School of Engineering

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A School within the Faculty of Applied Science

Associate Dean and Director's Offices
Rehan Sadiq, Associate Dean
Mina Hoorfar, Director
The University of British Columbia
Okanagan Campus
Engineering, Management & Education Building
1137 Alumni Avenue
Kelowna, BC V1V 1V7
Tel: 250.807.8723
Fax: 250.807.9850
Email: engineering.okanagan@ubc.ca
Web: www.ubc.ca/okanagan/engineering/welcome.html

The School of Engineering at the UBC Okanagan campus offers the Bachelor of Applied Science (B.A.Sc.) degree in Civil Engineering, Electrical Engineering, and Mechanical Engineering. Each program is accredited by the Canadian Engineering Accreditation Board. The School also offers a Bachelor of Applied Science (B.A.Sc.) degree in Manufacturing Engineering. Qualified applicants can be admitted directly from secondary school into Engineering One. Students may also enter the Engineering program after having successfully completed the equivalent of first-year Science. There are also admission routes via engineering transfer programs at various colleges and Engineering Bridge programs with Okanagan College and Camosun College.

Following entry from secondary school, the B.A.Sc. degree generally requires four or five years to complete.

The first-year program is common to all Engineering disciplines and lays the foundation for Engineering specializations in subsequent years. It is equivalent to first-year Engineering at the UBC Vancouver campus. The engineering-specific curriculum emphasizes project-based team learning, and offers first-year students the opportunity to implement the principles of engineering in a second-term design project. Upon successful completion of year one, students have the option of continuing at the UBC Okanagan campus in the second year of the integrated program or transferring to the UBC Vancouver campus. Students who elect to transfer compete for program spaces with students at the UBC Vancouver campus and limited seats are available.

Scheduled field trips and the activities of professional and technical societies complement the undergraduate programs, and students are expected to participate in them as fully as circumstances permit.

An optional Co-operative Education program, which integrates academic study with supervised work experience, is available during the second year.

Bachelor of Applied Science Program

Bachelor of Applied Science Program > Admission Requirements

Application for admission to the School of Engineering must be made through Enrolment Services. Procedures, policies, and admission requirements of UBC and the School of Engineering are specified in Admissions.
Due to limited resources, the School has been authorized to restrict enrolment in year one and within individual Engineering programs at the second-year level. Attainment of the minimum academic requirements listed below implies that the applicant is eligible for selection, but does not provide assurance of admission. The selection is based on academic standing. For most Engineering programs, the competition for places is such that standing above the minimum prescribed requirements is necessary to ensure admission.

**Note:** proficiency in mathematics is an important part of preparing for Engineering courses. Experience has shown that UBC students with grades below 65% in mathematics (below B at a college) are likely to have difficulty with many Engineering courses.

**Admission from BC/Yukon Grade 12 (or equivalent)**

In addition to satisfying University admission requirements, applicants must have completed mathematics, physics, and chemistry at the British Columbia Grade 12 level, or the equivalent. Students will be selected on the basis of their standing in Grade 12 courses in mathematics, chemistry, physics, and English. Applicants from schools where either Physics 12 or Chemistry 12 is not available may petition to be excused this deficiency.

**Admission from a Post-Secondary Institution**

Applicants from another faculty at UBC or another post-secondary institution may be considered for admission to the School of Engineering. An overall average of at least 65%, including any failed courses, is required. The overall average is calculated in accordance with the general admission requirement for undergraduate admission as specified in Applicants from a College or University (http://www.calendar.ubc.ca/okanagan/index.cfm?tree=2,344,0,0).

Applicants must also have an average of at least 70% in all chemistry, mathematics, and physics courses that transfer to the first-year Engineering program. Courses to be considered in this average of mathematics, chemistry, and physics courses are not limited to the last 30 credits only. Where two courses, or one repeated course, have been taken which transfer to one of the courses of the first-year engineering program, only the grade of the latest course will be used in calculating this average.

Admission to the Engineering program is competitive. Applicants who meet all of these criteria are not guaranteed admission.

Applicants with fewer than 24 transferable credits from a post-secondary institution are evaluated against both secondary and post-secondary admission criteria.

Applicants with more than 24 credits that transfer to first-year Engineering may be eligible for second-year Engineering. Advice on transfer credit is available from the School of Engineering. Deficiencies from first year must be completed prior to graduation.

Students admitted to second year must complete a Second-Year Program Preference Form by June 15.

