

Orientation session Fall 2026

**Department of Chemical and
Materials Engineering –
Academic and Community
Conduct**

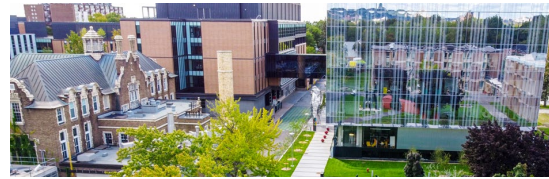


Academic and community conduct

- My advice:
 - Be honest at all times
 - Plagiarism is not tolerated
 - Don't cheat on exams
 - Don't copy from others
 - Always cite every source you use
 - Be respectful at all times
 - Rudeness or bullying is not tolerated
 - Concordia encourages and celebrates diversity
 - Be responsible at all times
 - Inform yourself of the rules and follow them
 - Read your admission letter – in its entirety
 - Read your course outlines – in their entirety
 - Safety: Part of Chemical Engineering culture

CONCORDIA.CA





Dr. Sana Jahanshahi Anbuhi,
Associate Professor
and Graduate Program Director (GPD)



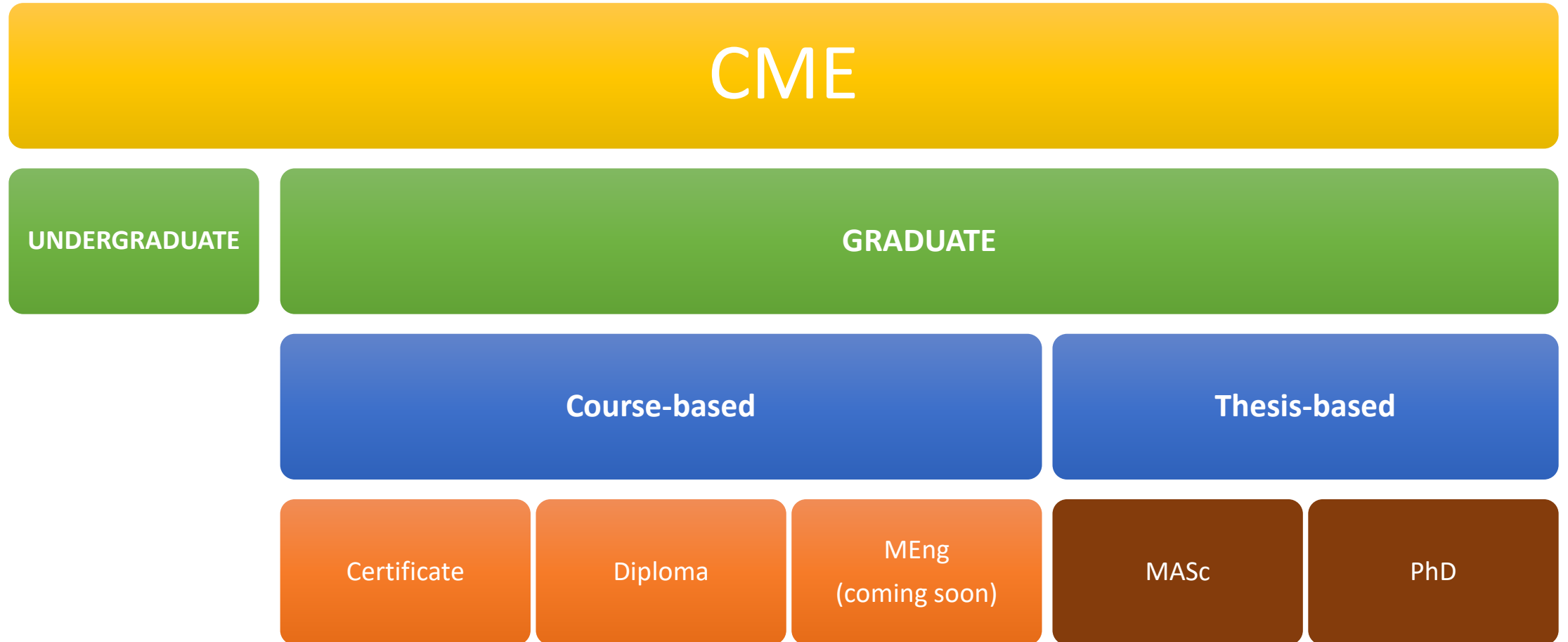
Concordia University

- Established in **1974** through the merger of two institutions, Sir **George Williams University (1926)** and **Loyola College (1896)**
- **Programs and Schools:** Concordia offers over 300 programs across four faculties:
 - 1) Gina Cody School of **Engineering and Computer Science (GCS)**
 - 2) Faculty of **Arts and Science (FAS)**
 - 3) Faculty of **Fine Arts (FoFA)**
 - 4) John Molson School of **Business (JMSB)**

Students	49,898 (as of 2022–23)
Undergraduates	35,404 (as of 2022–23)
Postgraduates	10,084 (as of 2022–23)



CME Graduate Programs



CME Thesis-Based Programs

☐ MASc

➤ 45 credit program:

- a) Courses (min. 4)
- b) Department seminars by invited speaker
- c) Thesis
- **typically, 2 years**

☐ PhD

➤ 90 credit program:

- a) Courses (min. 3)
- b) Comprehensive exam
- c) Proposal exam
- d) PhD seminar
- e) Department seminars by invited speakers
- f) Thesis
- **typically, 4 years**

Get familiar with the [CME Graduate Student Handbook](#). You will find detailed information on all programs offered by the Department and the guidelines you need to follow.

MASc Program Requirements

