

## INDIAN INSTITUTE OF TECHNOLOGY

(BHU) Varanasi



## PLACEMENT BROCHURE 2020-21 MTECH TRANSPORTATION ENGINEERING

#### EDUCATION IS CHARACTER

## MESSAGE FROM DIRECTOR



PROF. PRAMOD KUMAR JAIN

DIRECTOER, IIT (BHU) VARANASI Greetings from Indian Institute of Technology (BHU), Varanasi and a hearty welcome to the Land of Shiva !!!

We are proud to be the first to pioneer degree level engineering education in undivided India almost a century ago in 1919 and by none other than our revered Bharat Ratna Mahamana Pt. Madan Mohan Malviya Ji. The present day institute was created after the merger of three erstwhile colleges – Banaras Engineering College, College of Mining and Metallurgy and College of Technology.

In this age of liberalization, privatization and globalization, there is an ever increasing industry requirement for professionals who have high employability index and required competencies with an inquisitive mind set for innovations. Our collective and continuous commitment is to create vibrant and technology savvy environment where excellence is the credential. Our students imbibe all personality traits, values of the cultural city of Kashi and diversity of the BHU campus within which this Institute exists. Academic curricula not only provide them strength in their own area, but also from open electives in multiple disciplines. This uniqueness helps our students in successfully carrying out their responsibilities as a member of cross-functional team in any organization. Our excellent placement record over years speaks about the value of our students to their employers.

I am confident that our students will prove their mettle and will contribute immensely towards growth and success of your organization. Looking into great achievements of the alumni of this Institute, I am sure that you and your organization is going to have a wonderful experience of intern and full-time hiring at this Institute and this relationship will go beyond for having other kind of engagements as well for mutual benefits.

I extend my deep appreciation for our industry partners who have recognized the depth of our rich and diverse talent pool and accorded valuable opportunities. I am looking forward to your visit to this campus soon.

## MESSAGE FROM TPC INCHARGE



PROF. ANIL KUMAR AGRAWAL

TRAINING AND PLACEMENT OFFICER, IIT (BHU) VARANASI It gives me immense pleasure to extend you a most cordial invitation to participate in the Campus Recruitment Programme of the Indian Institute of Technology (BHU), Varanasi. With an increasing thrust being placed on Institute-Industry Interaction, it is my sincere belief that your esteemed organization and IIT (BHU) Varanasi will stand to gain immensely from this symbiotic relationship.

Our Institute holds the pride of place being pioneer in the field of engineering and technical education in this country and has a glorious heritage. We have been continuously ranked amongst the elite by all peers and stakeholders. Our constant pursuit of excellence has made our institute a focal point in technical education for students and faculty members alike. Admissions to the institute take place through the reputed Joint Entrance Examination (JEE) and Graduate Aptitude Test in Engineering (GATE).

At this institute, we take utmost care to groom our students according to the needs of the industry. We seek to open frontiers of knowledge and reveal new horizons of change to broaden mindset and to create positive attitude in our students. Our students receive industrial exposure by their frequent industrial visits. Besides, our undergraduate students undergo an eight-week training during summer vacation in reputed industries/institutions/organizations (in India as well as abroad) as part of their academic requirements.

Brochure will provide brief profile of the Institute, as well as details of the various programmes/courses offered by the Departments and Schools including details of the contact persons. More details with regards to our placement policy can be had from our website. Please feel free to contact the Training & Placement Office should you require any further information/clarification.

We would be most delighted to host you for campus recruitment and beyond. I am looking forward to a mutually beneficial relationship.

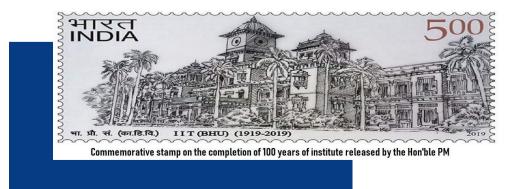
#### ABOUT DEPARTMENT OF CIVIL ENGINEERING



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. The formal sanction of the Visitor of the University to create this Dept. was received in 1956 and the B.Sc Engineering (Civil & Municipal) Degree was recognized by the Govt. of India in 1958. The department was rechristened to the present name in the year 1975.

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. It is particularly dedicating in providing solutions to the people of the country with technical solutions and guidelines.

It conducts short-term courses, training courses, seminars, workshops and conferences for enrichment in quality of students and entrepreneurs. 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 extracurricular and cultural activities so that there would be an holistic all round development of students. Also this society conducts a separate fest for the Civil Engineering Students, known as, Shilp.



### ABOUT M.TECH. PROGRAMME IN TRANSPORTATION ENGINEERING

Admission to this program is offered to GATE qualified/sponsored candidate through departmental level screening test/counseling.

This section provides students with a solid background on the principles of Transportation 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, Pavement design and materials testing. The lab is well equipped with latest equipment and software for both teaching and research purpose. 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.

