Welcome to Civil Engineering Dept. @ IITB

Prof. Deepankar Choudhury
Prof. T. Kant Chair Professor and Head, Department of Civil Engineering, IIT Bombay, Powai, Mumbai 400076, India.

URL: www.civil.iitb.ac.in
Civil Engineering Department, IIT Bombay

- Year of Establishment: 1958
- UG Program (B.Tech.): 1
- PG Specialisations: 7
- Faculty Members: 51
- Technical Staff: 21
- Administrative Staff: 10

Graduate Programs (M.Tech. & Ph.D.):

- Structural Engineering (1958)
- Water Resources Engineering (1958)
- Geotechnical Engineering (1959)
- Ocean Engineering (1980)
- Transportation Systems Engineering (1988)
- Construction Tech. & Management (2016)
### Students

**B. Tech (Civil Engg.) (4-years) – about 600**

<table>
<thead>
<tr>
<th>Specializations</th>
<th>Current PG Students</th>
<th>Graduated Students</th>
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<tbody>
<tr>
<td></td>
<td>PhD</td>
<td>M.Tech.</td>
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<tr>
<td>Transportation Systems Engineering</td>
<td>36</td>
<td>22</td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>55</td>
<td>18</td>
</tr>
<tr>
<td>Water Resources Engineering</td>
<td>61</td>
<td>23</td>
</tr>
<tr>
<td>Structural Engineering</td>
<td>57</td>
<td>32</td>
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<tr>
<td>Ocean Engineering</td>
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<td>11</td>
</tr>
<tr>
<td>Remote Sensing</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Construction Tech. &amp; Mgmt.</td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>275</td>
<td>141</td>
</tr>
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</table>

**IITB-Monash Academy**

- PhD = 15
- PMRF = 32

**M. Tech/PhD**

- Foreign Students = 31 / 5

**Post Doctoral Fellows** = 30
QS World Ranking 2021 shows, Civil Engineering department of IIT Bombay is at 1\textsuperscript{st} Rank in India and World ranking is 51-100.

Eight (8) of the department faculty members (highlighted) are listed among Sixty one (61) faculty members of IIT Bombay, who are listed as TOP 2% of world researchers up to Sept 2022 as per the report published by Elsevier, BV on 10th Oct 2022. (DOI:10.17632/btchxktzyw.4)

https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4?fbclid=IwAR3d6XWpU0UEf-KtqBYiLD3aVeC-iHRDhZze38nPx3mZggm6y1BM_Yoc4is
Laboratory Facilities

- Heavy Structures
- Experimental Mechanics
- Structural Evaluation & Materials Tech.
- Construction Management Studio
- Materials Characterisation Facility
- Hydraulics
- Fluid Mechanics
- Water Quality
- Advance & Dynamic Soil Testing
- National Geotechnical Centrifuge
- Applied Soil Mechanics
- Geotechnical Earthquake Engineering
- Geosynthetics Research and Testing
- Environmental Geotechnology
- Advanced Pavement Engineering
- Highway Material Testing
- Transportation Studio
- Traffic Engineering
- Remote Sensing and GIS
- Photogrammetry
- Geodesy, High Definition Survey
- Ocean Engineering
- Computational Laboratory
Sponsored Research Grants

Grants in Millions

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<tr>
<th></th>
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<tr>
<td></td>
<td>4.8</td>
<td>52.3</td>
<td>20.6</td>
<td>13.1</td>
<td>40.2</td>
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<td>95.6</td>
<td>250.6</td>
<td>237.8</td>
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*Figures in Millions.*
Industry Interactions

<table>
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<th>Year</th>
<th>Grants in Millions (INR)</th>
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<td>60.8</td>
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<td>2009-10</td>
<td>75.2</td>
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<td>2012-13</td>
<td>171.0</td>
</tr>
<tr>
<td>2013-14</td>
<td>178.9</td>
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<td>2014-15</td>
<td>183.4</td>
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<tr>
<td>2015-16</td>
<td>215.5</td>
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<td>2017-18</td>
<td>277.3</td>
</tr>
<tr>
<td>2018-19</td>
<td>300.0</td>
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Technical Publications

