginning, our focus has been on imparting quality education with a strong emphasis on technical advancements and research. Our students benefit from well-structured academic programs complemented by a vibrant campus life filled with sports, cultural activities, and organizational events at IIT Patna's beautiful and green Bihta campus.

Our curriculum is thoughtfully designed to address the needs of the present and prepare students for future challenges. Alongside core courses, we offer a range of elective courses, allowing students to explore interdisciplinary fields such as humanities, social sciences, and management. We prioritize project-based learning, encouraging students to undertake projects and dissertations that tackle industrial and societal needs.

The department is equipped with state-of-the-art experimental and computational facilities, fostering hands-on learning and research. We actively promote interaction between the institute and industries, providing students with immersive industrial and research internships that enhance their skills and prepare them for the competitive professional world. We believe in nurturing our students' innate qualities and preparing them for leadership roles in their careers.

Our goal is to continually strive for excellence in teaching and research that aligns with industry requirements and contributes to nation-building. Many renowned national and multinational companies, as well as esteemed public sector undertakings, regularly visit our institute for campus recruitment. The Training and Placement Cell (TPC) ensures a cordial relationship with recruiters and extends all possible hospitality to them. I warmly welcome both recruiters and our graduating students to come together on a common platform and mutually benefit from each other's strengths.

I have complete confidence that our department's students will prove themselves to be highly competent in meeting the challenges of the modern technological world and society. I extend my best wishes to them for a successful future.

FACULTY



Structural

- *Dr. Vaibhav Singhal*
- *Dr. Avik Samanta*
- *Dr. Koushik Roy*
- *Dr. Sourav Gur*



Water Resources

- *Dr. Om Prakash*
- *Dr. Vishal Deshpande*



Environmental

- *Dr. Subrata Hait*



Geotechnical

- *Dr. Pradipta Chakraborty*
- *Dr. Amarnath Hegde*
- *Dr. Ramakrishna Bag*
- *Dr. Arvind Kumar Jha*



Transportational

- *Dr. Syed K.K. Hussaini*
- *Dr. Sudhir Varma*
- *Dr. Bachu Anilkumar*

COURSE OFFERED

CORE COURSES

- Geomatics Engineering
- Fluid Mechanics
- Structural Engineering
- Structural Analysis and Mechanics
- Infrastructure Drawing and Estimation
- Civil Engineering Materials
- Foundation Engineering
- Numerical Methods in Civil Engineering
- Water Resources Engineering
- Transportation Engineering
- Design of Reinforced Concrete Structures
- Design of Steel Structures
- Construction Planning and Management

ELECTIVES

- Programming: Data Science, Python, and Algorithm
- Microeconomics, Macroeconomics, and Finance
- Industrial and Organizational Psychology
- Forensic Linguistics
- Sociology and Globalization
- Optics and Vacuum

