

Registration Guidance for Students Entering the MS in Chemical Engineering (CHME) Program in Fall 2025:

Congratulations on your acceptance to the MS in Chemical Engineering program at Northeastern University!

How do I register for classes? To be able to register for classes, admitted students need to first confirm their enrollment and pay their enrollment deposit. Students may do so by logging into their [application portal](#). Please register as soon as you can to ensure you have a spot in the courses you need.

Please watch the following webinars for instructions on how to register using your [MyNortheastern Student Hub account](#):

- Course Search Webinar:
[Schedule of Classes - Office of the University Registrar Knowledge Base \(northeastern.edu\)](#)
- Course Add/Drop Webinar:
[Registering for Classes - Office of the University Registrar Knowledge Base \(northeastern.edu\)](#)

IMPORTANT NOTE: The curriculum for the MS in Chemical Engineering Program recently changed effective Fall 2024, with the addition of three concentrations to choose from. You must select/register for one of these concentrations if you have not done so already when applying. Please read this guidance carefully to plan appropriately based on your desired concentration.

What are the new concentrations?

The new concentrations within the MS in Chemical Engineering Program are:

- 1) Biosystems (Coursework option)
- 2) Sustainability (Coursework option)
- 3) General Principles & Applications (MS Project or MS Thesis options)

Which concentration should I choose?

This depends on your goals in obtaining an MS in Chemical Engineering and your future plans. Importantly, you should know that you can pursue Co-op opportunities, take any of our elective courses, and participate in research as part of all three concentrations.

If you are considering pursuing a PhD or a career in research following completion of the MS degree, then we recommend choosing the General Principles & Applications concentration. Students choosing this concentration will learn more about the research process, meet with potential faculty research advisors, and rotate through different research labs during the first Fall semester.

If you want to focus more on advanced coursework in either Biosystems or Sustainability, then we recommend choosing the matching concentration. You can still look to join a research lab as a volunteer or for up to 4 credits of elective course credit (with approval by the program advisor).

What courses will I take in each concentration?

You can see all the requirements and options for each concentration on the [catalog website](#). Here is a summary:

- 1) Biosystems
 - a. 6 credits of common core (CHME 6310 & CHME 6320)
 - b. 2 semesters of CHME 6390 (0 credits)
 - c. 6 credits of concentration core (CHME 6430 & either CHME 5160 or 5630)
 - d. 8 credits of depth electives (CHME 5160/5185/5515/5630/5631/5632/5683)
 - e. 12 credits of breadth electives (many options available)
- 2) Sustainability
 - a. 6 credits of common core (CHME 6310 & CHME 6320)
 - b. 2 semesters of CHME 6390 (0 credits)
 - c. 6 credits of concentration core (CHME 6420 & either CHME 5621 or 5683)
 - d. 8 credits of depth electives (CHME 5105/5137/5179/5621/5683)
 - e. 12 credits of breadth electives (many options available)
- 3) General Principles & Applications
 - a. 6 credits of common core (CHME 6310 & CHME 6320)
 - b. 2 semesters of CHME 6390 (0 credits)
 - c. 6 credits of concentration core (CHME 6410 & either CHME 7330 or 7350)
 - d. 8 credits of option-specific courses:
 - i. Project option: CHME 7945 & either CHME 7330, 7340, or 7350
 - ii. Thesis option: CHME 7945 & CHME 7990 & CHME 7390 (0 credits)
 - e. 12 credits of approved electives (many options available)

Can I change my concentration later?

Yes, there will be many opportunities to consider changing your concentration. We recommend deciding and sticking with it by the end of the first Fall semester, however it may still be possible to change beyond that point. Students interested in changing their concentration should talk to the [Associate Director of MS Programs](#), Prof. Adam Ekenseair, and their Graduate Student Services (GSS) Academic Advisor (at coe-chme-gradadvising@northeastern.edu) to look over the options.

What should I register for in Fall 2025 if I do NOT hold a BS degree in Chemical Engineering and do NOT have Math training?

