# CIVIL ENGINEERING IIT HYDERABAD



# Inventing and Innovating in technology for humanity

# PLACEMENT BROCHURE 2022-2023



### **ABOUT DEPARTMENT**

The Department of Civil Engineering since its inception in 2008 has been at the forefront of teaching, research and consulting with a focus in the broad areas Geotechnical, Structural, Transportation Systems, Hydraulics & Water Resources and Environmental Engineering. Our research focuses on both fundamental and applied research to provide solutions that help drive the future evolution of Civil Engineering. Industry interaction and academic exchanges are an integral characteristic of our department.

CE faculty are committed to delivering knowledge and expertise in the broad spectrum of Civil Engineering. Our faculty and graduate students are actively involved in several sponsored projects from various funding agencies that include the Ministry of New and Renewable Energy, NHAI, Ministry of Environment &

Forests, and HRD ministry.

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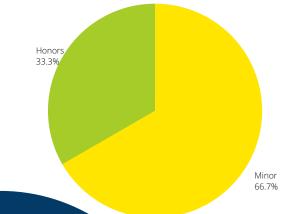


### **Academic Structure**

- Construction materials, Concrete
   Technology, Reinforced Concrete Design,
   Steel structure Design, Structural Analysis.
- Open-channel Hydraulics, Engineering Hydrology, Hydraulic-Engineering, Water and Wastewater Engineering, Water Resource Engineering
- Geotechnical Engineering, Foundation
   Engineering, Geology.
   Highway design & Materials, Railway &
- Transport Engineering, Traffic Engineering
   & Planning, Surveying
  - Environmental Engineering, Air Pollution,
- Environment Impact assessment,
   Construction Management, Fundamental of GIS & RS



### Distribution of specialisation chosen



## **Soft Skills Development**

 Our Students are exposed to managing teams of different sci-tech, cultural clubs, and different councils as well as managing the largest tech-cultural fest " Elan and Nvision" of Telangana - Andhra Pradesh leading to the development of soft skills like team management, effective coordination, time management, etc.

#### LAB COURSES:

- Construction materials lab
- Fluid Mechanics Lab
- Chemistry/Physics lab
- Structural mechanics lab
- Geotechnical engineering lab
- Hydraulic engineering lab
- GIS Lab
- Highway materials lab
- Traffic engineering lab
- Environmental engineering lab
- Fabrication Lab

#### **SOFTWARE/TOOLS:**

- Feast
- CAD Modelling
- STAAD Pro
- MATLAB
- SAP 2000
- Solid Edge
- C-Programming

Other than the regular curriculum our students are also involved in various projects under faculty covering different aspects of Civil Engineering and also opt for advanced courses in particular area of Civil Engineering to pursue their intrest

# WHY SHOULD YOU HIRE FROM IITH?

#### **Fractal Academics**

We have a unique system of Academics in which we are introduced to the diversified experience of courses. The Fractal Program at IITH atomizes the courses into breadth and depth, thereby enabling interdisciplinary learning with a choice of basic courses and advanced electives.

# Specialization (Minor/Major/Honors)

Our undergraduate students in civil engineering also have an opportunity to study electrical and entrepreneurial minors who are able to benefit in choosing their future career opportunities. Minors in business can assist a student by developing management skills, start-up skills and core civil engineering skills.

# Research-oriented academics

Our curriculum is designed in such a way that other than undergraduate courses we also get the insights of master courses 1(advanced) which paves the way for research in future, and we are also supposed to do a research project under the guidance of our respective professor

## Department at glance

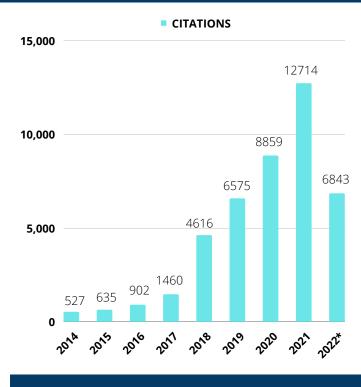


#### **Academic Programs**

- B-Tech in Civil Engineering
- M-Tech in
- · Structural Engineering
- Geotechnical Engineering
- Hydraulic and Water resource
- Environmental Engineering
- Ms, Ph.D in
- Structural Engineering
- Geotechnical Engineering Hydraulic and Water resource
- Environmental Engineering Transportation Engineering