Journal Papers  Conference Proceedings

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<thead>
<tr>
<th>Year</th>
<th>Journal Papers</th>
<th>Conference Proceedings</th>
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<tbody>
<tr>
<td>2008</td>
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<td>2018</td>
<td>185</td>
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<td>2020</td>
<td>239</td>
<td>78</td>
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<tr>
<td>2021</td>
<td>258</td>
<td>85</td>
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</table>

Patents Filed - 8
Patents Granted - 2

Books chapters (2021)
36
Major Awards

- Shanti Swarup Bhatnagar (SSB) Prize, CSIR, Govt. of India.
- Swarnajayanti Fellowship, DST, Govt. of India.
- Alexander von Humboldt Fellowship, Germany.
- JSPS Fellowship, Japan Society for Promotion of Science (JSPS), Tokyo, Japan.
- INSA Medal for Young Scientist, Indian National Science Academy (INSA), New Delhi, India.
- NASI Young Scientist Platinum Jubilee Award, National Academy of Sciences, India (NASI), Allahabad, India.
- ISCA Young Scientist Award, Indian Science Congress Association (ISCA), Kolkata, India.
- INAE Young Engineer Award, Indian National Academy of Engineering (INAE), New Delhi, India.
- Associate of IASc, Indian Academy of Sciences (IASc), Bengaluru, India.
Fellowship of Academies/Societies

- Fellow of Indian National Science Academy (INSA), New Delhi, India (FNA).
- Fellow of National Academy of Sciences, India (NASI), Allahabad, India (FNASc).
- Fellow of Indian Academy of Sciences (IASc), Bengaluru, India (FASc).
- Fellow of Indian National Academy of Engineering (INAE), New Delhi, India (FNAE).
- Fellow of American Society of Civil Engineers (ASCE), USA (F.ASCE).
- Fellow of American Geophysical Union (AGU), USA.
- Fellow of Institution of Civil Engineers (ICE), London, UK.
- Fellow of Institution of Engineers, India (IEI), India (FIE).
Recent Hall of FAME from GoI

She Is: 75 Indian Women in STEAM

Prof. Subimal Ghosh
Prof. Arpita Mondal

Prof. Prakash Nanthagopalan & Mr. N. Das
CEP/QIP/Conferences/Workshop

Events organized

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<tbody>
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<tr>
<td>2019-20</td>
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</table>
Visiting Faculty and Seminars by Distinguished Academicians/ Industrial Experts

<table>
<thead>
<tr>
<th>Year</th>
<th>(Visiting + Adjunct) Faculty</th>
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<tbody>
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<td>2018</td>
<td>7</td>
</tr>
<tr>
<td>2019</td>
<td>6</td>
</tr>
<tr>
<td>2020</td>
<td>3</td>
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</table>

Prof. C. S. Desai, USA and Prof. Ikuo Towhata, Japan, Visited as Distinguished Visiting Professor
### International Collaborations

#### Through Sponsored Projects
- University of New South Wales
- Monash University
- Texas A&M University
- University of Maryland
- University of Illinois at Urbana-Champaign
- Univ. of Edinburgh.
- Purdue University (under IUSSTF)
- KIT, TUD Germany (under DAAD)
- North-Eastern University
- The University of Sheffield
- South East European Research Center (SEERC)
- University of Padua (UNIPD)
- University of Aberdeen

#### Exchange Visits/Internships and Fellowship
- University of Manitoba, Canada
- Oak Ridge National Laboratory
- University of Wollongong
- University of California, Berkeley
- Technical University, Darmstadt
- Kagoshima University
- University of Karlsruhe
- Technical University of Dresden
- University of South Australia
- NUS
- ESTP
- EPFL
- Tokyo Institute of Technology
- National Kaohsiung University of Applied sciences

#### Through Joint Supervision of Doctoral Students
- Monash University
- University of Illinois at Urbana-Champaign
- Drexel University
- HK Polytechnic
- University of New South Wales
- University of Chile
Recent Alumni Contributions

Kanitkar Merit Awards

Starting of "Kanitkar Merit Awards" in 2021. Our alumnus Mr. Jayant Kanitkar (B.Tech./Civil Engg./1977) The two "Kanitkar Merit Awards" are as follows:

(A) "Kanitkar 3rd Year Merit Award" of INR 2,50,000 (Indian Rupees two lakhs fifty thousand only) will be given to the post 2nd year Civil Engineering B.Tech student Topper with CPI above 9.0.

