Computing science alumnus Angelica Lim (now an SFU faculty member) designs robots that exhibit social intelligence and empathy. In 2018, Forbes Magazine included her in its list of five people building our AI future.

Engineering science alumnus Isabel Ge Mahe is the vice-president and managing director of Apple’s Greater China team. In 2018, Fortune Magazine named Mahe the 10th most powerful woman in international business.

Mechatronics alumnus Hassan Murad and student Vivek Vyas are the co-creators of Oscar, an AI-powered visual waste-sorting system. In 2018, Forbes Magazine named Murad as one of five entrepreneurs on the rise in AI.

As a computing science PhD student, Maryam Sadeghi developed MoleScope™, a smartphone attachment that can monitor signs of skin cancer. Now an alumnus, she has raised $6 million and expanded her company into the Australian market. In 2019, Sadeghi received one of the RBC Top 25 Canadian Immigrant Awards.

ARE YOU READY TO MAKE AN IMPACT?

SFU’s Faculty of Applied Sciences is for those who see problems as opportunities and are ready to discover their potential for shaping a better tomorrow. Home to the Schools of Computing Science, Engineering Science, Mechatronic Systems Engineering, and Sustainable Energy Engineering, we are shaping the next generation of leaders in technology and engineering. We offer rewarding areas of study complemented by unique learning experiences that foster innovation and an entrepreneurial spirit.

A team of mechatronics and business undergraduate students in our Technology Entrepreneurship program established Zennea Technologies to develop a wearable device that reduces chronic snoring.

Engineering and mechatronics graduates Lukas-Karim Merhi and Gautam Sadarangani developed the TENZR™ gesture-recognition wristband that can control mixed-reality environments and also help rehabilitate hand injuries.
A FACULTY OF EXCELLENCE


SFU’s Burnaby campus is located on the traditional territories of the Squamish, Tsleil-Waututh, Musqueam and Kwikwetlem Nations.

SFU’s Surrey campus is located on the traditional territories of Katzie, Kwantlen, Kwikwetlem, Qayqayt, Musqueam and numerous Stó:lō Nations.
Put your classroom skills into practice, gain industry experience and discover your career passion. SFU’s co-operative education program integrates your academic studies with relevant, paid work experience—locally, nationally, and globally.

All Faculty of Applied Sciences students are encouraged to participate in co-op. For students in the Schools of Engineering Science, Mechatronic Systems Engineering or Sustainable Energy Engineering, it is a requirement for graduation.

HERE ARE SOME OF THE COMPANIES HIRING OUR CO-OP STUDENTS:

- Adobe Systems
- Amazon
- Apple Inc.
- Appnovation Technologies
- Ballard Power Systems Inc.
- BC Cancer Agency
- Boeing Vancouver
- Blizzard Entertainment
- Electronic Arts Canada
- Fortinet
- Fraser Health
- Fujitsu
- GE Canada
- Google
- Health Canada
- Honeywell
- Hootsuite Media Inc.
- IBM Canada Ltd.
- Industrial Light and Magic
- Intel of Canada Ltd.
- LinkedIn
- Lyft
- Manulife Financial
- Microsoft
- Mitacs
- Mobify
- Oracle
- Pixar Animation Studios
- Port of Vancouver
- RBC Global Asset Management
- Safe Software Inc.
- Salesforce.com
- Samsung Electronics Canada
- SAP Canada Inc.
- Seagate Technology International
- Siemens Electrical Drives Ltd.
- Simba Technologies Incorporated
- Statistics Canada
- STEMCELL Technologies Inc.
- Tableau Software
- Tesla Motors
- Toyota Canada Inc.
- TransLink
- TRIUMF
- Visier Inc.
- Tesla Motors
- Toyota Canada Inc.
- TransLink
- TRIUMF
- Visier Inc.

When Daniel Dixon graduated in 2018 with a major in computer engineering from the School of Engineering Science, he had already lined up a job with a six-figure salary at Apple. He received competitive offers from both Apple and Tesla and credits his co-op experience for making him a prime candidate.

Broaden your horizons with international co-op by working in countries such as USA, China, Denmark, Germany, Hong Kong, India, Iran, Spain, Switzerland, Taiwan, and Zimbabwe.

JUMPSTART YOUR CAREER WITH CO-OP
Every year the Engineering Science Student Society (ESSS) organizes the Opportunities Fair, or OpFair, where all students from the Faculty of Applied Sciences can directly connect with employers in their fields.

Women in Computing Science (WiCS) and Women in Engineering (WiE), which comprise students of all genders, are dedicated to promoting women in the technology and engineering fields. In addition to mentorship and industry events for students, they also organize workshops to introduce high school girls to these fields.