**Admission from UBC Engineering Transfer Programs**

Students who have completed first-year Engineering at a college offering a UBC transfer program are eligible to be considered for admission to second-year Engineering provided that they have obtained an overall grade average of at least 65%.

**Transition from UBC Vantage College**

The Faculty of Applied Science delivers engineering programs at both UBC campuses: Okanagan and Vancouver. The Faculty has
UBC Vantage College students who pass all courses in the Engineering stream with an average of at least 60% will be eligible for year two of the BSc degree program.

Program selection is competitive, and all students will be asked to rank both their preferred campus and their eligible program.

Academic performance at the end of the winter session and a personal statement are considered in placing students into programs in second year. Students who do not successfully complete the full UBC Vantage College Engineering Stream or who achieve an average lower than 60% in the full program can be reapplied to be reviewed on a case-by-case basis for evidence of academic promise for continued study in Engineering at UBC. The UBC Vantage College Engineering Stream is not equivalent to the direct entry BSc first year program. Therefore, successful completion of the Vantage College Engineering Stream will result in eligibility for second year standing, there are program requirements normally completed in first year that will not have been met and that must be completed prior to graduation. Please consult here for details on Vancouver Engineering programs and here for details on Okanagan Engineering programs.

Students must complete the following courses by the end of their first year in Engineering, including at least 65 credits from the Okanagan campus and the remaining 35 credits from UBC Vancouver. The courses for the Vantage College Engineering Stream must be completed before the student has any credit towards an Engineering degree program.

Details of the specific courses conforming to the above requirements are available from the Faculty of Applied Science.

Students may appeal year standing decisions to the Faculty of Applied Science Committee on Admissions, Standing, and Courses.

Promoted to the subsequent year, students must have completed all courses from the prior year and at least 27 credits from the current year. Readmission after that year.

Students who fail a year will be required to discontinue studies in the School for at least one year, but are eligible to apply for readmission after that year. Students who fail a second time will be required to withdraw. In a failed year, students will be granted credit for all courses passed and the required number of credits will be used to determine eligibility for readmission.

Applications for special consideration for examinations missed due to a medical condition, emotional or other problems, or religious observance must be submitted to the Engineering Student Services office before or immediately after the missed examination(s). For more information, see Academic Concession (Calendar page: Scholarships and Awards).

Students transferring into the program may be granted transfer credit if they have completed courses of equivalent content.

Bachelor of Applied Science Program > Academic Advising

Academic advising is available through Engineering Advising. Engineering Advising assists students in academic planning, interpreting Faculty course requirements and regulations, and resolving academic and personal problems.

Bachelor of Applied Science Program > Academic Regulations

Dean's Honour List Students in any Winter Session with a semester average of at least 80% while taking 30 or more credits will receive the notation "Dean's Honour List" on their record. A student with a semester average of at least 85% while taking 30 or more credits will be granted a Dean's Honour List for the Winter Session. A student with a semester average of at least 90% while taking 30 or more credits will be granted a Dean's High Honour List for the Winter Session. Students transferring into the Third Year of the B.Sc. program must complete a minimum of 60% of the standard credit load for the year and program in which they are registered. Note: The Faculty's definition of full-time status may differ from that of the Student Financial Awards office in determining eligibility for financial assistance. Check with the Student Financial Services and Financial Support (http://appleton.ad.students.ubc.ca/okanagan/index.cfm?tree=3,48,0,0#11831) to ensure eligibility for scholarships and awards.

Students with a two-year diploma in Civil, Electronic, or Mechanical Engineering Technology from Okanagan College or Camosun College may be granted a maximum of 30 credits. Students with a two-year diploma in Civil or Mechanical Technology may be admitted to the third year of the B.A.Sc. program in Civil Engineering or Mechanical Engineering upon successful completion of an Engineering Bridge program offered by Camosun College. Students must achieve a minimum of 60% in each course and an average minimum of 65% in all courses to be considered for admission to the B.A.Sc. program. Admitted students will be required to take additional UBC Okanagan campus courses from a list provided by the School of Engineering to fulfill the remaining B.A.Sc. degree requirements. Typically, students admitted from a Camosun College Engineering Bridge program will require two and a half years of additional study at UBC Okanagan to complete the B.A.Sc. degree requirements. Admission from Camosun College Engineering Bridge Programs to Civil or Mechanical Engineering Students with a two-year diploma in Civil or Mechanical Technology may be admitted to the third year of the B.A.Sc. program in Civil Engineering or Mechanical Engineering upon successful completion of an Engineering Bridge program offered by Camosun College. Students must achieve a minimum of 60% in each course and an average minimum of 65% in all courses to be considered for admission to the B.A.Sc. program.

