Registration Guidance for Students Entering the MS in Pharmaceutical Engineering Program in Fall 2025:

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

<u>How do I register for classes?</u> To register, admitted students need to first confirm their enrollment and pay their enrollment deposit. Students may do so by logging into their <u>application portal</u>. Please register soon 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)

What if I do not have the expected math skills coming into the program?

Students starting the MS in Pharmaceutical Engineering program are expected to have previously completed the equivalent of one full semester of Calculus 2 (Integral Calculus) AND one full semester of Differential Equations. If you do not have the necessary math background, then we have a transitional math course available this Fall 2025 semester, and we strongly recommend you enroll in:

1	CHME 5699-01 CRN: 19409	ST: Transitional Mathematics	4 credits	Mondays, Wednesdays & Thursdays, 4:35 – 5:40 pm
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This course can be counted towards your depth elective course credit for the MS-PHEN degree by petition once you are enrolled in the program. You can of course also take courses on your own over the summer in Calculus 2 and/or Differential Equations to satisfy these expectations, which would not be part or your MS degree requirements or otherwise transfer into this program as credit. It is strongly recommended to complete math preparation before starting CHME 7600.

What if I do not have any prior exposure to biochemistry or molecular biology?

Students starting the MS in Pharmaceutical Engineering program are expected to have some prior exposure to the basics of organic chemistry, as well as aspects of biochemistry and molecular biology. If you do not feel prepared on these topics or would like a refresher, then we have a transitional course available this Summer 2 2025 term offered online:

1	1	PHSC 5290	Foundational Biochemistry for Pharmaceutical	2 credits	Times TBA (Online Course)
	1	CRN: 61947	Engineering		

This course can be counted towards your depth elective course credit for the MS-PHEN degree by petition once you are enrolled in the program. You can follow-up with the College of Engineering Admissions Team to understand how and if you can register for and enroll in this course before your first semester on Campus. It is strongly recommended that, if needed, this course be completed prior to enrolling in PHSC 5100 or PHSC 5102.

Topics to be familiar with include: protein structure levels (primary, secondary, tertiary & quaternary), DNA structure including polymerization, transcription, transcription factors, and translation, amino acid structures, chemical bonds involved in drug binding, and the central dogma of molecular biology. Exposure to typical proteins discussed in biochemistry classes such as kinases and other enzymes, hemoglobin and their cofactors, and prosthetic groups such as heme and ATP, GTP & GDP will also be helpful. Basic knowledge of cell physiology and cell organelles is also recommended.

What courses should I register for?

Assuming that students are prepared in terms of math and biochemistry, note that there are seven core courses split across Chemical Engineering (CHME 6390, 7600, 7601, & 7602) and Pharmaceutical Sciences (PHSC 5100, 5102, & 7010). We recommended Full-Time students complete all these courses in your first two semesters in the program:

	For the Fall 2025 Semester, students should register for:					
1	CHME 6390 CRN: 19413	Professional Development and Communication Essentials	0 credits	Fridays 11:45 am – 1:25 pm		
2	CHME 7600 CRN: 19420	Pharmaceutical Engineering I	4 credits	Tuesdays & Fridays, 9:50 – 11:30 am		
3	PHSC 5100 CRN: 15726	Concepts in Pharmaceutical Science	2 credits	Thursdays, 6:30 – 8:10 pm		
4	PHSC 5102 CRN: 15727	Concepts in Pharmaceutical Science 2	2 credits	Thursdays, 4:35 – 6:15 pm		

For the Spring 2026 Semester, students should register for:					
1	CHME 6390 CRN: 19413	Professional Development and Communication Essentials	0 credits	Fridays 11:45 am – 1:25 pm	
2	CHME 7601 CRN: TBA	Pharmaceutical Engineering II	4 credits	ТВА	
3	CHME 7602 CRN: TBA	Pharmaceutical Engineering Laboratory	2 credits	ТВА	
4	PHSC 7010 CRN: TBA	Pharmaceutical Sciences Laboratory	4 credits	ТВА	

Following this schedule will ensure that all key theoretical courses as well as all hands-on lab courses are completed prior to potential Co-op placement. If you are looking to map out a different schedule, please keep in mind that some courses are only offered in the Fall semester (CHME 7600, PHSC 5100, and PHSC 5102) or the Spring semester (CHME 7601 and CHME 7602). PHSC 7010 is currently offered both Fall and Spring and might also be offered in Summer 1 2026.

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 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. If it has been years since you last took college-level courses or if this will be your first time in the Boston area, we recommend sticking with just the 8 credits of core coursework in the first semester. Graduate-level coursework in general can be more challenging than typical undergraduate courses, so we do advise against overloading yourself right away. Otherwise, for Fall 2024, adding PHSC 7010 or an approved elective course (see list in the Academic Catalog) may be possible.

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

- 1. Term For example: "Fall 2024 Semester"
- 2. Subject "CHME", "PHSC", 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 <u>Student Financial Services</u> 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 <u>Associate Director of MS Programs</u>, Prof. Adam Ekenseair, and their Graduate Student Services (GSS) Academic Advisor (at <u>coe-chme-gradadvising@northeastern.edu</u>) 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 <u>Associate Director of MS Programs</u> for programmatic and big-picture questions, with meetings to be scheduled once per year or as desired.

<u>Meeting with your Graduate Student Services Academic Advisor:</u> For questions related to registration errors and issues, program requirements, and questions about GSS forms, please email <u>coe-gradadvising@northeastern.edu</u> 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