

# ln brief



ÉTS OFFERS A VARIETY OF
APPLIED ENGINEERING DEGREES,
BOTH AT THE UNDERGRADUATE
AND GRADUATE LEVELS. WE
ARE BASED IN DOWNTOWN
MONTREAL, RANKED 1ST AMONG
THE MOST AFFORDABLE CITIES
FOR INTERNATIONAL STUDENTS
IN CANADA AND IN NORTH
AMERICA ACCORDING TO THE QS
BEST STUDENT CITIES RANKING.

ÉTS is second in Canada for the number of undergraduate student degrees delivered per year and our engineering programs are specifically designed for students with a technical background. Our work-study education model makes our teaching approach unique. In addition, all our professors have industrial work experience, and every class includes laboratory or industrial applied work.

ÉTS is also renowned for its successful collaboration with the industry, which represents approximately more than 70% of our research activities. We offer challenging Master's and PhD programs in several fields including: aerospace and transportation, energy, environment and construction, healthcare technologies, industrial engineering, software engineering and information technology.

ÉTS offers a dynamic environment conducive to extracurricular activities. Its 24 science and technology clubs have won international competitions in robot design, racing cars, submarines, solar, wind and amphibious vehicles, concrete canoes (yes, they float), drones, etc. ÉTS also

has 8 competitive sports teams, the Piranhas, evolving in the best sports networks in Quebec and Canada. Other students are involved in international cooperation or sustainable development, and let's not forget the INGénieuses, a group of female students passionate about science and technology.

On campus, you will benefit from our on-site student residences, grocery store, bank, pharmacy, pub, state-of-the art gym and close proximity to public transportation.

With 11,300 students, world-class research infrastructures, and innovative new programs, ÉTS has developed vibrant industrial and international exchange programs/partnerships for you to choose from.

Welcome to Montreal... you have what it takes!

# **General**information











### 11 300 students

(6,950 undergrad. / 3,700 master's / 750 PhD)



ÉTS – École de technologie supérieure Office of International Relations 1100 Notre-Dame Street West Montreal QC Canada H3C 1K3



Scientific News

# 6 engineering departments

Aerospace

Construction

Electrical

Software and Information technology

Mechanical

Systems



international@etsmtl.ca

# Regular exchange program

LANGUAGE OF INSTRUCTION	French only	
DURATION	1 term: 4 months 2 terms: 8 months	
DATES	Fall term : September - December, 2025 (specific dates to be determined) Winter term: January – April, 2026 (specific dates to be determined)	
ORIENTATION ACTIVITIES	Fall term: August 25-29, 2025 Winter term: first week of January 2026	
NOMINATION DEADLINE	Fall term: March 15, 2025 Winter term: June 15, 2025	
APPLICATION DEADLINE	Fall term: April 1, 2025 Winter term: September 1, 2025	
ADMISSION REQUIREMENTS	Applicants must be enrolled either in a Master's or an undergraduate program leading to an engineering degree, at a partner institution (bilateral or BCI agreement).  Students will be selected on the basis of their academic transcripts.	
QUOTA	Bilateral agreement: no quota (if partner university plans to send more than 4 students per semester, please contact the inbound student exchange coordinator)	
LANGUAGE REQUIREMENTS	Proof of a minimum B2 level of French proficiency (from the Common European framework) is required, unless the applicant is from a French-speaking institution or French is the applicant's native language.	
LANGUAGE COURSES	ÉTS does not offer French courses to exchange students. Exchange students may contact other universities in Montreal to inquire about registration modalities and applicable tuition fees.	

APPLICATION PROCESS	Once applicants have been officially nominated by their home institution, they must fill out the on-line application form  Every student has to select the following undergraduate program codes:  - 1-term exchange: 0469 – Programme court en génie pour étudiant en séjour d'études  - 2-term exchange: 4023 – Certificat en génie pour étudiant en séjour d'études
DOCUMENT CHECKLIST	<ul> <li>Applicants must upload the following documents on-line:</li> <li>Post-secondary transcripts: university-level courses and grades</li> <li>Birth certificate or other official proof of the applicant's identity where parents' names appear</li> <li>Course Selection Form, approved and signed by an authorized person at the applicant's home institution</li> </ul>
PROCESSING PERIOD	Applications are processed between January and April, and between June and September.
FEES	No tuition fees will be charged.  Exchange students are exempted from application fees.  Exchange students are required to pay for the mandatory ÉTS health insurance plan (\$356 CDN per term for the 2024-2025 academic year), unless exemptions apply (refer to the health insurance section).  Students may have to pay applicable tuition fees if they wish to enroll in French courses at another university.
COURSE CATALOGUE AND DESCRIPTIONS	The list of courses and detailed descriptions are available on our website: <u>Courses</u> <u>directory</u>
COURSE SCHEDULE	Applicants have to make sure that the courses they plan to take are offered during the term in which they will be studying at ÉTS (tentative schedule is available 5 terms in advance).  Detailed timetable will be confirmed 2 months before the term starts.  - Undergraduate and Graduate courses