#### Faculty (Total = 25)

Environmental - 5 Geotechnical - 5 Structural - 7 Transportation - 3 Hydraulic and Water resource - 5



### **CIVIL ENGINEERING SOCIETY**

#### Motto-"Learn, Network and Prosper"

#### **Activities**

- Seminars
- PM Sessions
- Alumni Talks
- Research-Mentee
- Workshops and Conferences
- Civil Day
- Site Visits
- Faculty Talks

#### **Research Areas:**

- CFRP Retrofitting
- Computational Mechanics
- Concrete Material and Structures
- Earthquake Engineering
- FRP Composites &FRP Structures
- Fracture Mechanics & Damage Mechanics
- High Strength & Light Gauge Steel
- Mechanics of Laminated Composites
- Prestressed & Reinforced Concrete
- Steel Structures& Steel-Concrete
- Structural Dynamics
- Structural Stability
- Wind Engineering.

#### Research Areas:

- Geosynthetic Reinforced Foundations.
- Municipal Solid Waste Landfills.
- Pavement Geotechnics.
- Recyclable Materials in Geotechnics.
- · Reinforced Soil and Soil Walls.
- Reliability-Based Design.
- Earthquake Resistant Design of Retaining
- Structures and Rock Mechanics.
- Soil Stabilization.
- Sustainable Design of Soil Structures.

#### Labs:

- Advanced Cement-Based Materials Lab.
- Materials Characterization Lab.
- Advanced Structural Material Testing Lab.
- Scaled Structural testing Lab.
- Structural engineering Computational Lab.

# **Structural Engineering**



# **Geotechnica | Engineering**

#### Labs:

- Advanced Geotechnical Engineering Lab.
- Geosynthetic Testing Lab.
- Large Scale Testing Lab.
- Ground Characterization Lab.
- Geotechnical Engineering Computational Lab.

#### Courses:

- Advanced Structural Mechanics.
- Applied Elasticity and Plasticity.
- Advanced Reinforced Concrete.
- Finite Element Analysis.
- Structural Dynamics.
- · Design Studio.
- Finite Element LAB.
- Condition Assessment and
- Rehabilitation of Structures.
- Advanced Steel Design.
- Prestressed Concrete Design.
- Stability of Structures.
- Theory of Plate and Shells.

#### Courses:

- Advanced Soil Mechanics.
- Soil Dynamics.
- Design of Earth Structures.
- Mathematical methods for Engineers.
- Advanced Foundation Engineering.
- Ground Modification Techniques.
- Finite Element Analysis.
- Design Studio

#### Research Areas:

- Groundwater flow and transport modeling.
- RS & GIS applications in water resources.
- Hydro-geologic characterization.
- Soil-Water-Crop interactions.
- Eco-hydrological processes.
- Fluid flow and movement of colloids in
- porous media.
- Urban Flood Modeling.
- Analytical hydrodynamics.
- Fluvial hydraulics.
- Scaling and similarity laws of turbulence

#### Research Areas:

- Biofuel.
- Bioremediation.
- Contaminant Transport Modelling.
- Environmental Hydraulics.
- Environmental Science.
- Hydrology.
- Solid and Hazardous Waste Management.
- Remote Sensing and GIS Applications.
- Solid Waste Management.
- Wastewater Treatment.
- Waste Management.

#### Labs:

- Ground Water Lab.
- Isotope Hydrology Lab.
- Hydro Meteorology Lab.
- Water Resources engineering Computational Lab.

# Hydraulics and Water Resource Engineering



# Environmental Engineering

#### Labs:

- Air Quality Monitoring Lab.
- Solid and Hazardous Waste Management Lab.
- Water Quality Analysis Lab.
- Microbiology Lab.
- Water and Wastewater Engineering Lab.

#### Courses:

- Engineering Hydrology and Hydrologic Systems.
- Open Channel Hydraulics and Sediment Transport.
- Computational Fluid Mechanics.
- Groundwater Modelling.
- Remote Sensing and GIS applications to Civil Engineering.
- Water Quality Modelling.
- Fluvial Hydraulics.
- Irrigation Water Management.
- Applied Computational Laboratory.
- Hydraulic and Hydrologic Simulation Laboratory.

#### Courses:

- Physiochemical processes in water and wastewater engineering.
- Air pollution and control.
- Applied Computational Laboratory.
- Contaminant hydrology and remediation
- Environmental Impact Assessment.
- Biochemical processes in water and wastewater engineering.
- Solid waste management.
- Industry and Hazardous Waste Management.