- **a) Courses – 16 credits**
 - **a.1) Mandatory (8 cr.):**
 - **CHME 6981- Chemical Engineering Research Protocols and Safety (4 cr.)**
 - required prior to lab access; take ASAP
 - **Minimum 1 course (4 cr.) from: CME MASc core courses:**
 - CHME 6011 Advanced Transport Phenomena (4 cr.)
 - CHME 6021 Advanced Chem. Eng. Thermodynamics (4 cr.)
 - CHME 6031 Chemical kinetics and Reaction Engineering (4 cr.)
 - CHME 6041 Chemical Process Dynamics and Control (4 cr.)
 - CHME 6051 Chemical Process Engineering and Design (4 cr.)
 - CHME 6071 Materials Science and Engineering (4 cr.)
 - CHME 6081 Advanced Separation Processes (4 cr.)
 - CHME 6121 Nanomaterials Science and Engineering (4 cr.)
 - ENCS 6021 Engineering Analysis (4 cr.)

Discuss with your supervisor on course selection!

MASc Program Requirements- Cont.

- a) Courses – 16 credits
 - a.2) Other 8 credits:
 - Any courses from **CME MASc core course list** and **electives list**

MASc electives:
(> 24; expanding)

CHME 6061 Advanced Biochemical Engineering (4 cr.)
CHME 6091 Statistics for Chem. Eng. (4 cr.)
CHME 6101 Advanced Battery Materials and Technologies (4 cr.)
CHME 6111 Polymer Chemistry and Engineering (4 cr.)
CHME 6131 Advanced Colloid and Interface Science and Engineering (4 cr.)
CHME 6911 Topics in Chemical Engineering I (4 cr.)
ENCS 6111 Numerical Methods (4 cr.)
ENGR 6201 Fluid Mechanics (4 cr.)
MECH 6131 Conduction and Radiation Heat Transfer (4 cr.)
....

- possible to take 1 course outside the Electives list (get permission of GPD); courses at other departments at Concordia or other universities.
- Note: If you take a 3-cr. course, you must take 1-cr. CHME 6001 – Project in CME to obtain the missing credit.

MASc Program Requirements- Cont.

☐ b) Department seminars by invited speakers: mandatory to attend 80%.

☐ c) Research and thesis

➤ **ENGR 8901- MASc Research and Thesis (29 cr.)**

Discuss with your supervisor on your thesis research (topic, objectives, methodology, timeline)!