Admission To the pass the year, students must obtain an overall average of at least 55% in the Winter Session, and a pass in 65% of credits taken. Students who fail a year will be required to discontinue studies in the School for at least one year, but are eligible to apply for readmission after that year. Students who fail a second time will be required to withdraw. In a failed year, students will be granted credit for all courses passed. Students who withdraw due to a medical condition, emotional or other problems, or religious observance must be submitted to the Engineering Student Services office before or immediately after the missed examination(s). For more information, see Academic Concession (Calendar page: Scholarships and Awards).

Bachelor of Applied Science Program > Degree Requirements

Students will be granted a B.Sc. degree only after obtaining credit for all courses listed in the program of study for a given Engineering program. This requirement will normally be met by completing four Winter Sessions with full credit load (five Winter Sessions if completing the Co-operative Education program). With the approval of the Dean's Office, students may be advised to study on a part-time basis. Credit will be granted for courses completed during the Summer Session. Students admitted to the Engineering Program at the Okanagan campus may be granted credit for courses completed during the Summer Session. Addendum: Students who have completed a two-year diploma in Biology, Chemistry, or Chemical and Biological Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Geological Engineering, Integrated Engineering, Materials Engineering, Mechanical Engineering, or Mining Engineering. Admission to a selected program is dependent on performance in first year.

Students proceeding to second year will have the option of continuing their Engineering program at the UBC Okanagan campus in Civil Engineering, Electrical Engineering, Manufacturing Engineering or Mechanical Engineering, or transferring to the UBC Vancouver campus (this will only be available to the following programs: Bio-Biomolecular Engineering, Chemical and Biological Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Geological Engineering, Integrated Engineering, Materials Engineering, Mechanical Engineering, or Mining Engineering). Admission to a selected program is dependent on performance in first year.

Bachelor of Applied Science Program > Years 1 and 2

First Year Students admitted into the Engineering program directly from secondary school will take the first-year Engineering curriculum. Other students will need to contact Engineering Advising for advice on their first-year program. Students proceeding to second year will have the option of continuing their Engineering program at the UBC Okanagan campus in Civil Engineering, Electrical Engineering, Manufacturing Engineering or Mechanical Engineering, or transferring to the UBC Vancouver campus (this will only be available to the following programs: Bio-Biomolecular Engineering, Chemical and Biological Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Physics, Geological Engineering, Integrated Engineering, Materials Engineering, Mechanical Engineering, or Mining Engineering). Admission to a selected program is dependent on performance in first year.
Criteria must be met and include completion of 37 credits of first year UBC Okanagan Campus Applied Science. The admission process is competitive, with limited seats available.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSC 173</td>
<td>Engineering Analysis II</td>
<td>3</td>
</tr>
<tr>
<td>APSC 176</td>
<td>Engineering Communication</td>
<td>3</td>
</tr>
<tr>
<td>APSC 177</td>
<td>Engineering Computation and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>APSC 178</td>
<td>Electricity, Magnetism, and Waves</td>
<td>4</td>
</tr>
<tr>
<td>APSC 179</td>
<td>Linear Algebra for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>APSC 180</td>
<td>Statics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 181</td>
<td>Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 182</td>
<td>Matter and Energy I</td>
<td>3</td>
</tr>
<tr>
<td>APSC 183</td>
<td>Matter and Energy II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

*Criteria must be met and include completion of 37 credits of first year UBC Okanagan Campus Applied Science. The admission process is competitive, with limited seats available. Second Year

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSC 201</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>APSC 246</td>
<td>System Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 248</td>
<td>Engineering Analysis III</td>
<td>3</td>
</tr>
<tr>
<td>APSC 252</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 254</td>
<td>Instrumentation and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>APSC 256</td>
<td>Numerical Methods for Analysis</td>
<td>3</td>
</tr>
<tr>
<td>APSC 258</td>
<td>Applications of Engineering Design</td>
<td>3</td>
</tr>
<tr>
<td>APSC 259</td>
<td>Materials Science I</td>
<td>3</td>
</tr>
<tr>
<td>APSC 260</td>
<td>Mechanics of Materials I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Bachelor of Applied Science Program > Civil Engineering

