

Faculty of Engineering & Computer Science | Department of Mechanical Engineering Engineering Office Wing Room 548 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada T 250-721-8895 | F 250-721-6051 | uvic.ca/engineering/mechanical

Faculty Position for Assistant Teaching Professor in Engineering Design

The Department of Mechanical Engineering invites applications for a faculty position at the rank of Assistant Teaching Professor to begin ideally in September 2025. The Faculty and Librarian Collective Agreement has provisions for the promotion of Teaching Stream faculty members into a tenured position. **Candidates must be a licensed professional engineer (P.Eng.) in Canada or have a clear and established pathway to registration** with a personal commitment to acquiring licensure with Engineers and Geoscientists of British Columbia as soon as possible.

The Department seeks an engineer with experience leading design teams and driving innovative product development, to augment our existing team of engineering-design-centric teaching and research faculty.

This faculty position's primary responsibility is the continuing improvement and delivery of the undergraduate capstone design project experience in the Mechanical Engineering BEng program. The capstone project is an 8-month project-based learning experience in the final year of undergraduate study in which teams of 3-4 students design technical solutions to problems presented by clients from industry, academia and the local community.

In the capstone project, students undertake an open-ended design challenge, to develop it into a proofof-concept final design through a creative, yet structured, team-based design process. This course is critical to developing engineering judgement and proficiency in the use of engineering tools (including software and hardware) to produce detailed engineered solutions to contemporary problems and is an important bridge connecting undergraduate study to professional practice. Leveraging previous experience, the successful candidate will provide unique insights and mentorship for capstone project students.

The successful candidate will also work closely with Faculty's Assistant Dean Community and Culture, as well as the Chairs and staff in the Mechanical, Electrical and Computer and Civil Engineering Departments, to support student engineering competition team activities. Competition team activities are student driven but make use of facilities and equipment provided by the faculty, and technical guidance provided by faculty advisors. This new position will provide additional design mentorship for the student competition teams, direction to suitable standards and safety procedures and coordination and oversight of some laboratory of field-testing activities.

The successful candidate will:

- hold a Bachelor degree in Mechanical Engineering or a closely-related discipline. A graduate degree from a project or thesis-based degree program in a related engineering discipline would be considered an asset
- have a demonstrable track record of achievement in industry-based design engineering
- have excellent project management skills
- experience in the identification and application of codes and standards in the practice of engineering design
- have a proven ability to lead design teams of diverse and multi-disciplinary members.
- have potential to excel in guiding undergraduate project-based learning activities. This may be evidenced by:
 - o previous supervisory, mentoring and/or teaching experiences

- an extensive professional network, and an ability to conduct effective outreach that will support industry project solicitation
- technical proficiency with engineering design and prototyping tools
- excellent interpersonal skills with ability to supervise design activities in face-to-face and remote (online) modalities
- ability to create an inclusive work environment that encourages a diversity of perspectives and insights within the design process
- be familiar with mechanisms to manage intellectual property in industry driven design projects

Responsibilities of the position include:

- collaborate with the Faculty's Community Partnerships Officer to expand and maintain a network of industry/community stakeholders that support a continuous intake of industry/community motivated design project proposals
- develop learning activities and assessment strategies related to the design process, project management, teamwork and written/oral communication
- collaborate with Faculty and staff members in the engineering design team to improve design outcomes for UVic Mechanical Engineering students.
- coordinate with the Department's Head Machinist in regards to prototype fabrication services for undergraduate student projects and student competition teams
- work with faculty colleagues to identify opportunities to secure funding to support student design activities
- work with the Department's Lab Manager to oversee student use of the various design spaces, including establishing appropriate safety training procedures and related internal certifications for equipment access
- contribute to processes related to program accreditation led by the Faculty's Accreditation Officer
- work closely with Faculty's Assistant Dean Community and Culture to support student team activities and seek ways to incorporate team activities into the capstone experience

The candidate's qualifications, experience, overall market demand and rank will determine a candidate's final salary offer. The salary for this position includes a competitive salary range of \$115,930 - \$143,208. UVic is committed to offering an equitable and competitive salary, inclusive of a generous benefits package, eligible leaves and pension plan.

The Department of Mechanical Engineering at the University of Victoria offers Bachelors, Masters, and Ph.D. degree programs. We have 27 faculty members, including two Canada Research Chairs, over 550 undergraduate students, and over 130 graduate students. Industrial collaboration enriches our teaching and research activities, and our expertise in Clean Energy Systems, Advanced Vehicles, Aerospace, Biomedical Systems, Mechatronics and Robotics is demonstrated in vibrant undergraduate and graduate curricula that expose our students to cutting-edge engineering tools, technologies and systems. With an excellent collegial atmosphere and strong collaborative spirit, the Department empowers faculty and staff who innovate modes of course delivery, champion project based and experiential learning and enrich the student learning experience across all years of our degree programs. For our faculty, teaching and mentorship extend beyond the classroom as our students participate in various team-based extra- curricular learning activities culminating in international competitions. Our faculty contingent includes winners of institutional, provincial and national awards for teaching excellence. Information on the Department can be found on the web at http://www.uvic.ca/engineering/mechanical/

UVic is committed to upholding the values of equity, diversity, inclusion and human rights in

our living, learning and work environments. In pursuit of our values, we seek members who are eager to actively participate in that shared responsibility. We actively encourage applications from members of historically and systemically marginalized groups. Read our full <u>equity statement</u>. The University of Victoria community acknowledges with respect the Lkwungen-speaking peoples on whose traditional territory the University stands, and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day. University of Victoria (<u>http://www.uvic.ca/</u>) is situated in the City of Victoria, the capital of British Columbia, at the southeast tip of Vancouver Island. Founded in 1963, the University has developed into one of Canada's leading universities with a reputation for excellence in research and teaching.

The University acknowledges the potential impact that career interruptions can have on a candidate's record of research achievement. We encourage applicants to explain in their application the impact that career interruptions have had on their record. Persons with disabilities, who anticipate needing accommodation for any part of the application and hiring process, may contact Faculty Relations and Academic Administration in the Office of the VP Academic and Provost at FRrecruit@uvic.ca. Any personal information provided will be maintained in confidence.

All qualified candidates are encouraged to apply; in accordance with Canadian Immigration requirements, Canadians and permanent residents will be given priority. Please indicate in your application package if you are a Canadian citizen or permanent resident.

To be considered, candidates should submit a single PDF document that includes:

- a cover letter providing an overview of the candidate's qualifications, and
- a resume that provides a comprehensive record of all relevant educational and work experiences.

Upon being shortlisted, candidates will also then be asked to provide:

- a maximum 2-page statement outlining their previous experiences leading engineering design teams, as well as their most significant accomplishments in those roles.
- a maximum 1-page statement outlining their philosophy in regards to fostering inclusive working environments that support a diversity of backgrounds, perspectives and insights in design activities.
- contact information for three referees.

To be considered, please submit your application package via email to: <u>mech.asst.chair@uvic.ca</u>, with the subject line "MECH Engineering Design ATP Position" before end of day, **17 March 2025**.

Applications should be addressed to:

Dr. Brad Buckham Professor & Chair, Department of Mechanical Engineering University of Victoria PO Box 1700 STN CSC Victoria, BC, Canada V8W 2Y2

Faculty and Librarians at the University of Victoria are governed by the provisions of the Collective Agreement. Members are represented by the University of Victoria Faculty Association (<u>www.uvicfa.ca</u>).

Please note that reference and background checks, including credential and degree verification, may be undertaken as part of this recruitment process.