PhD Program Requirements- Cont.

- a) Courses – 12 credits

- a.1) Mandatory (8 cr.):

- CHME 6981- Chemical Engineering Research Protocols and Safety (4 cr.)

- required prior to lab access; take ASAP

- At least 1 course (4 cr.) from CME PhD courses:

CME PhD courses:
(> 30 ; expanding)

CHME 6011 Advanced Transport Phenomena (4 cr.)
CHME 6021 Advanced Chem. Eng. Thermodynamics (4 cr.)
CHME 6031 Chemical kinetics and Reaction Engineering (4 cr.)
CHME 6041 Chemical Process Dynamics and Control (4 cr.)
CHME 6051 Chemical Process Engineering and Design (4 cr.)
CHME 6061 Advanced Biochemical Engineering (4 cr.)
CHME 6071 Materials Science and Engineering (4 cr.)
CHME 6081 Advanced Separation Processes (4 cr.)
CHME 6121 Nanomaterials Science and Engineering (4 cr.)
....

Discuss with your supervisor on course selection!
Choose courses that best align with your research areas and interest you most.

PhD Program Requirements- Cont.

☐ a) Courses – 12 credits

• a.2) Other 4 credits:

- You may take **1 course within or outside the PhD course list (get permission of GPD)**
- This can be a course at **other departments** at Concordia **or** at **other universities**
- **Note:** If you take a 3-cr. course, you must take 1-cr. (e.g. CHME 6001 – Project in CME) to obtain the missing credit.

PhD Program Requirements- Cont.

☐ (b-d) Comprehensive and proposal exams, and Seminar - 8 credits

➤ (b) ENCS 8501 Comprehensive Exam (0 cr.) – Critical Literature Review

Generally, within 1st year of PhD program; submit a critical literature review report and defend

➤ (c) ENCS 8511 Doctoral Research Proposal (6 cr.)

Generally, within half a year after passing Comprehensive Exam; submit a research proposal and defend

➤ (d) ENCS 8011 PhD Seminar (2 cr.)

Generally, after passing Doctoral Research Proposal; deliver a seminar and attend other seminars (by other PhD students and invited department seminar speakers)

Discuss with your supervisor on your comprehensive exam!

PhD Program Requirements- Cont.

☐ (e) Department seminars by invited speakers:

➤ mandatory to attend 80%.

☐ (f) Research and thesis

➤ ENGR 8911 Doctoral Research and Thesis (70 cr.)

Discuss with your supervisor to plan on your doctoral thesis!

Annual Progress reporting

Annual Report on Student Progress 2022/2023

Question 1 Of 11

Please describe your progress over the past 12 months, addressing academic and research/creation progress, as well as any related professional outcomes such as publications, presentations, or conferences.

- All **students** and their supervisors are responsible for filling out and submitting **Annual Progress Reports** (APRs) through the the **Student Information System** (SIS).
- **Note:** Students who fail to submit their APRs will be blocked from registering for courses the following term.

Student Resources

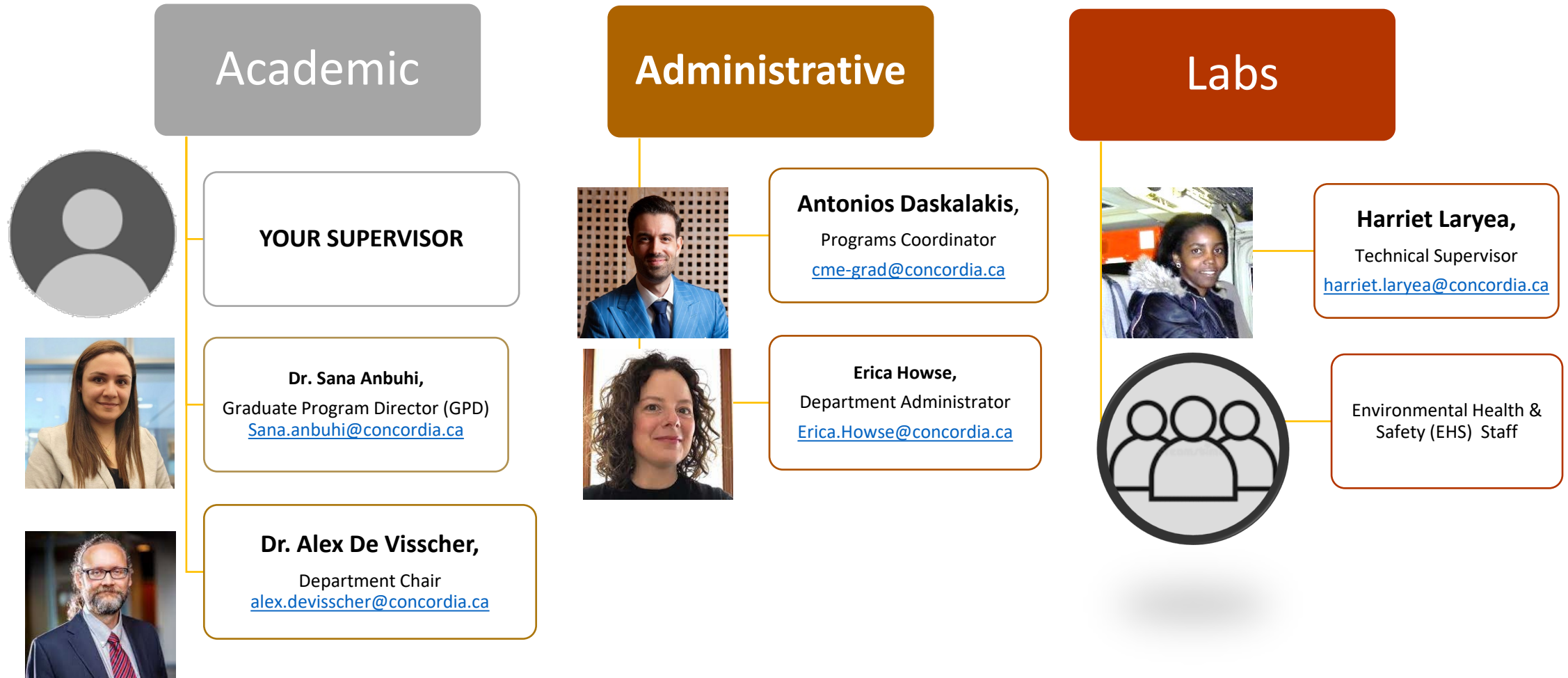
- ❑ **Scholarship and bursary opportunities available**, <https://www.concordia.ca/sgs/awards-funding.html>
 - **Announced from time to time; will forward once announced**

- ❑ **International Student Office (ISO)**, <https://www.concordia.ca/students/international.html>
 - Immigration documents
 - Health Insurance
 - Events and workshops

- ❑ **Student Hub**, <https://www.concordia.ca/students/services.html>

- ❑ **GradProSkills**, <https://www.concordia.ca/students/gradproskills/workshops/skill-domains.html>
 - **Grad academic success** (Preparing a thesis or research paper, Funding and awards, etc.)
 - **Leadership and management** (Administration, Creativity and innovation, Leadership, Project, management)
 - **Career development** (Entrepreneurship, Career planning, Job search, Networking, Personal branding, Skills identification)
 - **Teaching** (Teaching assistantship, Teaching methods, Teaching technology)
 - **Language training** (French competency, English competency)
 - **Communication** (Academic writing, Professional writing, Presenting, etc.)
 -

Help Available at CME department





Wish you best success in
your study at CME



CME Course-based Graduate Programs

CME Graduate Student Orientation
Fall 2026

Deniz Erol, Graduate Program Director, Course-based Programs

Graduate Certificate in Chemical Engineering

General requirements:

Certificate program consists of completing a minimum of **15 credits** of course work.

Course requirements: **4 courses**

- CHME 6011 – Advanced Transport Phenomena (4 credits)
- ENCS 6021 – Engineering Analysis (4 credits)
- One of the following courses:
 - CHME 6021 – Advanced Chemical Engineering Thermodynamics (4 credits)
 - CHME 6031 – Chemical Kinetics and Reaction Engineering (4 credits)
- One technical elective course (min. 3 credits, max. 4 credits):
 - You can choose any course offered in the Diploma or Master of Applied Science (MASc) programs that are not currently included in the core course list of the Certificate program.

Graduate Certificate in Chemical Engineering

Course Plan:

Option 1

Fall 2026:

- CHME 6011 – Advanced Transport Phenomena
- CHME 6021 – Advanced Chemical Engineering Thermodynamics

Winter 2027:

- ENCS 6021 – Engineering Analysis
- Technical elective

Option 2

Fall 2026:

- CHME 6011 – Advanced Transport Phenomena
- ENCS 6021 – Engineering Analysis

Winter 2027:

- CHME 6021 – Advanced Chemical Engineering Thermodynamics
- Technical elective

Graduate Certificate in Chemical Engineering

Additional requirements: Attendance at 80% of the CME departmental seminar series. Attendance is taken with a sign-in sheet. The schedule of the seminars is communicated by email.

Students can transfer their course credits from the Graduate Certificate to Graduate Diploma program.

If you wish to transfer, talk to your GPD and refer to the Graduate Student Handbook for the transfer process.

Graduate Diploma in Chemical Engineering

General requirements:

- Diploma program consists of completing a minimum of 30 credits of course work.

Course requirements: 8 courses

- CHME 6011 – Advanced Transport Phenomena (4 credits)
- CHME 6021 – Advanced Chemical Engineering Thermodynamics (4 credits)
- CHME 6031 – Chemical Kinetics and Reaction Engineering (4 credits)
- ENCS 6021 – Engineering Analysis (4 credits)
- One of the following courses:
 - CHME 6041 – Chemical Engineering Process Dynamics and Control (4 credits)
 - CHME 6051 – Chemical Process Engineering and Design (4 credits)
- 3 electives

Graduate Diploma in Chemical Engineering

Course Plan:

Fall 2026:

- CHME 6011 – Advanced Transport Phenomena
- CHME 6021 – Advanced Chemical Engineering Thermodynamics
- CHME 6051 – Chemical Process Engineering or Design

Winter 2027:

- CHME 6031 – Chemical Kinetics and Reaction Engineering
- ENCS 6021 – Engineering Analysis
- Technical elective

Summer 2027:

- Technical elective x 2

Graduate Diploma in Chemical Engineering

Additional requirement: 80% attendance to seminars.

Students can transfer up to 12 credits from the Graduate Diploma to the Master of Applied Science (MAsc) program.

Please note that securing a supervisor is required for admission to the MAsc program.

International course-based students: To have a full-time student status in any semester, you should be taking 9 or more credits of coursework.

Important for all students:

- **DNE: Monday, September 21.**
- **Most courses are offered once a year.**
- **Minimum pass grade is B-.**
- **One C rule, no F. If you think you might fail, discontinue (DISC) the course.**

DISC deadline: Monday, November 16.

ENGINEERING AND COMPUTER SCIENCE GRADUATE ASSOCIATION (ECSGA)



ECSGA





ECSGA

Our Mission

The mission of ECSGA is to optimally, responsibly, and efficiently serve its members.

Our Vision

Our vision is to lead the way in shaping a dynamic and visionary graduate student community within the fields of engineering and computer science.



WHAT WE DO?

- Represent the collective interests and promote the general welfare of the graduate students in the ENCS Faculty.
- Represent graduate students on various boards, councils, and committees in the ENCS Faculty and at Concordia University and to promote their interests in accordance with the Accreditation Act.
- Promote the educational, social, recreational, and cultural interests of its members.
- Co-operate with other organizations having similar interests in promoting student activities and interests.
- Consider and support activities which enhance the quality of life for students at Concordia University.