Team Phantom members are building a zero-emissions race car to compete at the Formula SAE Electric competition in the U.S. They also attend community events to promote the importance of sustainable transportation.

Team Guardian members build unmanned aerial vehicles (UAVs), participate in competitions and complete challenges such as locating a lost hiker in a remote area.

The Satellite Design Team is designing, building and launching a satellite into space with the Canadian Space Agency. They also work with high altitude balloons and organize community outreach events to inspire children with their projects.

The Computing Science Student Society (CSSS) organizes multiple events including a trip to Silicon Valley for students to tour tech companies and meet leaders in the field.

The Faculty of Applied Sciences is home to a number of student societies, groups and teams that host networking events, mentorship programs, competitions, community outreach events, career fairs, and industry field trips. Some of our competitive teams also build projects for national and international challenges. These connections and experiences will last beyond your undergraduate years.
Bachelor of Science (BSc) | Bachelor of Arts (BA) | Bachelor of Business Administration (BBA)

Honours, joint majors, dual degree, minor, and second degree options available

A degree in the School of Computing Science opens unparalleled opportunities to make a meaningful difference in society. From cloud computing and big data to wearable technology and artificial intelligence, computing science touches every aspect of modern life. Whether you’re developing solutions during an internship or researching at the forefront of computing, you’ll gain technical skills that let you tackle the problems you are passionate about.

Help advance society in areas of artificial intelligence, bioinformatics, cybersecurity, app development, medical imaging, computer vision, gaming, voice recognition, machine learning, and more.

Program Highlights

• Optional, paid co-operative education allows you to explore your career paths
• Degree flexibility allows you to shape your courses around study topics that interest you
• International opportunities allow you to take a semester abroad, or study in China for two years through our Dual Degree Program
• Our world-renowned faculty are leaders in their fields and represent research excellence

Sample Courses

- Biomedical Computing
- Computational Data Science
- Computational Linguistics
- Computer Graphics and Multimedia
- Computer Vision
- Software Development Methods

Sample Career Fields

- Artificial Intelligence
- Big Data
- Bioinformatics
- Cyber Security
- Game Development
- Software Development

Bachelor of Applied Science (BASc)

Honours and minor degree options available

Looking to work at the frontier of innovation? The School of Engineering Science combines deep technical knowledge with rich hands-on experience. Our graduates become the next generation of creative innovators and knowledge leaders in an expanding and rewarding job market.

Want to develop the next must-have wearable device, build a rehabilitative robotic prosthetic arm, create a smart solar panel or develop a satellite that tracks the impact of climate change on Canada’s natural resources? This degree puts you in the driver’s seat for a multitude of inventive careers.

Program Highlights

• Guaranteed program option allows you to study what you want
• One-year, paid co-operative education allows you to explore your career paths
• Accelerated master’s program allows you to work toward a master’s degree alongside your undergraduate degree
• Close-knit community provides you direct access to labs and expert faculty
• Accredited curriculum allows you to fulfill requirements to become a professional engineer

Sample Courses

- Biomedical Engineering Directions
- High Frequency Electronics
- Introduction to Robotics
- Multimedia Communications Engineering
- Orthopaedic and Rehabilitation Engineering
- Software Design and Analysis

Sample Career Fields

- Biomedical Imaging
- Nanodevices
- Networked Robotics
- Rehabilitation Engineering
- Space-based Synthetic Aperture Radar
- Wearable Technology
Bachelor of Applied Science (BASc)

Honours and double degree options available

Where else can you combine mechanical, computer and electronic engineering into one degree? SFU is home to the only School of Mechatronic Systems Engineering in Western Canada. Our labs put classroom theory into practice, providing you with hands-on experience using the same equipment you will encounter in your future career.

With a rich entrepreneurial edge, our program features invaluable real-world experience and offers a unique Technology Entrepreneurship option. Our close-knit student cohort experience provides a supportive environment that encourages teamwork, communication, creativity, innovation and excellence.

Program Highlights

• Direct admission, start studying as a Mechatronics major from the first day of classes
• One-year, paid co-operative education allows you to explore your career paths
• Close-knit community provides you direct access to labs and expert faculty
• Diverse engineering education prepares you for careers in biomedical, mechanical, robotic, electronic, systems, or computer engineering
• Accredited curriculum allows you to fulfill requirements to become a professional engineer

Sample Courses

- Fuel Cell Systems
- Kinematics for Robotic Systems
- Machine Design
- Mechatronics Design
- Nanomanufacturing
- Technology Entrepreneurship

Sample Career Fields

- Aerospace
- Consumer Products
- Exoskeletons
- Health Engineering
- Robotic Manufacturing
- Transportation and Automotive

Program Options

- Mechatronic Systems Engineering
- Mechatronic Systems Engineering and Business Double Degree

