DEPARTMENT OF CIVIL ENGINEERING
BUNDELKHAND INSTITUTE OF ENGINEERING & TECHNOLOGY
(An Autonomous Institute)
JHANSI – 284128 (U.P.) India

Ref. No.: CED/BIET Jhansi/2025 –   **Dated:** November 20, 2025

Advertisement for the post of Junior Research Assistant (JRA) under the Council of Science and Technology, Uttar Pradesh Sponsored Project

Applications are invited for one post of "**Junior Research Assistant (JRA)**" at a fixed emolument of **Rs. 28,000/- (Rupees Twenty Eight Thousand Only/-) per month** for the **two years**, payable as per rule in the CST, UP-funded project (Project Id 6676) entitled *"Integrated Machine Learning Models for Bearing Capacity of Shallow and Deep Foundations"* sponsored by Council of Science and Technology (CST), UP for two years. The position is purely temporary and is coterminous with the project.

Name of Position	:	Junior Research Assistant (JRA)
Number of Position	:	01 (One)
Last Date of Application	:	December 04, 2025
Duration of Project	:	Two Year
Emoluments	:	Rs. 28,000/- Per Month for the Two Years
Essential Eligibility (As per Council of Science & Technology, U. P. General Information and Guidelines for Award of Research-Assistantship and Grant-in-aid Regulation – 1988)	:	1. B.E./B.Tech./M.Tech. in Civil Engineering with 1st Division (with strong background in Geotechnical Engineering/ Foundation Engineering). 2. Preference to candidates with M.Tech. (Completed) in Geotechnical Engineering, or Structural Engineering, or allied areas. 3. The applicant should be Indian Citizens who are resident of Uttar Pradesh. 4. The maximum age of applicant should be below 28 years as on 1st April 2025 (relaxation as per CST UP Norms).
Desirable Eligibility	:	• Expert hands-on with Deep Learning, Graph Neural Networks (GCN, GAT, GraphSAGE, Graph Transformers) and Explainable AI. • Strong proficiency in Python, TensorFlow, Scikit-Learn, or similar ML frameworks. • Experience with database handling, model training, and performance evaluation. • Working knowledge of PLAXIS, Abaqus, or other numerical simulation tools. • Prior research publications in relevant areas (Machine Learning, Soil Mechanics, Foundation Engineering) will be an added advantages. • Ability to assist in technical documentation and report preparation. • Strong problem-solving ability and motivation for research. • Good written and verbal communication in English. • Willingness to contribute to project deliverables and collaborate across institutions.

About the Role:

We are seeking a **highly motivated Research Assistant** to contribute to the **CST, U.P.-funded research project** titled **"Integrated Machine Learning Models for Bearing Capacity of Shallow and Deep Foundations."**

The project aims to develop **advanced machine learning and deep learning models** for accurately predicting the **bearing capacity of shallow and deep foundations**, integrating principles of **geotechnical engineering** with the power of **artificial intelligence**. This interdisciplinary research seeks to enhance foundation design practices through data-driven insights and explainable AI (XAI) frameworks.

The Research Assistant will have the opportunity to gain **hands-on experience** in:
- ✓ Designing, training, and optimizing machine learning and deep learning models for foundation engineering applications
- ✓ Implementing **explainable AI techniques** to improve model interpretability and reliability
- ✓ Performing data analysis, model validation, and comparative studies with conventional design approaches
- ✓ Collaborating with faculty members, research experts, and technical partners in an interdisciplinary environment

This position provides an exceptional platform to engage in **cutting-edge research** at the interface of **AI and geotechnical engineering**, contributing toward the development of **intelligent, sustainable, and reliable foundation systems**.

Application Procedure:

Interested candidates should submit their applications **in the prescribed format (Annexure–1)** affixing a **recent passport-size photograph**, along with the following documents:
- Proof of Age (preferably High School Certificate)
- Copy of Aadhaar Card
- Proof of Residence of Uttar Pradesh
- Self-attested copies of all mark sheets and certificates

The complete application must reach the **Principal Investigator** at the address given below **on or before December 04, 2025 (till 05:00 pm).**

Dr. Ashish Gupta
Associate Professor
Department of Civil Engineering
Bundelkhand Institute of Engineering and Technology Jhansi
Jhansi – 284128, Uttar Pradesh

Application proforma (**Annexure – 1**) can also be downloaded from the college website **https://www.bietjhs.ac.in.** Applicants can also send scanned copies of the application and all documents in a **Single PDF file** by email to the Principal Investigator at **ag.civil@bietjhs.ac.in.**

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General Terms and Conditions:

1. The position is purely temporary and is coterminous with the project.
2. The selection committee has the discretion to restrict the number of candidates to be called for the interview to a reasonable limit based on qualification and experience higher than the minimum prescribed in the advertisement.
3. Only shortlisted candidates will be communicated to appear in the interview. No other communication in this regard will be made.
4. The candidate is expected to join immediately, if selected.
5. No TA/DA will be paid if called for the interview.
6. The **self-attested copies** (or scanned, if sent by email) of all the relevant certificates/ documents need to submit along with the application.
7. Tentative date of interview is **December 05, 2025** at **03:00 PM**. Any change in date and time will be communicated accordingly.
8. For further clarification regarding the application process, the candidate can discuss with Principal Investigator over mail at **ag.civil@bietjhs.ac.in**

(Dr. Ashish Gupta) (PI)
Associate Professor
Department of Civil Engineering
BIET Jhansi

(Prof. Amitabh Kumar Srivastava) (Co-PI)
Professor
Department of Civil Engineering
BIET Jhansi

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BUNDELKHAND INSTITUTE OF ENGINEERING & TECHNOLOGY
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Application for Junior Research Assistant (JRA) Position
Department of Civil Engineering
Bundelkhand Institute of Engineering and Technology Jhansi – 284128 (U. P.)

1. Full Name   :
2. Date of Birth   :
3. Sex (Male/ Female)   :
4. Category (GENERAL/ SC/ ST/ OBC)   :
5. Marital Status (Yes/ No)   :
6. Physically Handicapped (Yes/ No)   :
7. Nationality   :
8. Name of Father   :
9. Name of Mother   :
10. Permanent Address   :

11. Correspondence Address   :

12. E-mail Address   :
13. Contact No.:   :
14. Educational Qualification   :

Examination	Name of School, College, University/Institute with city and state	Year of passing	Subject	Percentage of marks/ GPA obtained	Division	Remarks (If any)
High School						
Intermediate						
Diploma (if any)						
Graduation						
Post-Graduation						
Any Other						

15. Working Experience (If any)   :
16. Whether Currently Employed   :

Declaration

I hereby declare that I have carefully read and understood the instruction and particulars on this application and that all entries in this form as well as in the attached sheets are true to the best of my knowledge and belief.

Date: Signature: Place: