

Engineering

Department Overview

Langara offers two Engineering programs. The [Engineering Transfer Certificate](#) is a BCCAT-articulated program that offers courses to match the first year of engineering study at the University of British Columbia. Those courses satisfy UBC's Faculty of Applied Science requirements for engineering transfer classification when completed in the regular, two-semester academic year. The two-year [Applied Science for Engineering Diploma](#) includes upgrading and preparatory courses and is aimed at students who are interested in Engineering but do not (or only minimally) meet the Engineering Transfer prerequisites.

Self-Study

Engineering launched its program review in academic year 2019/20 with a Self-Study. Csilla Tamas, the Engineering Coordinator, was the primary Self-Study writer. Additional support was provided by:

- Robin Macqueen (Division Chair, Applied Science)
- Gerda Krause (Dean, Faculty of Science)
- Sunita Wiebe (Director, Office of Academic Quality Assurance)
- Institutional Research analysts

Data sources for the Self-Study included:

- Institutional Research-compiled student administrative data (*e.g.*, headcounts, retention, satisfaction)
- Student survey
- Alumni survey
- Faculty survey

The Self-Study was completed in March 2020.

External Review

Engineering's External Review took place on April 22, 2020. The External Review Team consisted of:

- Brian Dick, PhD, Physics, Engineering and Astronomy, Vancouver Island University (External Review Chair)
- Atousa Hajshirmohammadi, Engineering Science, Simon Fraser University
- Kathryn Nairne, Applied Planning, Langara

Action Plan Goals

In response to the Self-Study and External Review, Engineering created an Action Plan with these goals:

- Goal 1: Enhance student pathways (transfers/articulation) and curriculum.
- Goal 2: Establish and enhance external connections.
- Goal 3: Enhancing the student recruiting process and student engagement/experience.
- Goal 4: Creating community and identity within the engineering cohort and its instructors.

Examples of Post-Review Successes

Curriculum mapping is underway. CPSC 1091: Engineering Design and Drafting, and CPSC 1491: Control Systems and Sustainable Engineering Design have been articulated to the universities. The Engineering Transfer Certificate courses are now aligned with the Common First-Year Engineering curriculum.

Engineering Career talks take place on a semi-annual basis with diverse speakers. Tri-mentoring pilot programs for female engineering students have been run successfully.