THE TEAM...

Consists of 10 members and categorized into 2 divisions.

Executive team(4)

- President
- Vice president - Internal
- Vice president - External
- Vice president - Finance

Department Representatives(6)

- Building, Civil and Environmental Engineering (BCEE)
- Mechanical, Industrial and Aerospace Engineering (MIAE)
- Concordia Institute for Information Systems Engineering (CIISE)
- Chemical and Materials Engineering (CME)
- Computer Science and Software Engineering (CSSE)
- Electrical and Computer Engineering (ECE)



ECSGA TEAM 2026- 2027

President: Kaushikan Murali

CISSE: Kimia Esmaili

VP external: Manikanta Bailuri

CSSE: Monil Tailor

VP internal: Sheida Jahandar

ECE: Ramprasad Giriraj

VP finance: Hassan Gharaei

MIAE: Arjun Jeyalaksmi

BCEE: Sai Tarun Iragattapu

CME: Amirreza Aghili



Some workshops done by ECSGA:



❖ CME department:

Fueling the Future: Sustainable Emissions in the Rocket Science

AI Tools: From Idea to Publication (3-day workshop)

❖ MIAE Department:

Negotiate like a Pro: Secrets of successful negotiating

❖ BCCE Department:

Career development guidance



Some external events done

Mount Tremblant

- One-day trip on October 12th

Arcade Night

- On September 15th

- **Pumpkin carving**
on October 31st

Join us for a spooktacular time!

PUMPKIN CARVING party

October 31, 2024 • 5:30 pm

At ECSGA Office • Annex MU, 2170, 101 Bishop St,
Montreal, Quebec H3H 1Y1

Students: 5 CAD Guest: 7 CAD

A NIGHT OF STRIKES & SPARES!

BOWLING BLITZ

- **Bowling**
on March 7th

SUNDAY
30 MARCH
06:00 PM

STUDENT
TICKETS
\$7.99

GUEST
TICKETS
\$10.99

VENUE : MONTREAL BOWLING
2313 RUE SAINTE-CATHERINE 4TH FLOOR, MONTRÉAL, QC H3H 1N2



Some workshops done by ECSGA:



❖ CME department:

Fueling the Future: Sustainable Emissions in the Rocket Science

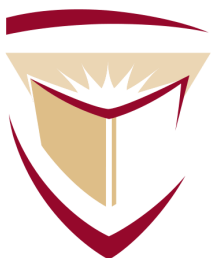
AI Tools: From Idea to Publication (3-day workshop)

❖ MIAE Department:

Negotiate like a Pro: Secrets of successful negotiating

❖ BCCE Department:

Career development guidance



Some Tips for beginning your PhD:

- Don't think you have to know everything!
- Don't say yes to everything!
- Don't focus on just one task!
- Don't wait for everything to be PERFECT!!
- Don't be afraid to ask questions!
- Don't take everything personally!
- Don't get too technical!
- Not every problem is yours to solve!
- Hard work alone doesn't guarantee results — focus on outcomes!
- Disagreement doesn't mean conflict!

Instead, you should show:

- ✓ You can learn!
- ✓ You can adapt!
- ✓ You can deliver!



**Thank you all, for your time and patience!
Stay tuned with ECSGA.**

Feel free to reach out to us at:

Website: concordiaecsga.ca

Address: Concordia University, 2170, Basement. MU 101, Behind Hall
Building on Bishop Street, Montreal, QC

Email: info@concordiaecsga.ca, cme@concordiaecsga.ca

Phone Number: 514-848-2424 ext. 8604



Welcome to your Library!

Chemical and Materials Engineering Graduate Orientation

Rudi Aker

Teaching & Research Librarian, Engineering & Computer Science

rudi.aker@concordia.ca

Library Overview

- 01 Welcome
- 02 Library Services
- 03 Library Access
- 04 Library Spaces
- 05 Getting connected

Welcome!