In the third and fourth years, students will follow a program in Civil Engineering, Electrical Engineering, or Mechanical Engineering.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 303</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 305</td>
<td>Engineering Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 325</td>
<td>Civil Engineering Materials</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 327</td>
<td>Reinforced Concrete Design I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 330</td>
<td>Optimization and Decision Analysis for Civil Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 331</td>
<td>Infrastructure Management I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 332</td>
<td>Surveying and GIS Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 335</td>
<td>Transportation Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 340</td>
<td>Soil Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 341</td>
<td>Engineering Hydrology</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 342</td>
<td>Open-Channel Flow</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 347</td>
<td>Environmental Engineering</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

Electives to be chosen from a list of approved RIM Option courses provided by the School of Engineering.

Bachelor of Applied Science Program > Electrical Engineering
In the third and fourth years, students will follow a program in Civil Engineering, Electrical Engineering, or Mechanical Engineering.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 363</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 365</td>
<td>Engineering Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 315</td>
<td>Systems and Control</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 320</td>
<td>Electromechanical Devices</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 350</td>
<td>Linear Circuit Theory</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 351</td>
<td>Microelectronics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 353</td>
<td>Semiconductor Devices</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 358</td>
<td>Microcomputer Engineering</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 360</td>
<td>Engineering Probability and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 361</td>
<td>Signals and Communication Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 362</td>
<td>Digital Signal Processing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 365</td>
<td>Engineering Electromagnetics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits:** 38

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**Engineering Electromagnetics**  

Four core courses (listed above) and:  
- APSC 482 Biomedical Engineering I  
- ENGR 450 Clinical Engineering  
- ENGR 423 Wearables  
- ENGR 460 Biomedical Engineering I  
- ENGR 499 Engineering Capstone Design Project – Biomedical Project  

Note that it is the student's responsibility to ensure that the electives chosen meet the program graduation requirements for design and technical electives. The option consists of years one to two, followed by a set of prescribed fourth-year courses with two additional prescribed courses (APSC 193) beyond the Bachelor of Applied Science degree. Students may encounter difficulties fitting these courses into their schedule. Careful planning is essential and completion of the Option may require a summer session or an additional term of study beyond that required to complete the Bachelor of Applied Science degree alone.

Entry into and continuation in the Option require that the student remain in Good Standing. Upon successful completion of the Option, the notation "Biomedical Option" will be added to the student's transcript. The Biomedical Option allows students interested in biomedical engineering and related technology to have courses focused in these areas. Application to the Biomedical Option is open to students in year 2 and above.

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**Bachelor of Applied Science Program > Manufacturing Engineering**

**Manufacturing Engineering**

**Program Overview**

In the second, third and fourth years, students will follow a program Manufacturing Engineering.

The Mission of the MANF program is to develop engineers with technical and managerial skills preparing them for sought-after careers in the exceptionally demanding and evolving domain of advanced design and manufacturing.

**Program Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>APSC 201</td>
<td>Technical Communication</td>
<td>3</td>
</tr>
<tr>
<td>APSC 246</td>
<td>System Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 246</td>
<td>Manufacturing Analysis III</td>
<td>3</td>
</tr>
<tr>
<td>APSC 252</td>
<td>Thermodynamics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 253</td>
<td>Fluid Mechanics</td>
<td>3</td>
</tr>
<tr>
<td>APSC 39A</td>
<td>Instrumentation and Data Analysis</td>
<td>3</td>
</tr>
<tr>
<td>APSC 255</td>
<td>Electric Circuits and Power</td>
<td>3</td>
</tr>
<tr>
<td>APSC 295</td>
<td>Materials Science I</td>
<td>3</td>
</tr>
<tr>
<td>APSC 260</td>
<td>Mechanics of Materials I</td>
<td>3</td>
</tr>
<tr>
<td>COSC 210</td>
<td>Software Construction</td>
<td>4</td>
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</tbody>
</table>
# Bachelor of Applied Science Program > Mechanical Engineering

In the third and fourth years, students will follow a program in Civil Engineering, Electrical Engineering, or Mechanical Engineering.

