

# **The University of British Columbia**

## **Department of Civil Engineering**

### **Assistant Professor in Civil Engineering** **Specialization in Carbon Neutral Infrastructure**

The Department of Civil Engineering at the University of British Columbia – Vancouver campus ([www.civil.ubc.ca](http://www.civil.ubc.ca)) invites applications for a tenure-track faculty position at the rank of Assistant Professor in Civil Engineering with a focus on Carbon Neutral Infrastructure. This position is part of the UBC's President's Academic Excellence Initiative (PAEI) within the Faculty of Applied Science. The successful applicant should demonstrate a commitment to excellence in research, teaching, and service.

The anticipated start date is July 1, 2025 or upon a date to be mutually agreed. Salary will be commensurate with qualifications and experience, and in the range \$125,000 – 150,000/year. The position is subject to final budgetary approval.

#### **PAEI background**

This position is part of the University of British Columbia's President's Academic Excellence Initiative (PAEI) within the Faculty of Applied Science. This cluster hire within the Faculty aims to build a community of scholars ready to challenge and create fresh ways of generating and applying impactful knowledge in areas related to the theme of this cluster – Revolution in the Cycle: Transforming the Product Lifecycle for Global Good.

#### **The Position**

The Department of Civil Engineering at the University of British Columbia seeks to hire a tenure-track Assistant Professor in Civil Engineering with a focus on Carbon Neutral Infrastructure. This position aims to support the Department's commitment to developing sustainable and carbon-neutral infrastructure solutions. Recognizing the significant carbon footprint of civil infrastructure, this position will adopt a systems-level approach to its design and maintenance, aiming towards a net-zero carbon footprint. This research program will focus on technologies and strategies for reducing the carbon footprint of civil infrastructure. Key areas of interest include, but are not limited to:

- Advanced structural materials with reduced carbon footprint.
- Durable and resilient infrastructure with reduced life-cycle carbon emissions.
- Developing and maintaining net-zero infrastructure via policy directives, codes and standards.
- Advanced repair and strengthening technologies to prolong the service life of infrastructure.
- Research in smart materials, sensors, cyber-physical networks, and structural health monitoring.
- Hybrid infrastructure combining natural (or nature-based) and structural components.

The successful candidate will be expected to develop an independent, internationally recognized research program, contribute to high quality undergraduate and graduate teaching and effective supervision of graduate students, and provide service to the University and the broader community.

### **Applicant Qualifications**

The successful candidate will:

- Hold a Ph.D. in Civil Engineering or a closely-related field.
- Be registered, or be eligible for registration within five years of appointment, as a Professional Engineer (P.Eng.) with [Engineers and Geoscientists, British Columbia](#).
- Have evidence of or demonstrated potential to develop a strong externally funded research program.
- Have evidence of or demonstrated potential for high-quality undergraduate and graduate teaching, along with the ability to provide effective supervision of graduate students.
- Have demonstrated commitment to provide service to the academic and broader community.
- Have demonstrated ability to contribute to the Department's equity, diversity, inclusion, and Indigeneity initiatives, and to promote an inclusive, collaborative, and respectful community.

### **Application Process**

All applications must be submitted [online](#) and should include:

- A brief cover letter describing one's suitability for the position,
- A curriculum vitae,
- A statement of research interests,
- A statement of teaching interests,
- A statement describing planned and past efforts to advance equity, diversity, inclusivity, and/or reconciliation with Indigenous peoples,
- Names and contact information (including email addresses) of four referees.

Review of applications will commence on November 01, 2024 and will continue until the position is filled.

### **The Department and Faculty**

The Department of Civil Engineering at the University of British Columbia-Vancouver is a top-ranked academic unit, with a reputation for excellence in research and teaching, and strong links to professional practice. As a Department, our [strategic priorities](#) are to ensure civil and environmental engineering education and research creates opportunities for the betterment of society, nature, and the built environment. In doing so, we are committed to the following: 1) fostering inclusive work, research and learning environments where respect for equity, diversity, and inclusion is embedded throughout; 2) building meaningful, sustainable, and supportive

relationships and partnerships with Indigenous communities, 3) leading cutting-edge research that addresses increasingly complex global challenges, 4) transforming education to equip the next generation of civil engineers with innovative problem-solving and technical knowledge to thrive in a diversity of careers; and 5) delivering dynamic and integrated learning experiences that inspire students to become equitable and informed leaders who will advance the boundaries of engineering knowledge.

As part of the Faculty of Applied Science at UBC, our Department benefits from collaboration across a distinctive constellation of disciplines, with expertise and academic programs in health, technology, design and communities at both the UBC Vancouver and UBC Okanagan campuses. The Faculty consists of four Schools: Nursing; Architecture and Landscape Architecture; Community and Regional Planning; and Biomedical Engineering (in partnership with Medicine); and six engineering departments: Chemical and Biological Engineering; Civil Engineering; Electrical and Computer Engineering; Mechanical Engineering; Materials Engineering; and Mining Engineering. The Faculty's core purpose is to discovery, design, innovate, provide unwavering top-tier education, and champion a community of responsible and inclusive professionals. The Faculty's Strategic Plan, [Transforming Tomorrow](#), prioritizes transforming ourselves, so our scholarship and learning is better able to address the urgent challenges facing communities and cities, near and far.

### **Career Interruptions**

UBC acknowledges that certain circumstances may cause career interruptions that legitimately affect an applicant's record of research achievement. We encourage applicants to note in their applications whether they would like consideration given to the impact of any such circumstances due to health, family, or other legitimate reasons in order to allow for a fair assessment of their research productivity.

### **Commitment to Accessibility and Accommodations**

The University is committed to creating and maintaining an accessible work environment for all members of its workforce. An inclusive work environment presumes an environment where differences are accepted, recognized, and integrated into current structures, planning, and decision-making modes. Within this hiring process we will make efforts to create an accessible process for all candidates (including but not limited to disabled people). Confidential accommodations are available on request, please contact [hr@civil.ubc.ca](mailto:hr@civil.ubc.ca). To learn more about UBC's Center for Workplace Accessibility, visit their website [here](#).

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents of Canada will be given priority.

*We respectfully acknowledge that the UBC Vancouver-Point Grey academic campus is located on the traditional, ancestral, unceded territory of the x<sup>w</sup>məθk<sup>w</sup>əy̓əm (Musqueam), and UBC operations in Vancouver more generally are also on the territories of the Skwxwú7mesh (Squamish) and sə́ilwətaʔt (Tseil-Waututh).*