Department of Civil Engineering
BITS Pilani Hyderabad Campus

Placement Brochure

2019-2020

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Hyderabad Campus

About Department

- The Department of Civil Engineering offers undergraduate, postgraduate and Ph.D programmes with emphasis on fundamental theory and practice in Civil Engineering
- In addition to Teaching and Instruction, the faculty is also engaged in active research with an aim to generate innovative concepts and ideas or apply the existing technologies to new applications.
- The Department has a number of ongoing/completed/applied research projects from various agencies.
- It plans to undertake industrial consultancy work and also organizes Conferences, Workshop for professional interaction where the first degree and higher degree students are actively involved

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Message from Head

- The Department of Civil Engineering believes in the concept of theory to practice with emphasis on fundamental concepts.

- Our students work on field implementable research projects with the faculty and they even participate in conferences to present their work.

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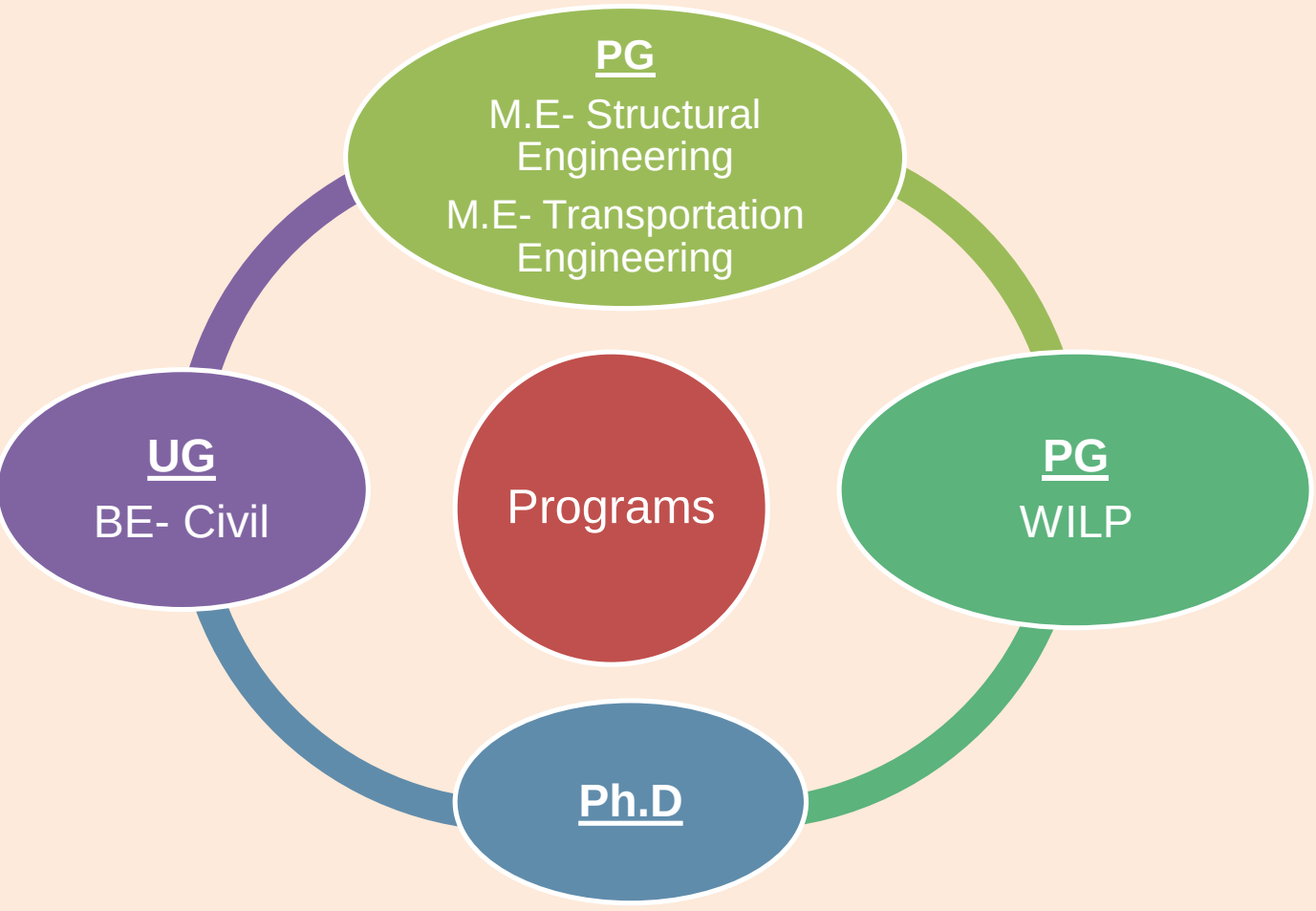
Courses offered



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Core Courses (First Degree)

- Mechanics of Solids
- Surveying
- Civil Engineering Materials
- Fluid Mechanics
- Analysis of Structures
- Construction Planning and Technology
- Soil Mechanics
- Highway Engineering
- Hydraulics Engineering
- Foundation Engineering
- Design of Reinforced Concrete Structures
- Engineering Hydrology
- Water & Waste Water Treatment
- Design of Steel Structures

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Core Courses (ME-Structures)

- Dynamics of Structures
- Advanced Structural Mechanics and Stability
- Earthquake Engineering
- Advanced Structural Analysis
- Finite Element Analysis

Core Courses (ME-Transportation)

- Pavement Analysis and Design
- Transportation Systems Planning
- Urban Mass Transit Planning
- Pavement Material Characterization
- Highway Geometric Design
- Traffic Engineering and Safety

