Northeastern University
College of Engineering

Congratulations on your acceptance to the Master of Science (MS) Data Architecture & Management program at Northeastern University – Toronto!

As an incoming Fall 2026 student, there are some steps that you need to take before the Fall semester starts. **Please read this document thoroughly as it contains helpful information and can answer many of your questions before you start your first semester in your master's program**.

Step 1: Confirm your enrollment.

You will not be able to register for classes (information below) until you confirm enrollment. You can confirm your enrollment by logging into your application account and paying the enrollment deposit. If you have any questions regarding this process, please reach out to the Graduate Admissions team at coe-gradadmissions@northeastern.edu.

Step 2: Know your key university and program contacts.

Graduate Student Services (GSS)
GSS is an academic resource in the College of Engineering which, in conjunction with university faculty and staff, facilitates key academic processes, including course registration, graduation clearance, and general academic advising.

The Office of Global Services (OGS)
OGS is an active resource to all international students and scholars at Northeastern. They provide the professional expertise and support you need to maintain compliance through immigration, academic, and your employment experiences.

College of Engineering Graduate Admissions
Our admissions team is dedicated to supporting you throughout the application process. If you have questions about your application, visit the Graduate Student Support Center for frequently asked questions, or contact the team via email at: coe-gradadmissions@northeastern.edu.

Software Engineering and Information Systems (SEIS) Department
The directors, faculty, and staff of the SEIS department work

collaboratively to support our programs and students. As a new student, we recommend reviewing the SEIS Frequently Asked Questions page, which provides essential guidance for all our students. For any other questions related to your program of study, please contact us at: COE-mgen-programs@northeastern.edu.

Step 3: Complete your course registration.

As a Data Architecture and Management student, you have 4 required courses to complete during the duration of your program in order to earn your degree. These courses are *DAMG 6105: Data Science Engineering with Python, DAMG 6210: Data Management and Database Design, DAMG 7250: Big Data Architecture and Governance, and DAMG 7370: Designing Advanced Data Architectures for Business Intelligence*. **DAMG 6105 and DAMG 6210 are mandatory courses for the Fall semester. Elective options will be available for you to take in future semesters once you complete these courses.** The Fall classes will help first-year students develop the skills needed to be successful throughout the rest of your program.

Professor Maricla Pirozzi, Director of the Data Architecture & Management program, in collaboration with your Academic Advisor, has created the following advising guide for you to refer to as you choose your courses for this Fall. Please register for Toronto sessions of the courses. You will not be able to take courses from other campuses. **Please note class information is subject to change.**

DAMG 6105: Data Science Engineering with Python

This class studies the Python programming language with data science as the application domain and offers students an opportunity to learn how to perform complex numerical calculations, fixed data types, space efficiency, and vector manipulations. The class covers tools and techniques for manipulating tables, spreadsheets, group and pivot tables involving extremely large data sets, large multidimensional arrays and matrices and the high-level mathematical functions to operate on these arrays. Students will study how to use Python to manipulate the classic math and science algorithms. Includes higher-level classes for manipulating and visualizing data. The course applies tools and techniques to classical data science using cases such as time series forecasting, social network analysis, text analytics, and big data processing.

Section Available:

Section 05: Friday 11:30 AM – 2:50 PM *EST*
CRN 21964

DAMG 6210: Data Management and Database Design
For the student who has no background in databases and wants to know what is involved in the design and programming of databases and wants to maximize technical skills. A good foundation for those who want to focus on data management, business intelligence, data science, etc. or who want to make these areas their career objectives.

Section Available:
Section 10: Monday 5:30 PM – 8:50 PM *EST*
CRN 16405

Capstone/Master's Project and Thesis Requirements
As part of the Data Architecture and Management degree program in Toronto, you are required to complete either a thesis or a capstone/Master's Project in addition to the coursework required for your degree program. These components are integral to your academic journey. Both the thesis and capstone/Master's Project options provide you with an opportunity to delve deep into a topic of your interest, apply theoretical knowledge to real-world problems, and showcase your analytical and research skills.
Here's a brief overview of the options available to you:

Thesis (8 Semester Hours)*: If you choose the thesis route, you will have the chance to conduct original research under the guidance of a faculty advisor. The thesis option will require a high-level of dedication and approval of thesis topic prior to registering in this option. Additionally, this option is ideal for those who have a keen interest in academic research, wish to contribute new knowledge to the field of Data Architecture and Management, and seek further doctoral or PhD studies post-graduation.