COURSE SELECTION	Attending courses from different departments is possible. It is the students' responsibility to verify that they meet prerequisites with their home university.  Only exchange students who are in the final year of their engineering degree at their home institution are allowed to take graduate-level courses (maximum of 3). Applicants have to fill out the application form provided for this purpose.  Some courses are not open to exchange students.  Some courses with capacity limits may not be open to exchange students at registration time.  ÉTS' departments will communicate with the exchange students through e-mail, after they have received their letter of admission, to confirm their final course registration.  Modifying course registration upon arrival is subject to each ÉTS department's approval and, in many cases, may be refused. For acceptable reasons, exchange students can request minor changes in the 2 first weeks after classes start (check the course change (add/drop) deadline in the academic calendar).
RESEARCH AND INTERNSHIP OPPORTUNITIES	Exchange students who wish to extend their stay at ÉTS by completing a research internship or a degree (master or PhD) should refer to the ÉTS web pages to check their eligibility and to read the application process.
CREDITS	International students must study on a full-time basis to meet the immigration requirements, that is to say a minimum of: - 12 credits per term (a maximum of 16 credits is allowed).
WORKLOAD	Workload for courses is measured using a credit system. One credit represents approximately 3 hours of work per week, or 45 hours per term.  This time includes courses, labs and personal study.  ETS considers 1 credit is equivalent to 2 ECTS.
TRANSCRIPTS	An official transcript will be sent by ÉTS to the partner university by email.  Partner universities which haven't received the official transcripts 2 months after the end of the final exams should contact the ÉTS Office of International Relations.
IMMIGRATION DOCUMENTS	<ul> <li>A valid passport for the entire duration of stay in Canada is mandatory.</li> <li>Students admitted to a one-term exchange program lasting less than 6 months are not required to obtain a CAQ and study permit.</li> <li>Students admitted to a two-term exchange program lasting more than 6 months must apply for and obtain a valid CAQ from the Quebec provincial government, and a study permit. Visit the official websites for information: Immigration Quebec / Citizenship and Immigration Canada.</li> <li>Students may also need an Electronic Travel Authorization or a Temporary Resident Visa to enter Canada, depending on their nationality. If an Electronic Travel Authorization or visa is required, it will be issued at the same time as the study permit. Visit the Citizenship and Immigration Canada website for information.</li> </ul>

WORKING IN CANADA	Exchange students are not allowed to work off-campus.  Full-time exchange students with a valid study permit may work on campus at ÉTS without a work permit. On-campus jobs are limited; students should not count on finding a part-time job during their studies to balance their budget.  Work on campus  Exchange students who wish to extend their stay at ÉTS by completing an internship in a lab should refer to the Research Internship section to check their eligibility and to read the procedures.
HEALTH INSURANCE	All international students studying in Quebec are required to be covered by a Quebec health insurance policy. Students and laboratory interns will be required to enroll in and pay for the Desjardins health insurance plan at the start of their stay at ÉTS (\$89 CDN per month for the 2024-2025 academic year).  Citizens from Belgium, Denmark, Finland, France, Greece, Luxembourg, Norway, Portugal, Romania, Serbia and Sweden fall under an agreement signed with the government of Quebec. These students will be covered by the provincial health care system (RAMQ), if they bring the required documents to register.
HOUSING	Different types of apartments are available on campus, and rooms are assigned on a first-come, first-served basis. Accommodation cannot be guaranteed. Students who are interested in living on-campus should complete the reservation form available online (no reservation fees).  Information on off-campus housing can be found on our website.
ACTIVITIES OR SERVICES AVAILABLE	Every ÉTS student, including exchange students and interns, has access to Student Services.  Services include: free access to library, scientific and social clubs, athletic center, bookstore, student association, free and confidential psychological counseling. Services are also available for students who have special needs. For more information please contact the Office of Student Life.
SOCIAL ACTIVITIES AND BUDDY PROGRAMS	Students can follow the activities of the ÉTS Student Association, which organizes various activities.