The Concordia Library has so much to offer throughout your studies & at every point of your academic journey.

The Library is an access point to:

- Specialized research expertise
- Key research tools
- Collaborative & independent study spaces
- Workshops & skill -building opportunities
- Equipment, technology, and software
- & more!



Library Services

RESEARCH SUPPORT

- 1-on-1 consultations with subject librarians
- Support with literature reviews, theses, research data management, & more.
- Guided research & discovery.

RESEARCH TOOLS

- Access to specialized databases & resources.
- Collections of engineering materials (standards, patents, trademarks).
- Access to materials outside of Concordia through Interlibrary loans.

LEARNING SUPPORT

- Workshops to develop & strengthen academic skills.
- Tutorials & guides for research, writing, and more.
- Study spaces & equipment for independent and collaborative work.

Library Access

In addition to learning & research materials, the Library also has **equipment and technology** available for you to borrow. **Printing services** are also available at the Webster and Vanier libraries and at multiple other locations on both campuses.

Your Student ID is your Library card.

Access online materials with netname and password.

Item type	Loan duration
Regular items	30 days (+ renewals)
Daily course reserves	1 day
3-hour course reserves	3 hours
Accessories (e.g. mobile chargers, headsets...)	1 day
Equipment (e.g. calculators, white board markers...)	1 day
Laptops	3 day
Tablets	3 days
Technology Sandbox items	7 - 14 days

Library Spaces

Both libraries have spaces and resources accessible to all students, as well as **dedicated spaces for graduate students.**

More information on the general-use study spaces available at both Webster and Vanier libraries can be found on the library website.

library.concordia.ca



WEBSTER LIBRARY
SGW CAMPUS

Dissertation Writers' Rooms

- LB-561 “Iceland”
- LB-562 “Venezuela”
- LB-564 “Mali”

Reading Room

- LB-545 “Spain”



VANIER LIBRARY
LOYOLA CAMPUS

Graduate Study Room

- VL-305

** Visit the reference desk to obtain an access code. This room is available on a first come, first-served basis, though can be reserved online.*

Library Hours

In the **Fall & Winter semesters**, the Library is open **24/7**. Be sure to **bring your student ID** if you are arriving, or planning to stay, after 11 PM.

Library hours do change slightly from semester to semester, and especially in the Summer, hours, services, and access are reduced.

library.concordia.ca

FALL HOURS

SEPTEMBER 8- DECEMBER 20

Monday – Friday

24 hours

Saturday – Sunday

24 hours

Getting connected!

library.concordia.ca



Online

- Ask-a-Librarian service
- Library chat service
- Email your subject librarian
 - Rudi Aker -- rudi.aker@concordia.ca



In-person

- Visit the Ask Us! desk at the Webster Library (SGW Campus)
- Visit the Reference Desk at the Vanier Library (Loyola Campus)

Thank you!

We hope to see you at the Library!

Graduate Professional Development

Racha Cheikh-Ibrahim
Coordinator, Graduate Professional Development

concordia.ca/gradproskills



Our OFFERINGS



WORKSHOPS

Hundreds of free
workshops per year



EVENTS

3MT/MT180, Thesis
Boost, PhD Career
Connect & more



CERTIFICATES

Record of participation
and certificates



OPPORTUNITIES

Doctoral Internship
Program, Work
opportunities



Professional Skills (GradProSkills)



Career
development

Program: PhD Career Connect & Brewing Success

Workshops: Job search and interview skills, CV & cover letter



Communication

Program: Strategic Public Communications Certificate

Workshops: Presenting, language training, pitching ideas



Leadership &
collaboration

Program: Graduate Leadership Development Certificate

Workshops: Project management, negotiating, and team dynamics



Teaching

Program: Graduate Seminar in University Teaching Certificate

Workshops: TA orientation & grading and feedback

Research and Thesis Support



Conducting
research

Program: Excel, Python & R programming

Workshops: Reading skills, literature review, time management



Graduate funding
applications

Program: Grant and application support

Workshops: Funding information, application preparation



Research
communication

Program: Public Scholars program and 3MT & MT180 competitions

Workshops: Academic writing and editing, publishing, and presenting



Thesis support

Program: Thesis Boost and Mini-Boost & Graduation (re)orientation

Workshops: Thesis writing and submission, student-supervisor relationship

Stay up-to-date!