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Sponsored R&D

Integrated Urban Flood Management in India: Technology-Driven Solutions
Performance Evaluation of Backfill Soils partially replaced with Building Derived Materials
Improving the Seismic Performance of Dynamically Similar Buildings Using Damper Connected Control Technique
Preparation of Sate of the Art Report (SOAR) on Use of Polymer Fibres and steel fibres for improvement in concrete properties
Preparation of State of the Art Report (SOAR) on Effect of Temperature Stresses in Concrete Pavements.
Multiobjective Evolutionary Approach for Solving Water Distribution Network Design Optimization
Congestion Pricing: Planning for optimal strategies and commuters behavioral implications under different pricing schemes

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Sponsored R&D

Coastal wetland characterization using L and S bands of Polarimetric SAR data

Implementation of plants and treated natural fibers to enhance the strength properties of soft soil and to decrease the rate of surface erosion

Economic Construction Practice Using Bacterial Inclusions in Concrete to Improve its Durability

Development of a framework to evaluate the operational feasibility of introducing battery-electric buses in India

Development of Pedestrian Facility Assessment Tool for Improving Pedestrian Safety Condition in Hyderabad

Prevention of Hazardous Field-Firing of Bagasse and Its Sustainable Utilization as a Raw Material in an Innovative Industrial Process

Evaluation of the efficiency of bacterial inclusions in concrete

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Key Student Projects (2018-19)

Application Data Mining techniques to Engineering and Sciences
Urban flooding solutions using data mining techniques
Effect of secondary mass on a seismic structure with primary mass
WAVELET NEURAL NETWORKS
Evaluation of mechanical properties of concrete with Alkali Activated Binder
Non linear seismic analysis of irregular RC structures
Optimal Design of steel roof truss for the given building plan
Application of Building Information modelling
Hyderabad Road Safety Monitoring and Modelling
Utilization of Higher percentage of Reclaimed Asphalt Pavement (RAP) in Hot Asphalt Mixes

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Thrust Areas

Specialization	Thrust areas
Structural engineering	Earthquake Engineering
	Fatigue and Fracture Mechanics
	Concrete Chemistry
	Computational Mechanics
	Green Building Materials
Water Resources Engineering	MCDM and Optimization
	Impact of Climate Change on Water Resources
	Soft Computing and Evolutionary Algorithms
	Water Distribution Networks Design Optimization
	Remote Sensing Applications in Hydrology.
Transportation Engineering	Pavement Materials
	Pavement Analysis, Design and Construction practices
	Highway design, analysis, planning
	Transportation planning, Traffic and Safety
Geotechnical Engineering	Reliability and Soil-Structure interaction

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Departmental Software

ETABS®

PLAXIS

erdas

AUTODESK
REVIT
Architecture

ArcGIS®

Bentley®
Advancing Infrastructure

PTV VISSIM

HDM - 4
HIGHWAY DEVELOPMENT & MANAGEMENT

And more...

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laboratories

- Academic Laboratories
- The department is equipped with state-of-the-art laboratory for carry out research works

- Research Laboratories
- Structural Engineering Laboratory
- Concrete Technology Laboratory
- Highway Engineering Laboratory
- Advanced Traffic and Transportation Laboratory
- Water Resources Laboratory
- Environmental Engineering Laboratory
- Advanced Geotechnical Engineering Laboratory
- Centre of Excellence in Water Resource Management
- Remote Sensing and Surveying Laboratory
- Computation Laboratory equipped with latest Civil Engineering software

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Structural Engineering

Dr. P. N. K. Rao

Soil Structure Interaction

Wind Load Analysis; Concrete

Dr. Chandu Parimi

Dynamics , Fracture Mechanics; Computational Analysis

Mr. Sri Kalyana Rama J

SCC & Ultra High Performance Concrete; Fracture properties and FEM

Dr. Mohan S C

Earthquake Engineering

Structural Health Monitoring

Dr. Bahurudeen A

Cement Chemistry; Durability

Characterization Techniques; Special concrete

Dr. Arkamitra Kar

Characterization and use of CDW; Durability studies of concrete with alkali-activated binders

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Transportation Engineering

Dr. Sridhar Raju

Airfield Pavement, Flexible Pavements, Recycling of Asphalt Pavements; Rheology

Dr. V. Vinayaka Ram

Pavement Material Characterization
Geoplymer; Rigid Pavement; PMS

Dr. Anasua Guharay

Reliability Application; Sensitivity Analysis
Earth Retaining Structures; Dynamic Behavior of Soil
Slope Stabilization; Utilization of Waste Materials

Dr. Bandhan Majumdar

Transportation Planning,
Geometric design
Traffic safety and Finance

Dr Prasanta Kumar Sahu

Freight Demand Modelling
Sustainable Transportation

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Water Resource Engineering

Dr. K Srinivasa Raju

Impact of Climate Changes
Water Resources Systems
Multi Objective Optimization and Decision Making
Soft Computing and Evolutionary Algorithms

Dr. Jagadeesh Anmala

Environmental Hydraulics
Surface and Subsurface Hydrology
Computational Fluid Dynamics
Stream Hydrology

Dr. A.Vasan

Optimization using heuristic methods
WR Systems Planning and Management

Dr. K Rajitha

Water resources planning and management using Geo-spatial technologies, Satellite image processing and GIS

Dr. Murari R R Varma

Watershed hydrology and management
Hydrochemistry of watersheds
GIS Applications in hydrology
Environmental hydrology