BITS Pilani

Hyderabad Campus

Department of Civil Engineering

Ph.D. Admissions

(First semester 2022-23)

BITS Pilani
Hyderabad Campus
Department of Civil Engineering

About the Department

The Department of Civil Engineering offers undergraduate, postgraduate and PhD programs, with emphasis on fundamental theory and practice in Civil Engineering, keeping in view the current and continuously changing scenarios in this discipline. The department runs postgraduate programs in Structural and Transportation Engineering. The Department has established state-of-art laboratories which can provide opportunities for the students at all levels to get acquainted with the latest developments in various avenues of Civil Engineering. In addition to teaching and instruction, the faculty is actively engaged in research with the goal of developing novel concepts and ideas or applying current technology to new applications. The department has a number of ongoing research projects and industrial consultancy works from various agencies. The department also organizes Conferences/ Workshops for professional interaction and networking.

Department at a glance

Academic Programmes

- B.E.
- M.E. Structural
- M.E. Transportation
- PhD

Areas of research

- Structural Engineering
- Water Resource Engineering
- Geotechnical Engineering
- Transportation Engineering

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About our faculty

Name: A. Vasan
Designation: Professor
Area: Water Resources Engineering

Name: Arkamitra Kar
Designation: Associate Professor
Area: Structural Engineering

Name: Anasua GuhaRay
Designation: Associate Professor
Area: Geotechnical Engineering

Name: Bahurudeen A
Designation: Associate Professor
Area: Structural Engineering

Name: Bandhan Bandhu Majumdar
Designation: Assistant Professor
Area: Transportation Engineering

Name: Chandu Parimi
Designation: Associate Professor
Area: Structural Engineering

Name: Jagadeesh Anmala
Designation: Associate Professor
Area: Water Resources Engineering

Name: K. Rajitha
Designation: Assistant Professor
Area: Geomatics

Name: K. Srinivasa Raju
Designation: Professor
Area: Water Resources Engineering

Name: Mohan S.C
Designation: Assistant Professor
Area: Structural Engineering

Name: Murari R. R. Varma (Head)
Designation: Associate Professor
Area: Water Resources Engineering

Name: P.N.K. Rao
Designation: Professor
Area: Structural Engineering

Name: Prasanta Kumar Sahu
Designation: Assistant Professor
Area: Transportation Engineering

Name: Raghu Piska
Designation: Assistant Professor
Area: Structural Engineering

Name: Shivang Shekhar
Designation: Assistant Professor
Area: Structural Engineering

Name: Sridhar Raju
Designation: Associate Professor
Area: Transportation Engineering

Name: V. Vinayaka Ram
Designation: Associate Professor
Area : Transportation Engineering

For more details, please visit: https://www.bits-pilani.ac.in/hyderabad/civilengineering/Faculty

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Research Areas

Structural Engineering

- **Sustainable materials and construction technology:** To address the issue of global carbon dioxide emissions and depleting natural mineral resources by developing viable alternatives for cement, sand, and aggregates in practical construction.
- **Large-scale testing under dynamic loading:** To develop laboratory models for testing the long-term effects of earthquakes and ground motions on large-scale structures using loading frame with actuator arrangement.
- **Application of computational techniques:** To develop computer-based algorithms and codes for simulating real-life scenarios and corresponding analyses of structural systems

Water Resources Engineering and Geomatics

- **Impact of climate change on water resources:** Impacts of climate change on water resources systems using multi-objective/ artificial intelligence/ fuzzy logic-based techniques.
- **Water distribution networks design optimization:** Application nature-inspired optimization Algorithms, MCDM, Machine Learning, AI, IoT and blockchain techniques to water resources systems planning and management and reservoir optimization.
- **Water resources, Surface and Sub-surface hydrology, and Water Quality in Natural systems:** Application of soft computing techniques, stream water hydrology and water quality monitoring using geo-spatial data.
- **Hydrological modelling and Field hydrology:** Application of field/ semi-empirical approaches for hydrological/ water quality modelling using satellite remote sensing data integrated with in situ datasets.
- **Wetland characterization and water quality monitoring:** Development algorithms utilizing the satellite remote sensing dataset (optical & SAR) for the classification of ecological-sensitive areas and water quality monitoring.

K K Plastic Waste Management Ltd.

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Research Areas

Geotechnical Engineering

- **Reliability Application in Geotechnical Engineering:** To address the uncertainties associated with geotechnical properties of soil and propose a reliability based design for geotechnical structures.
- **Utilisation of Waste Materials for Ground Improvement**: To utilise industrial and agricultural waste materials (fly ash, GGBS, construction and demolition waste, rice husk ash, biochar) in the stabilisation of soft and loose soils and apply the same as foundation material, backfill, pavement subbase, stone columns etc.
- **Alkali Activated binder treatment for natural geotextiles**: To develop a novel treatment process for improving the durability and strength of natural fibers such as jute, hemp, coir etc.
- **Slope Stabilisation with treated natural geotextiles and grass:** To develop a method of reducing erosion and improving the strength of natural slopes by treating with natural geotextiles and grass.

