

INDIAN INSTITUTE OF TECHNOLOGY (B.H.U), VARANASI

INFORMATION BROCHURE (2019-2020)



M.TECH PROGRAMME

IN

STRUCTURAL ENGINEERING



ABOUT US:

Historical Background: The Civil Engineering Department was established in 1949 (then known as Civil and Municipal Engineering) in BENCO (Banaras Engineering College) which was a part of BHU. Presently, it caters its student with various Post Graduate courses like Environmental Engineering, Geotechnical Engineering, Hydraulic Engineering, Structural Engineering, and Transportation Engineering. The department has taken up various research programmes apart from regular teachings and the research activities, namely CSIR, UGC, SAP, HUDCO, DST and AICTE. It has a created cooperation with industries to work for the various tasks given by Govt., Semi-Govt. and other Private organisations. The department has its own Civil Engineering Society which is dedicated in organising lectures by various experts in their respective field, group discussions, competitions, sports and various other extra-curricular and cultural activities so that there would be an holistic all round development of students.

M.Tech: Department of Civil Engineering Conducts M.Tech Program in Structural Engineering, Hydraulics and Water Resources Engineering, Geotechnical Engineering, Environmental Engineering, Transportation Engineering, Geo-informatics and Geosciences Engineering. Admission to this program is offered to GATE qualified/sponsored candidate through departmental level screening test/counseling. In addition to their course studies, the students are offered big platform for their overall personality development through the participation in various extra-curricular activities of the institute.

Structural Engineering: This section provides students with a solid background on the principles of structural engineering design. It deals with the theories and concepts of concrete and steel design and analysis. This Lab helps students in different areas related to Construction Technology, Construction Management, Functional Design of Buildings and Building Materials. The lab is well equipped with latest equipment and software for both teaching and research purpose.

FACULTY PROFILE :

1. **PROF. VEERENDRA KUMAR**

Qualification: B.tech [Civil Engg.]- IIT Kanpur, M.tech [Structural Engg.]- IIT Kanpur, Ph.D.- IIT BHU

Areas of Interest: Structural Engineering- Materials , Plastic Analysis.

2. **PROF. S. MANDAL**

Qualification: B.E.[Civil Engg.]- Jadavpur University, M.E. [Structural Engineering]- Roorkee University, Ph.D. -IIT Roorkee

Areas of Interest: Structural Engineering – Finite Element Analysis of Structures, Wind Effect on Structures.

3. **PROF. RAJESH KUMAR**

Qualification: B.Tech [Civil Engg.]-BIT Sindri Dhanbad , M.E. [Structural Engg.]- NIT Rourkela, Ph.D. [Structural]- IIT Kharagpur.

Areas of Interest: Structural Optimization, Non-Linear Structural Mechanics, Finite Element Analysis, Earthquake .

4. **PROF. KRISHNA KANT PATHAK**

Qualification: B.Tech[Civil Engg]- KNIT Sultanpur, M.E.[Structural Engg.]- MNNIT Allahabad, Ph.D. [Solid Mechanics]- IIT Delhi.

Areas of Interest: Structural Engineering – Continuum Mechanics, Structural Analysis & Design, Structural Shape.

5. **DR. PABITRA RANJAN MAITI**

Qualification: B.E.[Civil Engineering]- BESU Shibpur, M.E.- BESU Shibpur, Ph.D.- IIT Kharagpur.

Areas of Interest: Fluid – Structure Interaction , Hydraulic Structure, Fluid Flow , Computational Dynamics.

6. **DR. ROSALIN SAHOO**

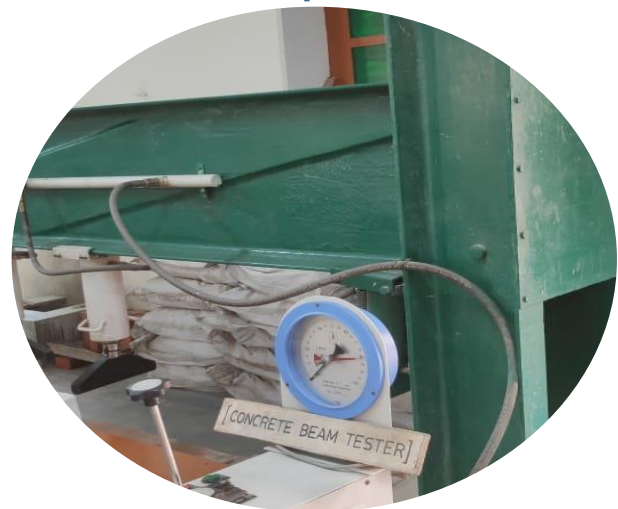
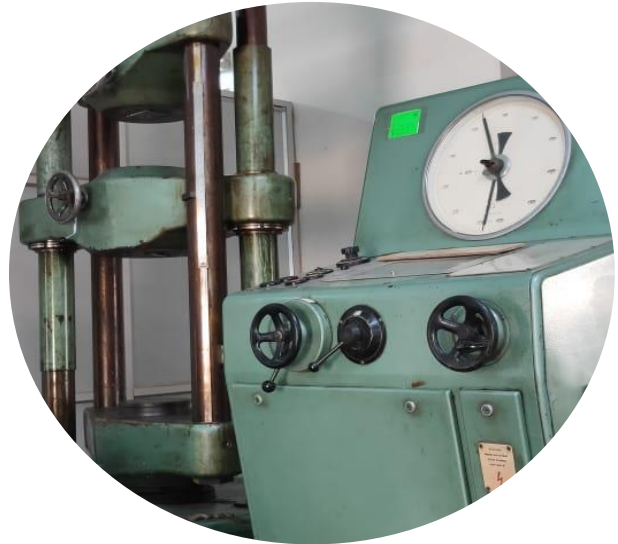
Qualification: M.Tech [Structural]- NIT Rourkela, Ph.D.- IIT kharagpur

Areas of Interest: Shear Deformation Theories, Laminated Composites, Sandwich Construction, Plate and Shell Structures , Finite Element method, Uncertainty Quantificati

STRUCTURAL ENGG. LAB:



This Lab helps in training engineers and architects in different areas related to Construction Technology, Construction Management, Functional Design of Buildings and Building Materials. The course is designed such that the students are exposed to the latest and appropriate techniques in these areas. This laboratory is equipped with the following equipment: Universal Testing Machine 100 ton capacity, Universal Testing Machine 200 ton capacity, Non-destructive test hammer, Furnace 1200° C, Concrete core cutter, Pre stressing bed, Load Frame, Data printer (strain measuring system), Ultra sonic tester, Rebar locator, Flexural testing machine, Resistivity meter for measuring the rate of corrosion, Shake Table (Seismic Analysis Table) etc. The Structural Engineering Laboratory has a heavy testing floor and equipped with necessary facilities for testing scaled structural models.



M.TECH THESIS WORK(2019):

Corrosion and weight loss study of reinforced concrete in Acid Environment

Effect of aerodynamic modifications on High Rise Buildings using ANSYS

Nonlinear dynamic analysis of shear wall in complex structures

Sequential Construction Analysis of RCC Building

Analysis of effects of along and across wind loads on tall structures

Pushover analysis of steel frame

Non Linear Dynamic Analysis(Time History Method) of Structures using SAP2000

Analysis and Design of towers

Performance based design of building

PAST RECRUITERS:



CONTACT US:



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