# **Research internships**

LANGUAGE OF INSTRUCTION	English or French
DURATION	2 to 12 months
DATES	Internships can start anytime throughout the academic year
ORIENTATION ACTIVITIES	Upon arrival (registration required)
NOMINATION DEADLINE	Not required
APPLICATION DEADLINE	Application can be submitted throughout the year
ADMISSION REQUIREMENTS	Applicants must be enrolled either in a postgraduate program (Master's or PhD) or be final-year students in an engineering undergraduate program.  Students will be selected on the basis of their CV, cover/motivation letter and academic transcripts.  Immigration restrictions apply.
QUOTA	ÉTS does not apply quota for research interns if they are selected by a professor for their activity.  Immigration restrictions and quotas apply – see the above line.
LANGUAGE REQUIREMENTS	French and/or English proficiency is subject to ÉTS professor's approval.  Any official test results or attestation letter issued by an appropriate person at home institution is an asset.
LANGUAGE COURSES	Interns are not allowed to take courses.

APPLICATION PROCEDURE	Applicants must conclude an agreement with an ÉTS professor who will supervise their internship. They should communicate directly with faculty members and submit all the required documents, clearly specifying their areas of interest and periods of availability.
DOCUMENT CHECKLIST	Applicants must upload the following documents on-line: - Scanned copy of passport - Curriculum Vitae - Proof of full-time enrolment at home university (current year) - University-level transcripts
PROCESSING PERIOD	Applications are processed within 2 weeks, once the application is approved by the professor.
FEES	No tuition fees apply.  No application fees apply.  Interns are required to pay for the mandatory ÉTS health insurance plan (\$89 CDN per month for the 2024-2025 academic year).
COURSE CATALOGUE AND DESCRIPTIONS	Interns are not allowed to take courses
COURSE SCHEDULE	Interns are not allowed to take courses
COURSE SELECTION	Interns are not allowed to take courses
RESEARCH AND INTERNSHIP OPPORTUNITIES	Applicants must be selected by a professor, related to their fields of study and interests. Internship offers are not available. Search opportunities on these ÉTS websites:  Chairs or research units Substance ÉTS
CREDITS	Interns are expected to work on a full-time basis (35-40 hours / week). A 1-month internship is equivalent to 3 credits.
TRANSCRIPTS	An internship may result in an official transcript released by ÉTS stating a "pass or fail" mention, on demand.

A valid <b>passport</b> for the entire duration of stay in Canada is mandatory.  A valid <b>work permit</b> is mandatory. In Canada, internships are considered to be work, whether or not they are paid and regardless of their duration.  Students may also need an <b>Electronic Travel Authorization</b> or a <b>Temporary Resident Visa</b> to enter Canada, depending on their nationality. Visit the <a href="Citizenship and Immigration Canada website">Citizenship and Immigration Canada website</a>
Interns are delivered an employer-specific work permit. Unless other particular conditions apply, interns are not allowed to work off-campus.
All international students studying in Quebec are required to be covered by a Quebec health insurance policy. Students and laboratory interns will be required to enroll in and pay for the Desjardins health insurance plan at the start of their stay at ÉTS (\$89 CDN per month for the 2024-2025 academic year).  Citizens from Belgium, Denmark, Finland, France, Greece, Luxembourg, Norway, Portugal, Romania, Serbia and Sweden fall under an agreement signed with the government of Quebec. These students will be covered by the provincial health care system (RAMQ), if they bring the required documents to register.
Different types of apartments are available on campus, and rooms are assigned on a first-come, first-served basis. Accommodation cannot be guaranteed. Students who are interested in living on-campus should complete the <u>reservation form</u> available online. Information on off-campus housing can be found <u>on our website</u> .
Every ÉTS student, including exchange students and interns, has access to Student Services.  Services include: free access to library, scientific and social clubs, athletic center, co-op bookstore, student association, free and confidential psychological counseling. Services are also available for students who have special needs, for more information please communicate with the Office of Student Life.
Interns can follow the activities of the ÉTS Student Association, which organizes various activities and cultural visits.

# ÉTS Research Chairs, Labs, Institute and Groups

### **AERONAUTICS AND AEROSPACE**

- Canada Research Chair for Aircraft Modeling and Simulation Technologies
- Pratt & Whitney Canada Industrial Chair on Propulsion System Integration and Optimization
- Safran Industrial Research Chair on the Development of Sustainable Aero-Propulsion Systems
- Marcelle-Gauvreau Engineering Research Chair in environmentally friendly composite materials
- ArianeGroup Research Chair on Emerging Materials in the Aeronautics and Space sector
- DYNAMO Research Laboratory in Machine, Process and Structural Dynamics
- GRAM Acoustics Research Group in Montréal
- GRANIT Research Group on Numerical Applications in Engineering and Technology
- LAMSI Shape Memory Alloys and Intelligent Systems Laboratory
- LARCASE Aeronautical Research Laboratory in Active Control, Avionics and Aeroservoelasticity
- LASSENA Laboratory of Space Technologies, Embedded Systems, Navigation and Avionic
- LIPPS Products, Processes, and Systems Engineering Laboratory
- LOFPA Laboratoire d'optimisation des procédés de fabrication avancés
- TFT Thermo-Fluids for Transport Laboratory