(A) "Kanitkar 4th Year Merit Award" of INR 2,50,000 (Indian Rupees two lakhs fifty thousand only) will be given to the post 3rd year Civil Engineering B.Tech student Topper with CPI above 9.0.
Recent Alumni Contributions

Anantrao Jagtap Chair in Construction Management

ANANTRAO JAGTAP CHAIR FOR CONSTRUCTION MANAGEMENT

Shri. Anantrao Jagtap, was born in 1937 in a small village in the Satara district of Maharashtra.

Through sheer determination, hard work, and ambition, he graduated with the degree in Civil Engineering from the College of Engineering, Pune. As a self-made businessman and a life-long learner, he went on to start his own construction company in Mumbai and worked on many construction projects including residential buildings, hospitals, factories, and flyovers.

This Chair professorship is established in his memory at IIT Bombay by his son, Mr. Pankaj Jagtap, alumnus batch 1995 from Department of Civil Engineering. This Chair will help promote education, research, and industrial collaboration in the field of Construction Management.

Mr. Pankaj Jagtap (B.Tech./Civil/1995 batch) has instituted in 2021 a new named Chair, “Anantrao Jagtap Chair in Construction Management” in memory of his father. This is open for outstanding faculty at Assistant/Associate/full Professor level, working in the area of Construction Management.
Contributions from Late Prof. R. S. Ayyar’s Family

Prof. R. S. Ayyar Chair Professor & Naming of Conference Room

Family of Late Prof. R. S. Ayyar signed MoU with IITB on 5th May 2022 to start a new named Chair, “Prof. R. S. Ayyar Chair Professor in Design and Analysis of Infrastructure using Mechanics”. Also to name the 1st floor conference room in name of Prof. Ayyar.
Alumni Day Celebrated in Dec 2021

Silver Jubilee Reunion for Batch of 1996
60th Convocation 2022

Department Celebrated 60th Convocation on 20/08/2022

Link of entire dept. Convocation: https://www.youtube.com/watch?v=bVFblHpZW7Y

Link of Photos: http://drive.google.com/drive/folders/1iJadGoqQbayHfRvogOgwk7KVGwb_EbEH
Department Celebrated Reunion Convocation for 2020 and 2021 batches on 6th August 2022

Link of Photos: https://drive.google.com/drive/folders/1JI_qEFVHPuIG40XGDi-g5AzRunKGgj4w?usp=sharing
Teachers’ Day Awards 2022
Institute (Prof. S. P. Sukhatme) and Department level Awards for Excellence in Teaching 2022
Brainstorming Sessions among Faculty members in April 2022 and Annual Reflection Meeting in Oct 2022
Civil Engineering Association

Prime Objective

• To enhance knowledge & address industrial issues by bringing corporates, professors and students on common platform

Primary Activities

• Most active association in the institute
• Technical Seminars
• Talks on Global practices
• Distinguished speakers from all over the world throughout the year
• Industrial Site visits
• Epicenter of technical and social interaction of faculty and students of Civil Engineering

Aakaar (https://aakaariitb.in/)

• Annual Tech. festival of Civil Engineering Department, IIT Bombay
• Student competitions
• Events, Workshops and research Symposium
• One of the biggest Civil Engineering Tech. festivals in the country
A team of 12 BTech students from Civil Engineering Department participated in National Concrete Canoe Competition held during August 22-23, 2015 at IIT Madras, Chennai.

**Team TARANG**

**Solar Decathlon (2021)**

**EERI SDC Award (2021)**

A team of 11 BTech students won Earthquake Engineering Research Institute’s Seismic Design Award 2021, 1st time for an Indian team.

The Tower of Babylon competition was organized by the **Global Alliance of Technological Universities**. The students had to design a tower representing sustainability using only local materials within a limited budget of US$1000. Drawing from Indian culture, the students created a kettle-shaped rain harvesting structure. **The team won the first prize in the competition.**
Valedictory for Batch 2022 in April’22
Orientation for new PG Batch in July’22
Thank You

Contact us: The Head,
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IIT Bombay, Powai, Mumbai 400076, INDIA.

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Website: www.civil.iitb.ac.in
Follow us @: https://www.facebook.com/headcivil.iitbombay
https://in.linkedin.com/in/head-civil-engg-iit-bombay-70aa09208
https://twitter.com/engghead