# **Sponsored Projects**

Project Title: Development of Integrated 3- D reinforced sandwich structural panels for rapid construction of building systems.

Agency: Uchchatar Avishkar Yojana, Ministry

of Human Resource Development. Amount: Rs. 10,200,000 (\$ 145,000).

Duration: 2018-2021.

Project Title: Center of Excellence in Sustainable Urban Development. Agency: Ministry of Human Resource Development.

Amount: Rs. 40 million (\$ 6 million).

Duration: 2014-2020.

Project Title: Developing a process and pilot-scale unit for the recovery of chrome and other value-added products from chrome ore process residue (CORP).

Agency: Ministry of Environment, Forest and Climate Change, Gol, India, under Uchhatar Avishkar Yojana.

Amount: Rs 400.00 Lakhs.

Duration: 2018 onwards (Ongoing).

Project Title: Geogrid and geocell reinforced

flexible pavements.

Agency: National Highway Authority of India.

Amount: Rs 130.00 Lakhs.

Duration: 2016- 2021 (Ongoing).

Project Title: Smart Hybrid Fibre Reinforced Polymer Strengthening System for Civil

Infrastructure. Agency: SPARC.

Amount: Rs 71,50,000. Duration: 2019-2021.

Project Title: Automation of Estimation of Dynamic Ground Water Resources Using GEC-2015 -Methodology and related research work to improve GEC assessment Agency: Central Ground Water Board,

Ministry of Jal Shakthi, GOI. Amount: Rs. 5,59,28000.

Duration: 2019-2021 (Ongoing).

Project Title: Purpose Driven Study on Talk as a source for regional groundwater research using Managed Aquifer Storage and Recovery (ASR).

Agency: World Bank Through National

Hydrology Project Amount: Rs. 20,00,000

Duration: 2018-2021 (Ongoing)

Project Title: Center of Excellence in Sustainable Urban Development. Agency: Ministry of Human Resource

Development.

Amount: Rs. 40 million (\$ 6 million).

Duration: 2014-2020.

# **Faculty**

#### **Structural Engineering**

- Prof. S. Suriya Prakash
- Dr. Anil Agarwal
- Prof. Amirtham Rajagopal
- Prof. K. V. L. Subramaniam
- Dr. Surendra Nadh Somala
- <u>Dr. Mahendrakumar Madhavan</u>
- <u>Dr. Biswarup Bhattacharyya</u>

#### **Geotechnical Engineering**

- Prof. S. Sireesh
- Prof. B. Umashankar
- Dr. Shwetabh Yadav
- Dr. B. Munwar Basha
- Dr. Roshan Khan

#### **Environmental Engineering**

- Dr. Ambika S
- Dr. Asif Qureshi
- Prof. Shashidhar
- Dr. Pritha Chatterjee
- <u>Dr. Debraj Bhattacharyya</u>

#### **Hydraulic and Water resource Engineering**

- Dr. Sk Zeeshan Ali
- Dr. Satish Regonda
- Dr. K. B. V. N. Phanindra
- Dr. Seetha N
- Dr. Maheswaran Rathinasamy

#### **Transportation Engineering**

- Dr. Digvijay S. Pawar
- Dr. Ramya Sri Mullapudi
- Dr. Suvin P. Venthuruthiyil

# **OUR PAST RECRUITERS**

L & T Construction

Eaton Technologies

Indus Enviro

Honeywell

Tata Power

GAIL

NTPC

Arup

Tata Consulting Engineers

L & W Construction

**AECOM** 

Adani Group

Tata Steel

Jindal Steel Plant

JK Cement

Ashoka Builders

Afcon Infrastructure

Limited

Ambuja Cement

Ansys

**Atkins** 

Reliance

Sage Sustainability

Siemens

Essar Steel

# **Placement Team and Contact**

### **How to Participate?**

For detailed information and registration kindly visit the recruiter's portal of <u>Office of Carrier Services</u>, IIT Hyderabad. The OCS Placement team will extend all the possible assistance to your organization to conduct the recruitment process.

Phone: 040-23016098 | Email: office.placement@iith.ac.in

### **Student Placement Coordinators**

1) Akshat Gupta ce21mtech14001@iith.ac.in +91 94690 35919

2) Akanksha Rajpurohit - ce21mtech14015@iith.ac.in +91 81302 91107

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