## Third Year Mechanical Engineering Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 303</td>
<td>Engineering Project Management</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 305</td>
<td>Engineering Economic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 310</td>
<td>Fluid Mechanics II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 315</td>
<td>Systems and Control</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 320</td>
<td>Electromechanical Devices</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 375</td>
<td>Energy System Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 376</td>
<td>Materials Science II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 377</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 380</td>
<td>Design of Machine Elements</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 381</td>
<td>Kinematics and Dynamics of Machinery</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 385</td>
<td>Heat Transfer Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 387</td>
<td>Vibration of Mechanical Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits: 36**

## Fourth Year Mechanical Engineering Credits

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGR 413</td>
<td>Law and Ethics for Engineers</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 430</td>
<td>Manufacturing Capstone Design Project</td>
<td>6</td>
</tr>
<tr>
<td>ENGR 465</td>
<td>Digital Enterprise</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 470</td>
<td>Production Systems Management III</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 476</td>
<td>Mechanics of Materials II</td>
<td>3</td>
</tr>
<tr>
<td>ENGR 499</td>
<td>Engineering Capstone Design Project</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total Credits: 36**

- To be chosen from a list of Mechanical Engineering elective courses provided by the School of Engineering.
- To be chosen from a list of technical elective courses provided by the School of Engineering. Up to two third- or fourth-year courses offered outside the School of Engineering may qualify as technical electives with permission from the Mechanical Program Coordinator.
- To meet graduation requirements, students must take at least one of ENGR 491: Computational Fluid Dynamics and ENGR 492: Finite Element Methods as part of the 4th year elective requirements.

**Note:** Students interested in the Biomedical Option should consult the School of Engineering for course information.

## Biomedical Option

Available to Mechanical and Electrical students, the Biomedical Option allows students interested in biomedical engineering and wearable technology to focus on these areas.

- Application to the Biomedical Option is open to students in year 2 and above in the Bachelor of Applied Science program specializing in Mechanical or Electrical Engineering.
- Applications for admission must be submitted to the Engineering Advising Office by May 31st. Enrolment in this option is limited and admission will be competitive based on GPA.

The Biomedical Option under Mechanical Engineering requires the following courses:

- ENGR 351 Microelectronics I
- ENGR 401 Biomechanics I

**Note:** Students interested in the Biomedical Option should consult the School of Engineering for course information.

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This document was generated on 19 Jun 2019 at 11:52 AM.
May 9, 2019

Programs. The Pillar contains the relevant technical material and is equivalent to a specialization.

Requirements

Relevant professional experience is considered a significant asset and should be normally a minimum of 3 years. A TOEFL minimum overall band of 100 (with nothing less than 25 in any individual test), or an IELTS minimum overall band of 6.5 (with nothing less than 6.0 in any individual test) is required. Additional requirements may be determined by the School of Engineering based on the student's application.

Bachelor of Applied Science Program > Minor in Computer Science

Application to the Minor in Computer Science is open to all students in the Bachelor of Applied Science program. Admission will be competitive based on the number of applications received. Applicants for admission must make a formal application to the School of Engineering. There are no specific prerequisite courses beyond the Bachelor of Applied Science degree. Students may encounter difficulty finding 2 Computer Science (COSC) courses into their schedule. Careful planning is essential and completion of the Minor Option requires a summer session or additional term beyond the required 30 credits. Students are encouraged to enroll in Computer Science courses in the Summer Session. The minor consists of 20 credits: 12 lower-level and 8 upper-level COSC credits, together with any necessary prerequisites.

Bachelor of Applied Science Program > Minor in Management

Admission to this option requires that students complete 21 credits. Bachelor of Applied Science (BA.Sc) technical elective requirement must be satisfied. Entry into and continuation in the Minor requires that the student remain in Good Standing. Upon successful completion of the Minor Option, the notation "Minor in Management" will be noted on the student's transcript. Students are encouraged to consult the School of Engineering website for current details.

Bachelor of Applied Science Program > Pre-Med Alternative Path (P-MAP)

This alternative path is intended for students with an engineering background who want to go on to medical school. A minimum of 45 credits is required to complete the P-MAP, including 12 credits of professional platform courses, 12 credits of technical pillar courses, and 12 credits of Design Electives. The program is designed to allow students to complete their undergraduate degree in 3 to 5 years, depending on their progress. Students interested in pursuing this alternative path should consult with their faculty advisor for guidance each year to be posted on the School of Engineering’s website.