Websites

- concordia.ca/gradproskills
- concordia.ca/thesis



Newsletter & LinkedIn

- Newsletter out every other week!
- linkedin.com/showcase/gradproskills



E-mail

gradproskills@concordia.ca



**Scan to visit our
website**

Four PhD programs to support you during your PhD journey

Choose the opportunities that support you at each stage of your PhD journey

START

Doctoral Peer Mentorship

Build community, navigate your first year and get peer support

DEVELOP

Doctoral Internship Program

Gain practical experience and apply your skills beyond your research

EXPAND

Public Scholars

Strengthen your research communication and engage broader audiences

EXPLORE

PhD Career Connect

Explore career possibilities and prepare for what comes after the PhD

Early PhD

Mid PhD

Mid-to-Late PhD

Wrapping up

Doctoral peer mentorship program



Scan to sign up

Navigate your first year of the PhD with peer support

CONNECT

Build community with
fellow PhD students

NAVIGATE

Gain clarity on
expectations
and helpful strategies

GROW

Build confidence and get
support from the start

Join by September 14

We're here to support you

Connect with us throughout your graduate journey





WELCOME & WHO WE ARE

We are the union representing
Teaching Assistants and
Research Assistants at
Concordia University.

Mission: Advocate for fair working
conditions, wages, and respect.

What is a union?



- A union is a **collective of workers** who join together to **improve wages, benefits, and working conditions**.
- **Recognized:** has the right to bargain with the university.
- The union is defined by its members. *You* are the union!



Know your rights as a TA / RA



- ❑ All TAs and RAs are protected by CREW's

Collective Agreement

- ❑ TA and RA contracts have **start and end dates**
- ❑ We are paid by the **hour**, not by the **task**!



Know your rights as a TA / RA



- ☐ Right to a **safe, discrimination-free workplace**
- ☐ Right to **fair compensation**
- ☐ Right to **union representation in disputes**
- ☐ Right to **bargain collectively**

CREW is here to back you up.



Why membership matters



SCAN
HERE TO
SIGN YOUR
CARD!



- ☐ Only members can **vote** in union elections.
- ☐ Membership = **strength** at the bargaining table.

It's a bargaining year!



What we won in the last round of negotiations:

- Pay raise of 20% (over the years 2023-2026)
- Protections from harassment, discrimination, and academic and/or professional retaliation
- A better workload form for TAs
- Job protections from university-wide austerity cuts
- Intellectual property rights, improvements to health and safety, accessibility measures, and much more.



It's a bargaining year!



CREW's **collective bargaining priorities** for this round of negotiations, as adopted by the General Assembly in March 2026 are:

1. **Transparent and Open Bargaining**
2. **Increased and Fair Wages**
3. **Safe Work Practices**
4. **Fair Hiring Practices & Workload Protections**
5. **Increased Benefits**
6. **Protections against AI and other technological changes**



How to get involved...



UPCOMING EVENTS:

- ☐ September 16, est. 6pm:
Inaugural General Assembly
- ☐ September 18, evening:
CUUSS-TS Film Screening

COMMITTEES:

- ☐ Department Organizers
- ☐ Article Committees
- ☐ Food Committee
- ☐ MoCo Committee

Visit crewcsn.com for all event information!



Contact and next steps

Visit our website: www.crewcsn.com

Follow us on Instagram: [@crew.csn](https://www.instagram.com/crewcsn)

Email us: hello@crew-csn.com

Address: PR-204/205, 2100 Mackay Street, Montréal, QC



**SCAN
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SIGN YOUR
CARD!**