Sample Courses

- Bioprocess Engineering
- Embedded Computer Systems
- Energy Storage
- Integrated Energy Solutions
- Power Systems Analysis
- Sustainable Energy Design

Sample Career Fields

- Clean Technology
- Clean Transportation
- Renewable Energy
- Smart Cities
- Sustainable Manufacturing
- Water Resources

Elective Focus Areas

- Smart Cities
- Clean Transportation
- Sustainable Manufacturing

SURREY CAMPUS

School of Mechatronic Systems Engineering

Bachelor of Applied Science (BASc)

The new School of Sustainable Energy Engineering (SEE) is the first of its kind in Western Canada and is housed in a new building at SFU’s Surrey campus. Immerse yourself in an interdisciplinary learning environment and develop in-demand skills that prepare you to become a global leader in clean technology.

Discover your potential for shaping a better tomorrow. Become industry-ready to work in high-demand sectors such as cleantech, renewable energy, smart cities, sustainable manufacturing, clean power generation and utilization, and sustainable food and water solutions.

Program Highlights

• New state-of-the-art building located at SFU Surrey’s campus has innovative sustainability features that will serve as a “living lab” for student projects
• One-year, paid co-operative education allows you to explore your career paths
• Interdisciplinary curriculum will combine courses from Faculty of Science, Faculty of Environment, and Beedie School of Business
• Immersive experiences will put your skills into practice during team-based, community-engaged projects
• Accreditation is expected once the full program is launched, allowing you to fulfill requirements to become a professional engineer

Sample Courses

- Bioprocess Engineering
- Embedded Computer Systems
- Energy Storage
- Integrated Energy Solutions
- Power Systems Analysis
- Sustainable Energy Design

Sample Career Fields

- Clean Technology
- Clean Transportation
- Renewable Energy
- Smart Cities
- Sustainable Manufacturing
- Water Resources

Elective Focus Areas

- Smart Cities
- Clean Transportation
- Sustainable Manufacturing

SURREY CAMPUS

School of Sustainable Energy Engineering

Bachelor of Applied Science (BASc)
SUPPORT SERVICES FOR STUDENTS

To ensure your success, SFU and the Faculty of Applied Sciences (FAS) offer a diverse range of services that will support you from today to graduation and beyond.

FAS Academic Advisor
This is your first point of contact at FAS. Learn about admissions and which program may suit you best. Your advisor can also help you avoid falling into academic difficulty.

FAS Engagement Coordinator
Our engagement coordinator will help you develop skills beyond the classroom.

SFU Health and Counselling
The Health and Counselling team offers a wide range of services to support mental health and well-being at SFU.

FAS Scholarship Coordinator
Our dedicated scholarship coordinator will help you navigate through all of the financial awards available to students.

FAS TechConnect
This first-year cohort mentorship program helps you transition from high school to university.

FAS Co-op Coordinator
From day one we match you with a personal co-op coordinator who helps tailor your career journey.

Entrepreneurial Support
SFU has programs to help you develop your idea into a working company. These include the Technology Entrepreneurship program and access to startup accelerators and business incubators.

Industry and Networking Events
Throughout the year you will have opportunities to connect with industry members and meet with employers.

SFU Student Learning Commons
A suite of workshops that help you develop learning, writing and English-as-an-additional-language skills.

FAS Tutors
Peer-to-peer support is available through many of our classes.

FAS Tutors
Peer-to-peer support is available through many of our classes.

LET US HELP YOU GET STARTED

Meet a Student and Campus Tours
If you are a prospective student, parent or teacher, we encourage you to visit us in person to discover more about our programs, explore our high-tech research labs and instructional spaces, and learn about undergraduate student life in the Faculty of Applied Sciences. As well, take a one-hour tour, hosted by a current student, of the Burnaby and/or Surrey campuses.

www.sfu.ca/fas/meet-a-student
www.sfu.ca/fas/tours

Scholarships and Awards
We offer entrance scholarships to attract and engage undergraduate students who demonstrate potential to enrich the university community through ongoing academic and community contributions.

www.sfu.ca/students/admission/fees-scholarships

READY TO APPLY?

To view the latest information on admission requirements and application deadlines visit the SFU Admission page.

www.sfu.ca/admission

The 2019 FAS Competition challenged Faculty of Applied Sciences students to build sustainably-designed ‘eco-bots’ that are capable of sorting organic and non-organic waste.

JOIN THE NEXT GENERATION OF INNOVATORS
FACULTY OF APPLIED SCIENCES
www.sfu.ca/fas

School of Computing Science
www.sfu.ca/computing

School of Engineering Science
www.sfu.ca/engineering

School of Mechatronic Systems Engineering
www.sfu.ca/mechatronics

School of Sustainable Energy Engineering
www.sfu.ca/see