

Positions for full-time and part-time instructors
Faculty of Applied Science – School of Engineering

The University of British Columbia, Faculty of Applied, School of Engineering

The School of Engineering at the University of British Columbia, Okanagan invites applications for Sessional Lecturer positions.

Location

UBC's Okanagan campus is situated in Kelowna on the unceded lands of the Okanagan people, and Kelowna is surrounded by agricultural areas, lakes, forests, and mountains. Kelowna is a four-season playground for a diversity of outdoor activities.

Our values

Our work is shaped by our values: professionalism and integrity; scholarship and teaching excellence; commitment to students; partnerships and collegiality; initiative, innovation, and willingness to change; community, the environment, and sustainability. We hold these values as an integral frame of reference to inform our decisions and actions at every level and in every situation. The ideal candidate will have a strong commitment to Indigenous engagement. As part of the University's response to the Truth and Reconciliation Commission's Calls to Action, UBC Okanagan has committed to supporting and implementing five key commitments, which can be found at <https://ok.ubc.ca/about/indigenous-engagement/>

Winter - Term 2 (January 1, 2025 – April 30, 2025)

APSC 178 (3) Electricity, Magnetism, and Waves

Electric fields and forces, electric potential, capacitance, DC circuits, magnetic fields and forces, Faraday's law, inductance, waves, light, and optics.

APSC 258 (3) Applications of Engineering Design

Principles of engineering design, applied to a team-based design project. Use of probability, programming, decision making, economic principles, systems theory, and technical communication in design projects.

APSC 201 (3) Technical Communication

Written and oral communication in engineering. Report preparation, business correspondence, and oral presentation of technical material. Principles of communication with Indigenous communities.

APSC 262 (3) Digital Logic Design

Logic design methods, hardware description language (HDL), number representation and arithmetic circuits, combinational circuits, flip-flops, registers, programmable logic devices (FPGAs), counters, finite state machines, digital system designs.

Preferred applicants will have P.Eng

CMPE 246 (3) Computer Engineering Design Studio and Course Development (Term 1)

Embedded systems programming, App development for Internet of Thing applications, Microprocessor Programming

ENGR 332 (3) Surveying and GIS Analysis

Theory and application methods for measuring and representing objects of interest on, below, and over the earth's surface, and for analyzing data to meet engineering design and operational objectives driven by socio-economic or environmental concerns of natural and engineered systems.

ENGR 362 (3) Digital Signal Processing I

Discrete-time signals and systems, difference equations, sampling and aliasing, decimation and interpolation, quantization errors, z-transform, discrete Fourier transform, fast Fourier transform, implementation of discrete-time systems, finite and infinite impulse response filter design.

Preferred applicants will have P.Eng

ENGR 402 (3) Biotechnology: Fundamentals and Applications

Basics of biotechnology, DNA and RNA technologies, nanobiotechnology, medical biotechnology, and ethics in biotechnology.

ENGR 512 (3) Signals, Systems, and Inference

Review of signals and systems basics; LTI state-space methods; probabilistic models and estimation of random variable; hypothesis testing rules; random processes and power spectral density; signal estimation based on linear minimum mean square error principle; signal detection in i.i.d. Gaussian noise and colored noise.

Review of above applications will commence on October 14, 2024. The positions will remain open until filled.

Applicants must have a Master's or Ph.D. in an engineering discipline and have post secondary teaching experience.

Eligibility: A student completing their master's degree will normally not hold an appointment to teach. A doctoral student at UBC who has been admitted to candidacy may hold an appointment to teach, with a limit of a total of nine credits of teaching over the duration of the degree. A doctoral candidate whose program has been extended will not normally be eligible to teach.

<https://gradstudies.ok.ubc.ca/policies-procedures/student-employment/#item3>

Duties will include teaching, holding regular office hours, marking all assignments and exams, and reporting grades.

With the letter of application, candidates should include a Curriculum Vitae (C.V.), which includes a current home address and phone number, and teaching evaluations (where available). The C.V. must include a detailed list of all post-secondary courses taught, including: course title, credit-value, course delivery dates and degree of responsibility for the course. Applicants should also include a minimum of two referees with addresses and phone numbers. Please reference the course(s) that you are applying for.

All positions are subject to funding and are governed by UBC's "Agreement on Conditions of Appointment for Sessional and Part-time Faculty Member."

Please e-mail application materials to the School of Engineering via email to recruitment.apsc@ubc.ca. Documents must be submitted in electronic format as e-mail attachments. Acceptable formats include Microsoft Word (.doc) and Adobe Acrobat (PDF).

"Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been under-represented 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."