Transportation Engineering

- **Pavement materials:** Reclaimed asphalt pavement in bituminous mixtures, characterization of asphalt mixtures with warm mix additives, alternative bituminous mixtures, bitumen rheology, long term ageing and polymer modified bitumen, self-healing asphalts and concretes
- **Sustainable materials and Nano-materials:** Sustainable building materials; Nano, Biomaterials and composites for roads and building applications.
- **Transportation planning, Road safety and Non-motorized transportation:** Travel Behavior Analysis; Multimodal Transportation; Public Transportation; Proactive and Reactive Safety assessment; Safety Performance Function Development, Bicycle and Walk mode assessment; Electric vehicle infrastructure planning
- **Freight transportation and Logistics:** Freight Demand Modelling and Planning for Logistics Systems; Energy-efficient Platforms for Collaborative Last-mile delivery

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LAB FACILITIES

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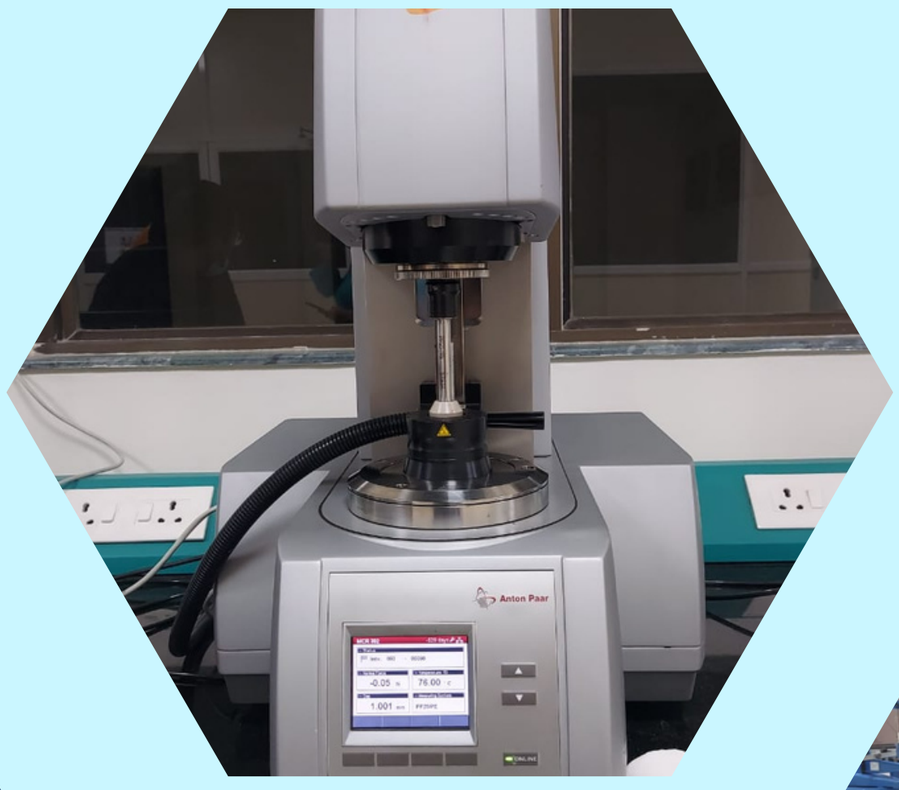

LAB FACILITIES

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PhD ADMISSIONS OPEN

Apply now for full- time position

Financial Assistance :

- M.E/M.Tech candidates are eligible to receive a fellowship of Rs 31000/- per month
- A higher fellowship may be made available in subsequent years (As per institute norms)
- Every candidate must undertake 8 to 10 hours of work per week as assigned by the institute.

Program Requirements : Minimum eligibility criteria for admissions

- M.E./M.Tech or an equivalent degree with a minimum of 60% aggregate in the qualifying examination.
- B.E. or an equivalent degree with a minimum of 60% aggregate in the qualifying examination
- Meeting the minimum eligibility criteria does not guarantee admission into the PhD programme.
- Additional departmental criteria might be set for shortlisting.
- Shortlisted candidates will have to appear for an interview and/or a written test

Important websites :

For the link to fill up application and details on important dates please refer to following website: ***https://bitsadmission.com/phdmain.aspx***

Department website: ***https://universe.bits-pilani.ac.in/hyderabad/civilengineering/CivilEngineering***

Contact :

E-mail: ***hod.civil@hyderabad.bits-pilani.ac.in***
Tel.No. - **91 40 66303 584**

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