** 8SH of thesis work need to be completed consecutively over two semesters.*

Capstone/Master's Project (4 Semester Hours): Alternatively, you may opt for the capstone/Master's Project, which is a hands-on, practical endeavor focused on solving a real-world problem or addressing a specific challenge within the realm of Data Architecture and Management. This option allows you to gain relevant industry insights, apply theoretical concepts to practical scenarios, and demonstrate your ability to develop innovative solutions.

Regardless of which option you choose, both the thesis and the capstone/Master's Project offer valuable opportunities for personal and

professional growth, allowing you to develop critical thinking skills, enhance your research abilities, and make meaningful contributions to the field. ***More information regarding the course sequencing, course registrations, and requirements of each option will be shared with you during your orientation sessions.***

Throughout your academic journey, our faculty and staff are here to support you every step of the way! If you have any questions or require further clarification regarding the thesis or capstone/Master's Project requirements, please do not hesitate to reach out to your Academic Advisor (coe-toronto-gradadvising@northeastern.edu).

Frequently Asked Questions

In addition to the items outlined below, please visit the SEIS Frequently Asked Questions page for further guidance.

How do I register?
Please enter the CRN numbers listed above directly into your registration worksheet. In some instances, these sections may not be available to view online as they are reserved for first-term students only. In these cases, you will not be able to register for these classes using the search classes feature and MUST enter the CRNs directly. If you need help navigating to your registration worksheet on your StudentHub, please click on the following link for instructions on how to register: **General Registration Instructions**

*If you continue to encounter issues registering, contact Graduate Student Services (coe-seattle-gradadvising@northeastern.edu)

How do I get a MyNortheastern account?
After you confirm your enrollment, you will be able to log in to your Northeastern portal and utilize your Student Hub. If you have not set up your Northeastern account, please visit How do I claim my student account.

How do I meet with Professor Pirozzi?
You will have an opportunity to meet with Professor Pirozzi, Director of Software Engineering and Information Systems Programs, at orientation before classes start.

Am I allowed to take three courses?
No. Data Architecture and Management students are limited to two courses

each term. Based on feedback from our students we found that three courses were too demanding, especially in terms of final exams and projects. All our courses require projects that count as much as 30% of your final grade and it is hard to complete three of these a term. No exceptions to this policy will be considered until **after your first year**.

Can I take courses from other departments?
The only departments DAMG students can take courses from are DAMG (Data Architecture and Management), INFO (Information Systems), CSYE (Software Engineering Systems), and TELE (Telecommunication Systems).

Can I transfer credit from other universities?
No. Professor Pirozzi firmly believes that all 32SH should be taken within the program at Northeastern University to uphold the integrity and continuity of the program.

What is the duration of the Data Architecture and Management Program?
You are required to take eight courses for a total of 32 credits. The program takes a minimum of four semesters to complete. The typical student takes 2.5 years to complete the program, which includes an eight-month co-op.

Is there funding or Teaching Assistant jobs available for first year students?
There are no funding options in your first year. TA positions are filled by second year students only. You are expected to be fully dedicated to achieving academic success in the first year of the program.

Am I required to bring a laptop?
Yes. You must bring a high-quality laptop with a minimum of 8 GB memory AND a strong (4 hour) battery life -- this is required.

Am I eligible for co-op?
You are not eligible for co-op the first two semesters of your program, during which your focus will be strictly academic. During your last semester of study (in your second year), you must be fully on campus as a full-time student, even if you are eligible to be on co-op. According to government rules and regulations, co-op is an educational opportunity to strengthen your engineering skills--not a job pursuit.

How do I register for the co-op course?
One of the requirements to becoming eligible to go on co-op is to take ENCP 6000, Career Management for Engineers. To register, check Banner for available sections at your campus.

The **ENCP 6000: Career Management for Engineers** course is required to be eligible for co-op and to obtain access to Northeastern's co-op job platform, to search for co-op positions. See the suggested registration information below.

For more details, the Graduate Co-op Eligibility and Requirements can be found HERE.

How long can I go on co-op?
Co-ops are a minimum of four months and a maximum of eight months.

Will I get an electronic bill after 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 the mode of payment or billing, please contact the Student Financial Services Office by submitting a Student Financial Services Inquiry Form. Please do not contact faculty members or the registrar's office regarding tuition payment or billing. Additional information is available on their website at http://www.northeastern.edu/financialaid/contact/.

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!