#### COURSES OFFERED

- Pavement Materials
- Traffic Flow Theory
- GIS Applications in Transportation Engineering
- Transport and Environment
- Mathematics
- Transportation Economics
- Advanced Concrete Technology
- Advanced Numerical Methods
- Ground Improvement Methods
- Urban Transportation Systems Planning
- Highway Construction Practice
- Finite Element Method
- Pavement Evaluation, Rehabilitation and Maintenance
- Optimization Methods
- Transport and Environment
- Highway Geometric Design

#### CURRICULUM

#### **SEMESTER I**

- Pavement Materials
- Traffic Flow Theory
- GIS Applications in Transportation Engineering
- Transport and Environment
- Mathematics
- Laboratory Transportation **Engineering - 1**

#### SEMESTER II

- Analysis and Design of Pavements
- Urban Transportation Systems Planning
- Highway Construction Practice
- Pavement Evaluation, Rehabilitation and Maintenance
- Transport Economics
- Laboratory Transportation Engineering - 2

#### SEMESTER III

• Thesis

#### **SEMESTER IV**

- Thesis

## TRANSPORTATION ENGINEERING LABORATORY

This Lab has well-equipped laboratories for pavement materials testing and traffic engineering studies. These labs can also boast of some modern equipment. The latest addition to the Division is the computing facility, which houses some of the very latest equipment.These facilities not only enhance teaching, but are also of much value in the conduct of research and consultancy services.Equipments such as Computer driven testing system, Automatic Pavement Unevenness Integrator, In-situ Pavement Sampling and Testing Equipment, Bitumen Extraction and Processing Equipment, Materials Testing Equipment Traffic Engineering Laboratory, Marshall Stability Test Equipment with Digital Display and Graphic Plotter, etc.



## FACULTY PROFILE



#### DR. ABHISEK MUDGAL Assistant professor

**Qualification**: B.tech [Civil Engg.]- IIT Delhi, M.S.(Transportation Engineering)-Iowa State University,Ph.D.(Transportation Engineering, Minor in Statistics), Iowa State University

**Areas of Interest:** Vehicular Emissions and Health, Accident Analysis, Intelligent Transportation System and Sensors, Data Science in Civil Engineering Applications



#### DR. ANKIT GUPTA Assistant professor

**Qualification**: B.E.[Civil Engineering]-Govt Engineering College ,Kota, M.Tech.- IIT Roorkee, Ph.D.- IIT Roorkee

Areas of Interest: Pavement Performance Modeling, Pavement Material Characterization, Pavement Management Systems, Sustainable Pavements, Traffic Flow Modeling, Pedestrian Behavior Modeling, Road Safety



#### **PROF. BRIND KUMAR**

**Qualification**: B.E.[Civil Engg.]- NIT Suratkhal,

M.E.Madan Mohan Malaviya Engineering College- Roorkee University, Ph.D. -Madan Mohan Malaviya Engineering College **Areas of Interest**: Pavement Materials and Characterization, Analysis and Design of Pavements, Highway Construction Practice, Airfield Pavements (Civil & Military), Subgrade Soil Stabilization, Traffic Noise, Waterways



#### DR.NIKHIL SABOO ASSISTANT PROFESSOR

Qualification: B.Tech[Civil Engg]-West Bengal University of Technology, M.Tech- IIT-Kharagpur Ph.D- IIT Roorkee. Areas of Interest: Pavement Materials, Pavement Evaluation, Design and Analysis, Rheology of Asphalt Binders

## THESIS AREA 2020-21

- Transportation Economics
- Pavement Material Technology
- Pedestrian Traffic Analysis
- Pavement Cracks Analysis
- RAP Mix Design
- Highway Construction Practices



## Thornton Tomasetti

## RAMBOLL

## PAST RECRUITERS





# **ATKINS**

Our students have all of the skills and experience that you're looking for. Apart from the civil engineering subjects, our students are also taught various other courses which provide them with the upper hand in various situations.

Over the course, our students have also developed excellent communication skills. Our students have passed all the labs and subjects with flying colors and the projects they submitted were all quite impressive and provided innovative solutions to some major problems around us. They are well acquainted with various software used by civil engineers.

For the past few years the department of Civil Engineering has provided various firms with their most prized engineers, project managers, and even programmers. We raise our students to be more than just-engineers, we raise them to be the harbingers of positive change, we raise them to be the ones who help and guide others and at the same time are always ready to leam.

## WHY SHOULD You hire US?



#### HEAD OF DEPARTMENT PROF. PRABHAT KUMAR SINGH DIKSHIT

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#### DEPARTMENT PLACEMENT OFFICER PROF. VEERENDRA KUMAR

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### TRAINING AND PLACEMENT OFFICE

+91-542-2307007

- placement.iitbhu.ac.in
- M tpo@iitbhu.ac.in

For any queries, pleace contact department placement co-ordinators or TPO during office hours. For additional information on Department of civil engineering please visit : www.iitbhu.ac.in/civ