



At HafenCity University Hamburg, the following position will be available as soon as possible in the area of civil engineering

## **Research Associate (m/f/d) in the project “Next Generation City Networking” (NGCN)”**

Pay group 13 TV-L

to support the research with 100% of the regular weekly working hours. The position is limited till 31.12.2027.

### **About us**

The HafenCity University Hamburg, University of Architecture and Metropolitan Development (HCU) is a university that focuses on the built environment. The HCU unites all aspects of building and design, engineering, and natural sciences as well as geoscientific and social sciences under one roof.

The German Center for Mobility of the Future (DZM), funded by the Federal Ministry for Digital and Transport (BMDV), brings together expertise from science, industry, society, and public administration, contributing to mobility research across four research and innovation hubs. Hamburg, with the HafenCity University Hamburg (HCU) as the network coordinator, is one of the four funded locations nationwide. The Hamburg project site, the Hanseatic Wireless Innovation Competence Center (HAWICC), conducts interdisciplinary and transdisciplinary projects ranging from fundamental research to application-oriented research and development. HAWICC focuses on the built environment of mobility, including infrastructure in conjunction with wireless technologies and artificial intelligence (AI). Through close collaboration with other DZM locations across Germany (e.g., Karlsruhe Institute of Technology (KIT)), a nationwide network is being established, offering medium- and long-term benefits to the position holder.

The overarching initiative, Next Generation City Networking (NGCN), is the second sub-project within HAWICC. It involves interdisciplinary collaboration between nine professorships/departments at the HafenCity University Hamburg (HCU) and Hamburg University of Technology (TUHH). In addition, partners from industry and society are also involved. The NGCN project, with the HCU as the consortium leader, contributes to the infrastructure side of mobility by integrating novel wireless technologies and AI.

For a specific use case—route optimization for emergency vehicles—as well as for overarching objectives in planning the city of short and fast routes, a digital twin of an urban district is being developed. This twin merges static and dynamic data to create a real-time urban traffic situation model.

The position is assigned to the Professorship of Prof. Dr.-Ing. Youness Dehbi.

Here you can find more information about [HCU](#) and the [Arbeitgeberin Freie und Hansestadt Hamburg](#).

### Your tasks

- development of a digital, semantic 3D city model with sensor information
- design of an AI-based toolbox with analysis and simulation tools for optimizing traffic control
- provision of suitable methods and instruments for supporting interactive decision making in urban and mobility planning

### Your profile

#### mandatory requirements

- an academic university degree (master's degree or comparable) in (geo-)Informatics, geodesy, or a comparable field of study
- strong programming skills, e.g., in Python

#### additional requirements

- familiar with machine learning methods
- teamwork skills, sense of responsibility, and goal orientation
- strong communication skills

### Benefits

- workplace at an attractive location in HafenCity
- varied work in a university environment in cooperation with international scientific partners
- a family-friendly university that supports its employees in balancing work and family life
- support for professional and personal development through a wide range of training and continuing education opportunities
- other benefits such as discounts in the student union canteens

## Contact

For questions and further information, do not hesitate to contact Prof. Dr.-Ing. Youness Dehbi, at +49 (0) 40 428 27-5328.

The applicant's classification regarding the level of experience within the advertised TV-L pay group is based on the candidate's individual work experience and is reviewed by the HR department. Legally binding statements can only be made by the HR department of the HCU.

Please send your application (including CV, cover letter, and copies of relevant certificates), no later than **28.02.2025** (preferably by email as one PDF file) to:

HafenCity Universität  
Personalverwaltung  
Stellen-Nr.: 2025-16  
Henning-Voscherau-Platz 1  
20457 Hamburg  
E-Mail: [HCU-bewerbung@vw.hcu-hamburg.de](mailto:HCU-bewerbung@vw.hcu-hamburg.de)

Please include the reference number „**2025-16**“ in your application.

Please be aware that in case of an invitation to an interview, HCU will not be able to cover any expenses for travel and lodging.

Due to the high number of applicants, the HCU will not be able to return application documents. Therefore, please do not submit originals of certificates. If you add a post-paid envelope, the HCU will return your application documents.