



# Graduate studies at UBC's Department of Mechanical Engineering

## Why Mechanical Engineering at UBC?

### STRONG RESEARCH

UBC Mechanical Engineering is one of the most active research departments in Canada, with 34 research faculty, four Canadian Research Chairs, and over \$13 million in annual research funding. Our faculty are recognized nationally and internationally as leaders in their fields: many hold prestigious Fellowships and are affiliated with distinguished research institutes.

### WORLD-CLASS EDUCATION

UBC is ranked among the world's top 40 universities, and among the world's top 25 public universities. Our faculty have received numerous awards and distinctions for their scholarly activity, professional activities, service, and teaching. Our beautiful campus is located in temperate Vancouver, British Columbia which is constantly ranked as one of the most livable cities in the world.

### COMPETITIVE FUNDING

We are committed to providing funding to MASc and PhD students in the form of Research Assistantships, scholarships, and top-ups to external awards. Most MASc and PhD students receive competitive funding packages. MEng and MEL students may be eligible for program-specific scholarships and industry-sponsored awards. The department also offers a number of Teaching Assistant positions that are open to all graduate students.

## Options to fit your goals

**Mechanical Engineering offers research-based MASc and PhD degrees, in a range of research areas. We also offer four industry-focused professional MEng and MEL programs for those who want to further their studies without pursuing research.**

### RESEARCH AREAS

APPLIED SOLID MECHANICS  
BIOMECHANICS & BIOMEDICAL DEVICES  
COMPUTATIONAL ENGINEERING  
ENERGY & ENVIRONMENT  
FLUID MECHANICS  
MANUFACTURING AUTOMATION & ROBOTICS  
MECHATRONICS & INSTRUMENTATION  
NAVAL ARCHITECTURE & MARINE ENGINEERING

### PROFESSIONAL PROGRAMS

NAVAL ARCHITECTURE &  
MARINE ENGINEERING (NAME)  
MECHATRONICS DESIGN  
CLEAN ENERGY ENGINEERING  
MECHANICAL ENGINEERING



## Our Programs **We offer four graduate programs in Mechanical Engineering:**

	<b>MEng</b> MASTER OF ENGINEERING	<b>MEL</b> MASTER OF ENGINEERING LEADERSHIP	<b>MASc</b> MASTER OF APPLIED SCIENCE	<b>PhD</b> DOCTOR OF PHILOSOPHY
<b>PROGRAM TYPE</b>	Professional	Professional	Research	Research
<b>DURATION</b>	12 months	12 months	24 months	48 months
<b>SPECIALIZATION OPTIONS</b>	<ul style="list-style-type: none"> <li>- Mechanical Engineering</li> <li>- Mechatronics Design</li> <li>- Naval Architecture &amp; Marine Engineering (NAME)</li> </ul>	<ul style="list-style-type: none"> <li>- Naval Architecture &amp; Marine Engineering (NAME)</li> <li>- Clean Energy Engineering (CEEN)</li> </ul>	<b>Both MASc and PhD programs offer specializations in:</b> <ul style="list-style-type: none"> <li>- Applied Solid Mechanics</li> <li>- Biomechanics &amp; Biomedical Devices</li> <li>- Computational Engineering</li> <li>- Energy &amp; Environment</li> <li>- Fluid Mechanics</li> <li>- Manufacturing Automation &amp; Robotics</li> <li>- Mechatronics &amp; Instrumentation</li> <li>- Naval Architecture &amp; Marine Engineering</li> </ul>	
<b>PROGRAM COMPONENTS</b>	<ul style="list-style-type: none"> <li>- Coursework</li> <li>- Design Project</li> <li>- Co-op (NAME only)</li> </ul>	<ul style="list-style-type: none"> <li>- Coursework</li> <li>- Business, technical and leadership training</li> <li>- Experiential Learning Project</li> </ul>	<ul style="list-style-type: none"> <li>- Coursework</li> <li>- Graduate Seminar</li> <li>- Thesis</li> </ul>	<ul style="list-style-type: none"> <li>- Coursework</li> <li>- Graduate Seminar</li> <li>- Dissertation</li> </ul>
<b>CREDITS</b>	30 credits (33 for NAME)	30 credits	30 credits	33 credits
<b>STUDENTS ADMITTED</b>	up to 30	up to 30	up to 40	up to 30

## Admission Requirements

### MEng/MEL/MASc

Domestic applicants for a master's degree program must hold the academic equivalent of a four-year bachelor's degree from UBC with one of the following:

- A minimum overall average of B+ (76% at UBC) in third- and fourth-year courses; or
- At least 12 credits of third- or fourth-year courses in the A-grade range (80% or higher at UBC) in the field of study

Note: MEL applicants also require a minimum of three years of industry experience.

In exceptional cases, students who meet the requirements may be granted PhD Direct Entry or Fast Track. Please check out our website for more information.

**For international applicant requirements, visit the Graduate & Postdoctoral Studies website at [grad.ubc.ca](http://grad.ubc.ca).**

## How to Apply

Start your application now. Visit [mech.ubc.ca/graduate/applications](http://mech.ubc.ca/graduate/applications) for information on application instructions, deadlines, and requirements.

**"UBC Mechanical Engineering is not just another department; it's a tight-knit community of individuals who are passionate about their work... By doing my post-graduate studies here in UBC Mechanical Engineering, I believe that I have been provided with all of the resources and the latitude needed to succeed as a student and researcher."**

MATTHEW PAN, PHD GRADUATE

### PhD

Domestic applicants for the Doctor of Philosophy (PhD) program must have:

- A master's degree (or equivalent) from an approved institution; and
- Clear evidence of research ability or potential

## Learn More

[MECH.UBC.CA/GRADUATE](http://MECH.UBC.CA/GRADUATE)  
STUDENT SERVICES OFFICE

**P: 604-822-6584**  
**F: 604-822-2403**  
**E: [admissions@mech.ubc.ca](mailto:admissions@mech.ubc.ca)**