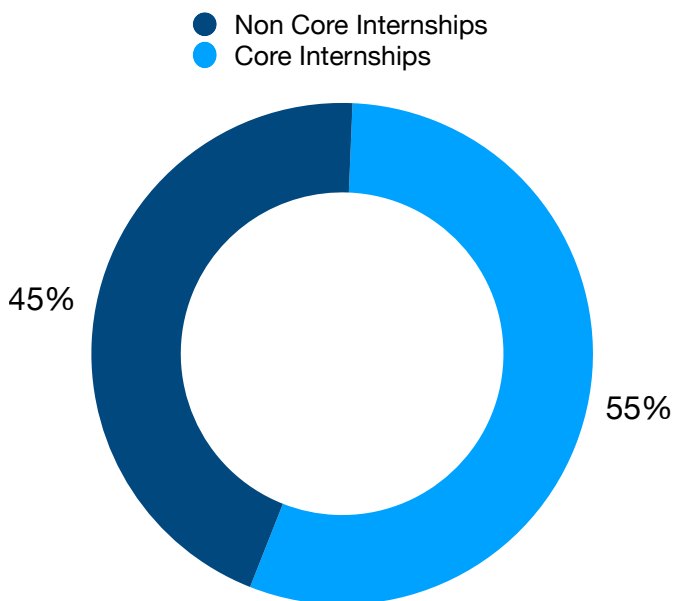
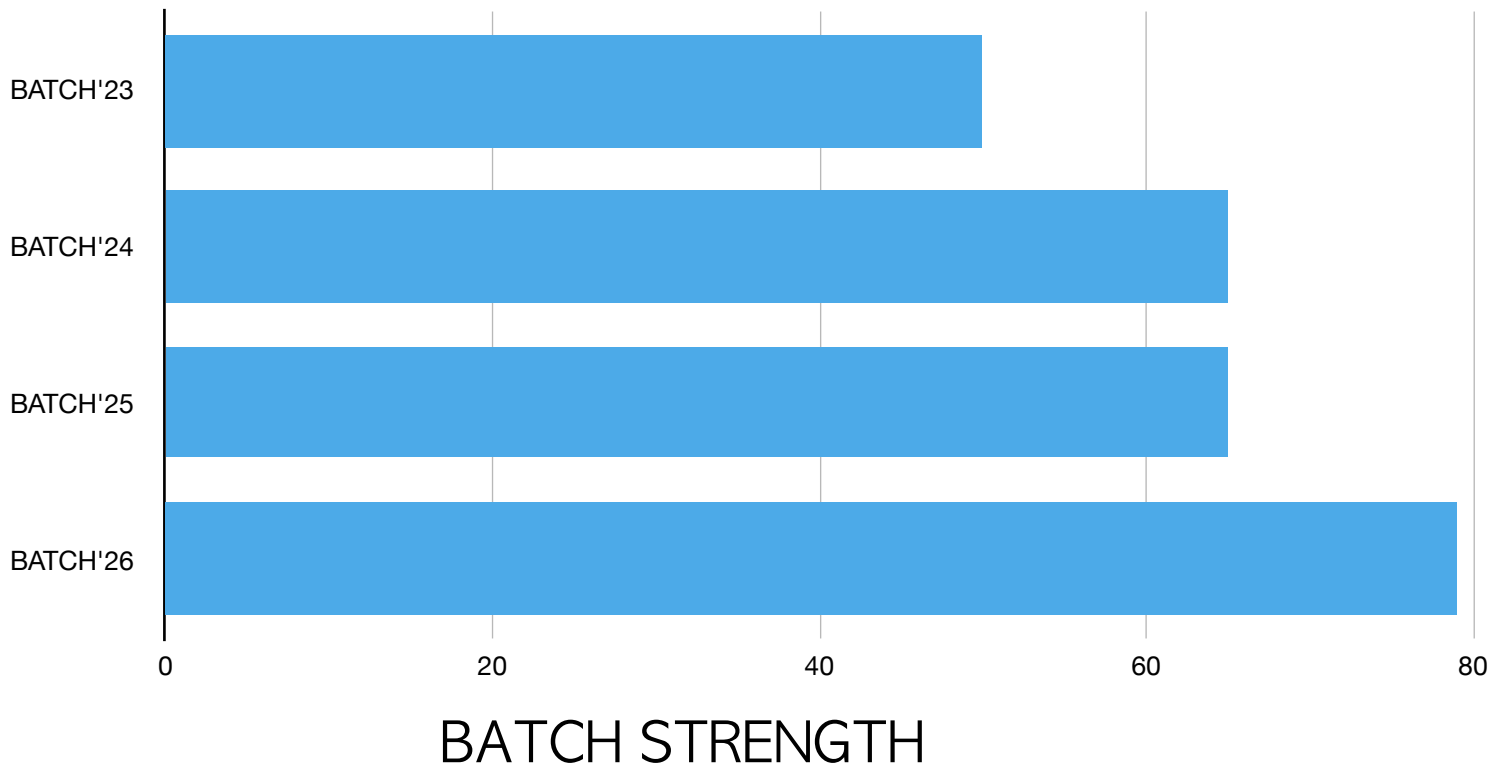
LABS

- *Structural Engineering and Concrete Technology Lab*
- *Geotechnical Engineering Lab*
- *Surveying Lab*
- *Soil Dynamics Lab*
- *Environmental Engineering Lab*
- *Water Resource Engineering Lab*
- *Transportation Engineering Lab*
- *Railway Engineering Lab*
- *Computer-Aided-Design Lab*

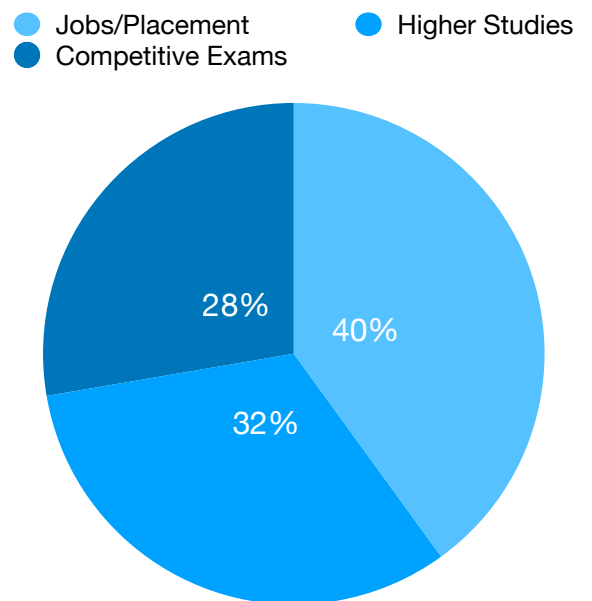
SOFTWARE RESOURCES

- STAAD Pro and STAAD Foundation
- ABAQUS
- AutoCAD
- MATLAB
- SAP2000
- GeoStudio
- LISCAD
- PLAXIS 3D
- FLAC 3D