For those students who have not previously completed a bachelor's degree in chemical engineering (regardless of desired concentration), it is very strongly recommended to complete CHME 5101 (first Fall) and 5102 (first Spring) to get up to speed on the key aspects and skills inherent in working in fields as a chemical engineer. Furthermore, if you do not previously have training equivalent to one full semester of Calculus 3 and one full semester of Differential Equations, it is also very strongly recommended that you take CHME 5699 ST: Transitional Mathematics to gain the skills needed to success in our courses. For Fall 2025 specifically:

For the Fall 2025 Semester, students WITHOUT a CHME BS degree and WITHOUT Cal 3 and/or Diff. Eqns. should register for:				
1	CHME 5101 CRN: 19403	Fundamentals of Chemical Engineering Analysis	4 credits	Mondays & Wednesdays, 5:45 – 7:25 pm
2	CHME 5699-01 CRN: 19409	ST: Transitional Mathematics	4 credits	Mondays, Wednesdays & Thursdays, 4:35 – 5:40 pm
4	CHME 6390 CRN: 19413	Professional Development & Communication Essentials	0 credits	Fridays, 11:45 am – 1:15 pm

What should I register for in Fall 2025 if I do NOT hold a BS degree in Chemical Engineering and DO have Math training?

For those students who have not previously completed a bachelor's degree in chemical engineering (regardless of desired concentration), it is very strongly recommended to complete CHME 5101 (first Fall) and 5102 (first Spring) to get up to speed on the key aspects and skills inherent in working in fields as a chemical engineer. For Fall 2025 specifically:

For the Fall 2025 Semester, students WITHOUT a CHME BS degree and WITH Cal 3 and/or Diff. Eqns. should register for:				
1	CHME 5101 CRN: 19403	Fundamentals of Chemical Engineering Analysis	4 credits	Mondays & Wednesdays, 5:45 – 7:25 pm
2	CHME 6310 CRN: 19411	Python for Chemical Engineers	2 credits	Fridays, 1:35 – 3:15 pm
3	CHME 6320 CRN: 19412	Numerical and Statistical Methods for Chemical Engineering	4 credits	Mondays & Wednesdays, 2:50 – 4:30 pm
4	CHME 6390 CRN: 19413	Professional Development & Communication Essentials	0 credits	Fridays, 11:45 am – 1:15 pm

What courses should I register for in Fall 2025 if I DO hold a BS degree in Chemical Engineering?

For those students with a bachelor's degree in chemical engineering, here are concentration-specific recommendations:

Biosystems Concentration: For the Fall 2025 Semester, students WITH a CHME BS degree should register for:			
CHME 6310 CRN: 19411	Python for Chemical Engineers	2 credits	Fridays, 1:35 – 3:15 pm
CHME 6320 CRN: 19412	Numerical and Statistical Methods for Chemical Engineering	4 credits	Mondays & Wednesdays, 2:50 – 4:30 pm
CHME 6390 CRN: 19413	Professional Development & Communication Essentials	0 credits	Fridays, 11:45 am – 1:15 pm
Choose One: CHME 5160 CRN: 19405 or CHME 5631 CRN: 19408 or CHME 5515 CRN: 19406	Drug Delivery: Engineering Analysis Biomaterials Principles and Applications Process Safety Engineering for Biotechnology and Pharmaceutical Industries	4 credits	Wednesdays, 4:35 – 7:55 pm Tuesdays & Thursdays, 4:35 – 6:15 pm Tuesdays & Fridays, 9:50 – 11:30 am

Sustainability Concentration: For the Fall 2025 Semester, students WITH a CHME BS degree should register for:			
CHME 6310 CRN: 19411	Python for Chemical Engineers	2 credits	Fridays, 1:35 – 3:15 pm
CHME 6320 CRN: 19412	Numerical and Statistical Methods for Chemical Engineering	4 credits	Mondays & Wednesdays, 2:50 – 4:30 pm
CHME 6390 CRN: 19413	Professional Development & Communication Essentials	0 credits	Fridays, 11:45 am – 1:15 pm
CHME 5621 CRN: 19407	Electrochemical Engineering	4 credits	Tuesdays & Fridays, 9:50 – 11:30 am

General Principles & Applications Concentration: For the Fall 2025 Semester, students WITH a CHME BS degree should register for:			
CHME 6310 CRN: 19411	Python for Chemical Engineers	2 credits	Fridays, 1:35 – 3:15 pm
CHME 6320 CRN: 19412	Numerical and Statistical Methods for Chemical Engineering	4 credits	Mondays & Wednesdays, 2:50 – 4:30 pm
CHME 6390 CRN: 19413	Professional Development & Communication Essentials	0 credits	Fridays, 11:45 am – 1:15 pm
CHME 7330 CRN: 19415	Chemical Engineering Thermodynamics	4 credits	Tuesdays & Thursdays, 5:45 – 7:25 pm

If you want to map out a different schedule, please keep in mind that some key courses are only offered in the Fall semester (CHME 6310, 6320, and 7330) or the Spring semester (CHME 6410, 6420, 6430, 7340, and 7350).