Bachelor of Applied Science Program > Co-operative Education Program

The Engineering Co-op program is administered by the School of Engineering and is designed to provide students with a unique learning experience. Students interested in pursuing this option should consult with their faculty advisor for guidance. Applications for admission must be submitted to the School of Engineering by May 31st. For an application to be considered, the student must be eligible for University entrance and have completed the required number of credits. A TOEFL minimum overall band of 100 (with nothing less than 25 in any individual test) or an IELTS minimum overall band of 6.5 (with nothing less than 6.0 in any individual test) is required. Additional requirements may be determined by the School of Engineering based on the student's application.

Bachelor of Applied Science Program > Co-operative Engineering Management Option

The Co-operative Engineering Management Option is designed for students who wish to pursue their education in Mechatronics Engineering and are interested in pursuing a career in the field. Students interested in pursuing this option should consult with their faculty advisor for guidance. Applications for admission must be submitted to the School of Engineering by May 31st. For an application to be considered, the student must be eligible for University entrance and have completed the required number of credits. A TOEFL minimum overall band of 100 (with nothing less than 25 in any individual test) or an IELTS minimum overall band of 6.5 (with nothing less than 6.0 in any individual test) is required. Additional requirements may be determined by the School of Engineering based on the student's application.

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Other Graduate Programs (M.A.Sc., M.Eng., Ph.D.)

Information on the Master of Applied Science (M.A.Sc.) (http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,981,1163), the Master of Engineering (M.Eng.) (http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,981,1163), and the Doctor of Philosophy (Ph.D.) (http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,981,1163) programs can be found under the College of Graduate Studies. Last updated: May 9, 2019

Professional Associations

The rights to practice engineering and accept professional responsibility in Canada is limited to those who are registered Professional Engineers. Registration is overseen by the 12 provincial and territorial engineering regulatory bodies that regulate the engineering professions in Canada. During the period between graduation and registration, the graduate who intends to practice in BC should be enrolled with Engineers and Geoscientists British Columbia as an EIT (Passed). For more information, register at http://www.calendar.ubc.ca/okanagan/index.cfm?tree=18,285,981,1163.

Academic Staff

Professor J. Chang


K. Hwang
B.Eng. (Yonsei), Ph.D. (McGill), P.Eng.

M. Hunter
B.Eng. (Carleton), M.A.Sc. (Carleton), Ph.D. (Waterloo), P.Eng.

A. Ikeda
B.Eng. (Kyoto), M.Eng. (Kyoto), Ph.D. (Kyoto), P.Eng.

K. Oda
B.Eng. (Kyoto), M.Sc. (Kyoto), Ph.D. (Kyoto), P.Eng.

D. J. Kabir
B.Eng. (Maceh), M.Sc. (Maceh), Ph.D. (Maceh), P.Eng.

D. D. Kim
B.Eng. (Seoul), M.Eng. (Seoul), Ph.D. (Seoul), P.Eng.

S. Komori
B.Eng. (Osaka), M.Eng. (Osaka), Ph.D. (Osaka), P.Eng.

A. Kurosawa
B.Eng. (Osaka), M.Eng. (Osaka), Ph.D. (Osaka), P.Eng.

S. Matsui
B.Eng. (Osaka), M.Eng. (Osaka), Ph.D. (Osaka), P.Eng.

Y. Ohashi
B.Eng. (Osaka), M.Eng. (Osaka), Ph.D. (Osaka), P.Eng.

K. Takahashi
B.Eng. (Osaka), M.Eng. (Osaka), Ph.D. (Osaka), P.Eng.

Y. Yan
B.Eng. (Beijing), M.Eng. (Beijing), Ph.D. (Beijing), P.Eng.

M. Mrad

T. Landecker
B.Eng. (British Columbia), B.A.Sc. (British Columbia), M.A.Sc. (British Columbia), P.Eng.

D. Richert
B.Eng. (Saskatchewan), M.Eng. (Saskatchewan), Ph.D. (Saskatchewan), P.Eng.

G. Naser
B.Eng. (Vancouver), M.A.Sc. (Vancouver), Ph.D. (Vancouver), P.Eng.

L. Patterson
B.Eng. (Victoria), M.A.Sc. (Victoria), Ph.D. (Victoria), P.Eng.

S. Weyand
B.Eng. (Ottawa), M.A.Sc. (Ottawa), Ph.D. (Ottawa), P.Eng.

A. Elnaggar
B.Eng. (Cairo), M.A.Sc. (Cairo), Ph.D. (Cairo), P.Eng.

Y. Zhao
B.Eng. (Beijing), M.A.Sc. (Beijing), P.Eng.

Last updated: May 9, 2019