## SENSORS, NETWORKS AND CONNECTIVITY

- Canada Research Chair on Next-Generation Internet of Things (Next-Gen IoT) Networks
- Canada Research Chair in Spatiotemporal Encryption of Terahertz Light Assisted by Computational Method
- Canada Research Chair in Hybrid Optoelectronic Materials and Devices
- NSERC-Ultra Electronics Chair on Wireless Emergency and Tactical Communications
- Industrial Research Chair on the Integration of Digital Technologies in Construction
- Distech Controls Industrial Chair on Embedded Neural Networks for Connected Building Control
- Marcelle-Gauvreau Engineering Research Chair in Multimaterial and Multifunctional Photonic Devices
- Resilient Machine Learning Institute (ReMi)
- LACIME Communications and Microelectronic Integration Laboratory
- LASI Computer System Architecture Research Laboratory
- CoRo Control and Robotics Laboratory
- Intuitive and Natural Interaction for the Teleoperation of Robots
- LASSENA Laboratory of Space Technologies, Embedded Systems, Navigation and Avionic

### SUSTAINABLE DEVELOPMENT, CIRCULAR ECONOMY AND ENVIRONMENTAL ISSUES

- Canada Research Chair in Measuring the Impact of Human Activities on Climate Change
- Canada Research Chair on Sustainable Multifunctional Construction Materials
- Canada Research Chair in Electrical Energy Conversion and Power Electronics
- Safran Industrial Research Chair on the Development of Sustainable Aero-Propulsion Systems
- DKSpec Industrial Research Chair in Advanced Manufacturing Technologies for a New Generation of Components for the Wood Industry
- Marcelle-Gauvreau Engineering Research Chair on the Impact of Environmental Changes on Water Resources
- Marcelle-Gauvreau Engineering

- Research Chair in Environmentally Friendly Composite Materials
- CERIEC Center for Intersectoral Studies and Research on the Circular Economy
- CIRODD Centre interdisciplinaire de recherche en opérationnalisation du développement durable
- DYNAMO Research Laboratory in Machine, Process and Structural Dynamics
- GREPCI Power Electronics and Industrial Control Research Group
- GRANIT Research Group on Numerical Applications in Engineering and Technology
- GRIDD Research Group in Integration and Sustainable Development in Built Environment
- HC3 Hydrology, Climate and Climate Change Research Laboratory
- LaRTIC Laboratoire de recherche sur les technologies de l'information dans la construction
- LASI Computer System Architecture Research Laboratory
- LCMB Pavements and Bituminous Materials Laboratory
- LG2 Geotechnical and Geoenvironmental Engineering Laboratory
- LIDD Laboratoire d'ingénierie pour le développement durable
- LIPEC Polymer and Composite Engineering Laboratory
- LIPPS Products, Processes, and Systems Engineering Laboratory
- LTBS Laboratory of Thermal and Building Science
- NUMÉRIX Organizational Engineering Research Laboratory for the Digital Enterprise
- POLYMERETS Polymer Rheology and Physics Laboratory
- SYNCHROMÉDIA Multimédia Communication in Telepresence
- TFT Thermo-Fluid for Transport Laboratory

## INFRASTRUCTURES AND BUILT ENVIRONMENT

- Canada Research Chair on Sustainable Multifunctional Construction Materials
- Industrial Research Chair on the Integration of Digital Technologies in Construction
- Distech Controls Industrial Chair on Embedded Neural Networks for Connected Building Control
- CERIEC Center for Intersectoral
   Studies and Research on the Circular

- Economy
- DRSR Research team specialized in Development and Research on Structures and Rehabilitation
- GRIDD Research Group in Integration and Sustainable Development in Built Environment
- LaRTIC Research Laboratory on Information Technologies in Construction
- LCMB Pavements and Bituminous Materials Laboratory
- LG2 Geotechnical and Geoenvironmental Engineering Laboratory
- LTSB Laboratory of Thermal and Building Science

### **QUANTUM ENGINEERING**

 Marcelle-Gauvreau Engineering Research Chair in Multimaterial and Multifunctional Photonic Devices

