A holistic re-imagining of engineering education

The pedagogy project of Indian Institute of Technology Gandhinagar

We invite applications for the positions of a **Post Doctoral Fellow** for an engineering education research project at IIT Gandhinagar.

About the project

IITGN has designed a campus and community modeled to encourage its students to become socially, culturally, ethically and environmentally conscious engineers, capable of self-learning, taking responsibility for their own and others actions, and creative problem solving. This reflects in the ethos of the design and culture of the campus and its community. Given this unique synergy of culture and pedagogy on the IITGN campus, this research project investigates the effects of these features of the campus on the learning and identities of the students graduating from this institution. Teachers and administrators have implemented a range of pedagogical strategies over the years. The purpose of this project is to identify and document these strategies, study their impact, and inform the academic community about its results. In order to achieve these goals, we have the following position open within this project:

Post Doctoral Fellow (PDF) / Project Scientist (1 position)

- a. Minimum qualifications for the PDF:
 - PhD in (science/math/engineering) education, educational technology, cognitive science, learning sciences, data sciences, psychology or allied domains. The candidate should have demonstrable expertise in educational/social sciences research methods. (or)
 - PhD in science or engineering with experience in educational research or teaching experience and strong motivation to do educational research.
 - Candidates who have submitted their thesis, and are awaiting their defense, are encouraged to apply, provided they have the experience mentioned above.

Candidates having more experience or qualifications would be considered for the post of Project Scientist.

- **b. Job Description:** The selected candidate has to:
 - Survey existing literature to identify appropriate research questions.
 - Design appropriate qualitative and quantitative research studies to answer the various research questions of the project.
 - Design valid assessments, interview protocols, surveys and questionnaires for the respondents.
 - Coordinate and collect the appropriate data.
 - Analyze the collected data using suitable qualitative and quantitative methods.
 - Write scientific articles to be published in peer reviewed journals and conferences.

c. Remuneration: The fellows would be paid a monthly fellowship of INR 50000-65000 (depending on qualifications and experience) + INR 10,000 HRA (No HRA will be paid if the campus housing is availed)

d. How to Apply:

- Interested persons are requested to apply online <u>HERE</u>.
- You will need the following documents to fill the online application form:
 - Latest detailed CV
 - 500 word document describing your experience in educational research and how it will be helpful in HREE project as mentioned in the beginning of this document.
- No manual / Paper / Email application will be entertained.
- Read the instructions carefully and fill-in the online application form giving accurate information about your candidature.

e. Selection Process:

- Eligible candidates will be shortlisted based on submitted online applications and will be selected based on an interview.
- IITGN reserves all the rights, not to call an applicant for interview, without assigning any reason.
- The decision of the selection committee is final and binding to all. No queries related to the same shall be entertained.
- Fulfillment of "Minimum Qualifications" does not entail a call for an interview. The
 applications received in response to the advertisement shall be scrutinized and only
 candidates shortlisted from valid applicants, on the basis of better qualification and
 quality of relevant experience, shall be called for interview.

f. General Conditions and Instructions:

- Relaxation of educational qualifications will be considered in case of exceptionally meritorious candidates, with prior approval of IIT Gandhinagar.
- The candidate is liable to be rejected at any stage of recruitment process or after recruitment or joining if any information provided by the candidate is false or is not found to be in conformity with eligibility criteria mentioned in the advertisement.
- The E-mail ID entered in the online application form must remain valid for at least next one year. No change in the E-mail ID will be allowed, once entered. All future correspondence would be sent via Email only.
- IITGN reserves the right to cancel / restrict / enlarge/ modify / alter the recruitment process, if needed, without issuing any further notice or assigning any reason whatsoever.
- IITGN reserves the right not to select any candidate for the post(s).
- Incomplete applications will be summarily rejected.
- No interim correspondence will be entertained. Canvassing in any form shall lead to automatic disqualification.

g. Important Dates

Commencement of Online application through website: 17-Nov-2022 Last date of submitting online application through website: 28-Nov-2022