DEMOGRAPHICS



INTERNSHIP DISTRIBUTION



BATCH DEMOGRAPHICS

ACHIEVEMENTS

CORE

- Inter IIT Civil Conclave 2020 (Batch 2022):
 - Participants: Five UG students
 - Position: 1st position in 2 events
- Inter IIT Civil Conclave 2021 (Batch 2022):
 - Participants: Nine UG students
 - Position: 1st position in 3 events, 2nd position in 1 event
- Research Work Presentation:
 - Participant: One PG student
 - Position: 2nd position
- GATE 2021 (Batch 2022):
 - Participant: Shashank Kumar (UG Batch 2022)
 - All India Rank (AIR): 249
- GATE 2021 Qualifiers (Batch 2022):
 - Participants: Six UG students (Batch 2022)
 - Qualified in their third year
- GATE 2022 Qualifiers (Batch 2023):
 - Participants: Seven UG students (Batch 2023)
 - Qualified in their third year
- Internships in Core Companies (Batch 2023):
 - Participants: Twenty-two UG students (Batch 2023)
 - Number of students who got internships in core companies: 22

NON CORE

- Certified Hyperledger Fabric Administrator:
 - Participant: Pritam Kumar Singh (UG Batch 2022)
- Startup - 'Boox Woor':
 - Founder: Maurya Bhatt (UG Batch 2022)
 - Description: A startup creating a strong local network for book communities, providing access to books, libraries, digital resources, etc.
- Startup - 'Preetam Services':
 - Founder: Preetam Abhinay Kamaji (UG Batch 2022)
 - Description: Currently providing freight vehicle services in few districts of Maharashtra.
- Internships in Non-Core Companies (Batch 2023):
 - Participants: Nine UG students (Batch 2023)
 - Number of students who got internships in non-core companies: 9
- Gold in a Team Event - Inter IIT Tech Meet 2022:
 - Participants: Two UG students
 - Event: Team event organized in Inter IIT Tech Meet 2022
 - Position: Gold medalists

RESEARCH WORK

1. Seismic performance of structures | Fluid-structure interaction | Structural health monitoring.
2. Ground improvement | Radioactive waste disposal | Geotechnical earthquake engineering | Geo-energy.
3. Pavement characterisation | Traffic Engineering | Performance of railway ballast using geo synthetic.
4. Groundwater Pollution Sources Identification | Sedimentation analysis.
5. Waste treatment and resource recovery | Biological production of nano-silica from agro-industrial waste | management and recycle of e-waste.



SPONSORED RESEARCH PROJECTS

- ❖ Seismic Response, Damage, and Vulnerability of Structures in Patna for Future Earthquakes:
 - Funding Agency: SERB, DST, GoI
- ❖ Development of Structural Health Monitoring Technique for Existing Bridge in Bihar: A Pilot Study:
 - Funding Agency: Road Construction Department, Bihar
- ❖ Evaluate the Fate and Transport and Implication of Engineered Nanoparticle Retention in Porous Media:
 - Funding Agency: DST, GoI
- ❖ Arsenic Immobilization by In-situ Synthesis of Iron-based Adsorbent under Reducing Environment within Porous Media:
 - Funding Agency: DST-WTI (Water Technology Initiative)
- ❖ Varied Profiling of Bio-macromolecules for Energy and Byproduct Assessment Employing Electrochemical Tools:
 - Funding Agency: SERB, DST
- ❖ Development of Ganga Grams under Namami Gange Programme with Support of Technical Institutions:
 - Funding Agencies: MHRD, National (NMCG), Ministry of Water
- ❖ Development of Gravity-based Household Filter for Simultaneous Removal of Arsenic and Iron Contamination of Groundwater in Patna District, Bihar, India:
 - Funding Agency: Shastri Indo-Canadian Institute
- ❖ Occurrence, Fate and Removal of Emerging Contaminants in Surface Water:
 - Funding Agency: Shastri Indo-Canadian Institute
- ❖ Microzonation of Jaipur City Based on Shear Wave Velocity:
 - Funding Agency: DST, GoI