# INNOVATIVE MATERIALS AND ADVANCED MANUFACTURING

- Canada Research Chair in Hybrid Optoelectronic Materials and Devices
- Canada Research Chair on Sustainable Multifunctional Construction Materials
- ArianeGroup Research Chair on Emerging Materials in the Aeronautics and Space sector
- Finkl Steel Industrial Research Chair in Forming Technologies of High-Strength Alloys
- Olympus Industrial Chair on Ultrasonics Nondestructive Testing
- Marcelle-Gauvreau Engineering Research Chair in environmentally friendly composite materials
- CERIEC Center for Intersectoral Studies and Research on the Circular Economy
- CoRo Control and Robotics Laboratory
- DRSR Research team specialized in Development and Research on Structures and Rehabilitation
- DYNAMO Research Laboratory in Machine, Process and Structural Dynamics
- GRAM Acoustics Research Group of Montréal
- LACIME Communications and Microelectronic Integration Laboratory
- LAMSI Shape Memory Alloys and Intelligent Systems Laboratory
- LaRTIC Laboratoire de recherche sur les technologies de l'information dans la construction
- LCMB Pavements and Bituminous

- Materials Laboratory
- LIPEC Polymer and Composite Engineering Laboratory
- LIPPS Products, Processes, and Systems Engineering Laboratory
- LOPFA Optimization of Aerospace Manufacturing Processes Laboratory
- POLYMERETS Polymer Rheology and Physics Laboratory
- PULÉTS Piezoelectricity, ULtrasonics technologies and materials Laboratory
- NUMÉRIX Organizational Engineering Research Laboratory for the Digital Enterprise

## INTELLIGENT AND AUTONOMOUS SYSTEMS

- Canada Research Chair on Electrical Energy Conversion and Power Electronics
- Canada Research Chair on Next-Generation Internet of Things (Next-Gen IoT) Networks
- Industrial Research Chair on the Integration of Digital Technologies in Construction
- Distech Controls Industrial Chair on Embedded Neural Networks for Connected Building Control
- Matrox Industrial Chair in Computer Vision for Industrial Applications
- Olympus Industrial Chair on Ultrasonics Nondestructive Testing
- Chaire de recherche industrielle
   Summit Tech sur la vidéo interactive et immersive
- Robotiq Industrial Research Chair in Interactive Robotics
- Canada CIFAR Research Chair in Artificial Intelligence
- Siemens Industrial Chair on Industry
   4.0 Technology Integration
- Marcelle-Gauvreau Engineering Research Chair on Applications and Services in Edge Computing
- CoRo Laboratoire de commande et de robotique
- GREPCI Power Electronics and Industrial Control Research Group
- IMAGIN LAB Laboratory of Innovation and Engineering Systems for Automation and Digitalisation
- INIT Intuitive and Natural Interaction for the Teleoperation of Robots
- LACIME Communications and Microelectronic Integration Laboratory
- LASI Computer System Architecture Research Laboratory
- LATIS Biomedical Information Processing Laboratory

- LCSec Cybersecurity Laboratory
- LINCS Cognitive and Semantic Interpretation Engineering Laboratory
- LIVE Interventional Imaging Laboratory
- LIVIA Imaging, Vision and Artificial Intelligence Laboratory
- NUMÉRIX Organizational Engineering Research Laboratory for the Digital Enterprise

# SOFTWARE SYSTEMS, MULTIMEDIA AND CYBERSECURITY

- Canada Research Chair in Spatiotemporal Encryption of Terahertz Light Assisted by Computational Method
- Canada Research Chair on Next-Generation Internet of Things (Next-Gen IoT) Networks
- ÉTS-EERS Industrial Research Chair in In-Ear Technologies
- NSERC-Ultra Electronics Chair on Wireless Emergency and Tactical Communications
- Matrox Imaging Industrial Research Chair in Computer Vision for Industrial Applications
- Olympus Industrial Chair on Ultrasonics Nondestructive Testing
- Summit Tech Industrial Research Chair on interactive and immersive video
- Kaloom-Telus Industrial Research Chair on an Engineering Approch to DevOps in the Context of Software Defined Systems
- GRANIT Research Group on Numerical Applications in Engineering and Technology
- IMAGIN LAB Laboratory of Innovation and Engineering Systems for Automation and Digitalisation
- MULTIMEDIA LAB
- LATIS Biomedical Information Processing Laboratory
- LCSec Laboratory on Cybersecurity
- LIVE Interventional Imaging Laboratory
- LIVIA Imaging, Vision and Artificial Intelligence Laboratory
- SYNCHROMÉDIA Laboratory for Multimedia Communication in Telepresence