What if I want to take courses Part-Time?

Domestic students wanting to take less than 8 credits of coursework per term should reach out to their Graduate Student Services (GSS) Academic Advisor (at coe-chme-gradadvising@northeastern.edu) once enrolled to submit a petition to change their status to Part-Time (all students are admitted as Full-Time by default). International students interested in Part-Time status are strongly encouraged to also consult with the [Office of Global Services](#) to verify if this is allowed per their visa status.

What if I want to take an additional/elective course?

Please know that even just 8 credits of coursework is considered a Full-Time load for graduate students, and there is an upper limit of no more than 13 credits of coursework per term. The above recommendations put most students on a path to potentially complete the degree in 1.5 years (with 10 credits the first Fall and Spring, and then 12 credits the following Summer/Fall) without a Co-op, or in 2 years with a Co-op. Keep in mind that graduate-level courses can be more challenging than undergraduate courses.

To check which courses are being offered (and days/times) each semester, you can search the [Course Schedule](#):

1. Term – For example: “Spring 2024 Semester”
2. Subject – “CHME”, etc. depending on the department(s) you want to search for course availability
3. Under Advanced Searches – “Graduate” for Course Level

What if my course is full?

Do not panic! Enrollments are always shifting as students get Co-ops or change their course registrations. If a seat is not available in your preferred classes right away, you can join the waitlist. To join a waitlist, enter the class CRN (a unique, 5-number identifier for each section) directly into your registration sheet and hit submit. You will then have an option to select “waitlist” from a drop-down menu. The waitlist system will automatically inform you when a seat opens - just log into your account and accept it within the 24-hour time limit! Having students on the waitlist for a course is also how the department will know to consider expanding the registration cap if that is feasible based on the assigned classroom space or to potentially offer an additional section.

Will I get a bill from registering?

Yes, your first e-bill is generated when you register for your courses. You will receive an e-bill from the University with instructions on how to pay the e-bill. If you have questions about payment, please contact the [Student Financial Services](#) office directly.

What if I am transferring credits from another institution or degree program?

Students who are transferring credit for core and/or elective courses should talk with the [Associate Director of MS Programs](#), Prof. Adam Ekenseair, and their Graduate Student Services (GSS) Academic Advisor (at coe-chme-gradadvising@northeastern.edu) to determine an appropriate plan of study. You will be able to easily add or drop courses using the online registration system for the first two weeks of the term.

What if I am interested in the Gordon Engineering Leadership Program?

If you are considering the Gordon Engineering Leadership program, please discuss your interest with your Graduate Student Services (GSS) Academic Advisor at Orientation. You should still register for the above-listed courses.

What if I am interested in the Co-op Program?

Before going on a Co-op, students need to have completed their first two semesters (16 credits). A Co-op preparatory course, ENCP 6100, must also be completed during the second semester at the earliest. Find out more [here](#). If you have further questions, contact your Co-op team at ChemEGradCoop@northeastern.edu

What if I already have some equivalent coursework? Students who have already completed an equivalent course that counted towards a prior degree may be eligible to waive some of the required core coursework by petitioning the department's Graduate Committee. Consult with the [Graduate Committee](#) and the department Academic Coordinator [Cindy Rinear](#) for advice and be prepared to provide transcripts and syllabi. Please note that this is different than transferring in credit from another university. Waiving the requirement just allows you to take a different course instead (with approval of the program advisor) to fulfill the 32 credits that are required for the degree.

Meeting with your Chemical Engineering Department faculty advisor:

Students will be advised by the [Associate Director of MS Programs](#) for programmatic and big-picture questions, with meetings to be scheduled once per year or as desired.

Meeting with your Graduate Student Services Academic Advisor: For questions related to registration errors and issues, program requirements, and questions about GSS forms, please email coe-gradadvising@northeastern.edu to be connected with your academic advisor. You can find more information about the academic advisors [here](#).

For more information about beginning your program at Northeastern University, please read your acceptance letter in full.

We look forward to welcoming you to the Graduate School of Engineering!

Sincerely,

The Chemical Engineering Department