Welcome to Civil Engineering Dept. @ IITB

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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: 49
- 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)
## B. Tech (Civil Engg.) (4-years) – about 600

### Current PG Students

<table>
<thead>
<tr>
<th>Specializations</th>
<th>PhD</th>
<th>M.Tech.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Engineering</td>
<td>59</td>
<td>46</td>
<td>105</td>
</tr>
<tr>
<td>Water Resources Engineering</td>
<td>45</td>
<td>37</td>
<td>82</td>
</tr>
<tr>
<td>Geotechnical Engineering</td>
<td>55</td>
<td>26</td>
<td>81</td>
</tr>
<tr>
<td>Remote Sensing</td>
<td>24</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>Transportation Systems Engineering</td>
<td>40</td>
<td>29</td>
<td>70</td>
</tr>
<tr>
<td>Ocean Engineering</td>
<td>15</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Construction Tech. &amp; Mgmt.</td>
<td>25</td>
<td>26</td>
<td>51</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>263</strong></td>
<td><strong>190</strong></td>
<td><strong>453</strong></td>
</tr>
</tbody>
</table>

### Graduated Students

<table>
<thead>
<tr>
<th>Year</th>
<th>M.Tech.</th>
<th>PhD</th>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>2016</td>
<td>44</td>
<td>14</td>
</tr>
<tr>
<td>2017</td>
<td>50</td>
<td>34</td>
</tr>
<tr>
<td>2018</td>
<td>64</td>
<td>24</td>
</tr>
<tr>
<td>2019</td>
<td>56</td>
<td>19</td>
</tr>
<tr>
<td>2020</td>
<td>56</td>
<td>31</td>
</tr>
</tbody>
</table>

- IITB-Monash Academy PhD = 15
- M. Tech/PhD Foreign Students = 31/5
- Post Doctoral Fellows = 27
World Ranking of Civil Engg. Dept. of IITB

QS World Ranking 2021 shows, Civil Engineering department of IIT Bombay is at 1st Rank in India and World ranking is 51-100.

Eight (8) Faculty members are from Civil Engineering department, out of 50 faculty members of IIT Bombay, who are featured in Top 2% Scientists of the World as per Stanford University, USA published list in 2020.

https://doi.org/10.1371/journal.pbio.3000384 (Table S7)
Laboratory Facilities

- Heavy Structures
- Experimental Mechanics
- Structural Evaluation & Materials Tech.
- Construction Management Studio
- Materials Characterisation Facility
- Hydraulics
- Fluid Mechanics
- Water Quality
- Advanced & 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

Thematic Labs
Sponsored Research Grants

Grants in Millions

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<tr>
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</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>4.8</td>
<td>52.3</td>
<td>20.6</td>
<td>13.1</td>
<td>40.2</td>
<td>32.1</td>
<td>95.6</td>
<td>250.6</td>
<td>237.8</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
</tbody>
</table>

The chart above illustrates the increase in sponsored research grants from 2008-09 to 2019-20. The grants have shown a significant increase over the years, with a peak in 2015-16.
Industry Interactions

Grants in Millions (INR)

Year

- 2008-09: 60.8
- 2009-10: 75.2
- 2010-11: 96
- 2011-12: 139.6
- 2012-13: 171
- 2013-14: 178.9
- 2014-15: 183.4
- 2015-16: 215.5
- 2016-17: 259.9
- 2017-18: 277.3
- 2018-19: 300
Technical Publications

- Journal Papers
- Conference Proceedings

No. of Publications over Years:

- 2008: 79, 89
- 2009: 101, 66
- 2010: 109, 135
- 2011: 94, 123
- 2012: 137, 142
- 2013: 106, 123
- 2014: 126, 121
- 2015: 146, 147
- 2016: 171, 152
- 2017: 158, 168
- 2018: 185, 202
- 2019: 212, 194
- 2020: 239, 84

Additional Information:
- Patents Filed: 8
- Patents Granted: 2
- Books Chapters (2020): 14
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), Kolkata, India (FIE).
CEP/QIP/Conferences/Workshop

Events organized

Year

Numbers
Visiting Faculty and Seminars by Distinguished Academicians/ Industrial Experts

<table>
<thead>
<tr>
<th>Year</th>
<th>(Visiting + Adjunct) Faculty</th>
</tr>
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<tbody>
<tr>
<td>2010</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>2</td>
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<tr>
<td>2012</td>
<td>3</td>
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<td>2014</td>
<td>5</td>
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<tr>
<td>2015</td>
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<td>2016</td>
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<td>2018</td>
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<tr>
<td>2019</td>
<td>6</td>
</tr>
<tr>
<td>2020</td>
<td>3</td>
</tr>
</tbody>
</table>
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, 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
- Lund University
- 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
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 250000 (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 250000 (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

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.
59th Convocation 2021

Department Celebrates 59th Convocation 2021 on 8th August 2021 (online)

Link of entire dept. Convocation: https://www.youtube.com/watch?v=iQ898rvHINM
Best Teachers’ Awards 2021

Institute (Prof. S. P. Sukhatme) and Department level Awards for Excellence in Teaching 2021
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
Student Activities

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.

Tower Of Babylon

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.
Thank You

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