Please note that the abbreviations used in the funding agencies are as follows:

- SERB: Science and Engineering Research Board
- DST: Department of Science and Technology
- GoI: Government of India
- WTI: Water Technology Initiative

OUR ESTEEMED ALUMNI



Pranav Suresh (2015-19),
Associate at Exponent, California



Rahul Jain (2015-19),
M.S., Purdue University



Abhinav Gyan (2016-20),
IIM Bangalore



Abhishek Mishra,
(2014-18), secured AIR 2 in
GATE 202



Amolika Sinha (2013-17),
PhD, UNSW, Australia

ACE (ASSOCIATION OF CIVIL ENGINEERS)

The Association of Civil Engineers is a student club established by DCEE to proliferate knowledge & provide industrial exposure by bringing corporates, professors, and students on a common platform. The various activities organized by ACE include technical seminars, research practices, site visits, Open-House Sessions, competitions, and quizzes. The students are also encouraged to participate in various fests to enhance their technical skills. ACE conducts regular discussions and brainstorming sessions for the DCEE students to bring awareness about civil and environmental-related works and new ideas related to this field.



SAMNIVESHA

Samnivesha is the two day civil technical fest of DCEE, IIT P, organised by ACE. Starting in 2019 our vision was to reach out to interested students and provide a glimpse of beauty Civil engineering has to offer. With its maiden edition fetching 300+ participations, second edition with 500+ participations, and the third one being the latest and online edition witnessed 600+ registrations. Events organised in Samnivesha so far were spectacular and saw a great enthusiasm among the participants along with their engagements in workshops and guest lectures. Some of the highlighting events were CiviQ, Crack the Clue, Engineers conclave, and CADdesign. The extravaganza truly justifies the word "Fest", and is definitely worth experiencing.



MESSAGE FROM ACE PIC



Dr. Bachu Anilkumar

I cordially invite you to participate in the Placements 2022-23 of the Department of Civil and Environmental Engineering (DCEE) at IIT Patna. We are seeking placements for the B.Tech (Civil and Environmental Engineering) batch of 2019-23 and M.Tech. (Civil Engineering) batch of 2021-23.

Established in 2013, the Department of Civil and Environmental Engineering offers a comprehensive range of courses and activities encompassing the planning, design, construction, and management of engineering projects. Our academic programs, including B.Tech., M.Tech., and Ph.D., are highly regarded across the country.

At DCEE, we strive to provide an academic and research environment that nurtures and prepares civil engineering professionals to tackle the challenges associated with a multidisciplinary field. Our students possess skills and traits that are meticulously developed during their tenure at the department. In addition to academic excellence, we encourage our students to engage in co-curricular activities, which are managed by the students themselves with the support of our dedicated faculty members.

Our students actively participate in various competitions and activities, showcasing their talents beyond academics. Through a holistic approach, our graduates and postgraduates have consistently been selected by leading national and multinational corporations, as well as renowned research and academic institutes, since the inception of our department. They have brought immense pride to our institution.

I am thrilled to introduce the current batch of B.Tech. and M.Tech. students from DCEE. They are intellectually sharp and academically proficient. I have full confidence that the students selected from our department will meet and exceed the expectations of employers, delivering excellent performance and satisfaction.

We look forward to your esteemed presence and active participation in the placement process. For further details and to schedule campus visits or virtual recruitment sessions, please feel free to contact us. Thank you for considering our talented students for placement opportunities.

OUR RECRUITERS



PLACEMENT/INTERNSHIPS PROCEDURE

1. Companies are contacted by the Placement office or Placement cell (authorized student representatives) and invitations are extended, providing relevant information.
2. Companies are given an exclusive login id in the website after they submit the filled-in Job Announcement Forms (JAF) via email or fax. The JAFs are made available online, which helps the willing students to register for the company.
3. The Placement Cell and the Company confer and finalize the date for pre-placement talks if necessary.
4. Each student who has registered for a particular company submits resume so that the company can shortlist the students accordingly.
5. A detailed schedule is prepared by the Placement Cell evaluating the job offer, prospects, student intake and the like. The schedule is confirmed with all the companies.
6. The companies/organizations visit the campus, meet the registered (or shortlisted) students, and conduct the interviews, tests or group discussion sessions in accordance with their respective recruitment process. The date of the interview and other sessions should be in compliance with the mutually confirmed schedule discussed earlier.
7. The companies are required to prepare and submit, with a written confirmation letter the list of students who are selected after the interview process, on the day of the interview itself.

CONTACT US



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