



Northeastern University

College of Engineering

Department of
Mechanical and
Industrial Engineering

Congratulations on your acceptance to the Data Analytics Engineering (DAE) program at Northeastern University – Vancouver!

Please remember to confirm your enrollment at Northeastern, as you will not be able to register for classes until you complete this step. 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 through the [Graduate Admissions Support Center](#).

We recommend that you complete IE 6200 Engineering Probability and Statistics, **AND** IE 6600, Computation and Visualization for Analytics **OR** OR 6205 Deterministic Operations Research in your first semester. These courses are offered in the traditional instructional method in Vancouver. These courses are part of your core course requirements and are an important building block for all your subsequent courses. You will have a structured course plan throughout the program to ensure the quality of learning. The subsequent classes and course plan will be shared with you at orientation.

IE 6200 Engineering Probability and Statistics: Offers students an opportunity to learn fundamental concepts of probability. Topics include events, sample space, and discrete and continuous random variables; density functions, mass functions, cumulative probability distributions, and moment generating functions; expectation of random variables; common discrete and continuous probability distributions including binomial, Poisson, geometric, uniform, exponential, and normal; multivariate probability distributions, covariance, and independence of random variables; sampling and descriptive statistics; and parameter estimation, confidence intervals, and hypothesis testing. Also introduces analysis of variance. Requires knowledge of multivariate calculus.

Sections Available:

Fall 2024, Monday/Wednesday, 8:30 – 10:10 AM PDT, CRN 22222
Traditional Instructional Method

IE 6600 Computation and Visualization for Analytics: Offers students an opportunity to learn how to use visualization tools and techniques for data exploration, knowledge discovery, data storytelling, and decision making in engineering, healthcare operations, manufacturing, and related applications. Covers basics of Python and R for data mining and visualization. Introduces students to static and interactive visualization charts and techniques that reveal information, patterns, interactions, and comparisons by focusing on details such as color encoding, shape selection, spatial layout, and annotation.

Sections Available:

Fall 2024, Monday and Wednesday, 10:30AM – 12:10PM
PM PDT, CRN 18741
Traditional Instructional Method

OR 6205 Deterministic Operations Research: Introduces the theory, computation, and application of deterministic models to represent industrial operations. Includes linear programming formulation and solution using spreadsheet and algebraic languages software; simplex, big-M, two-phase, revised simplex, and dual simplex algorithms for solving linear programs; introduction to the theory of simplex, fundamental insight, duality, and sensitivity analysis; transportation, assignment, and transshipment problems; shortest path, minimum spanning tree, maximum flow, minimum cost network flow problems and project networks; and discrete-state and continuous-state dynamic programming models and applications.

Sections Available:

Fall 2024, Friday 9:00 – 12:30 PM PDT, CRN 21668

Traditional Instructional Method

Frequently Asked Questions

How do I register? If you need help navigating to your registration worksheet on your MyNEU account, please watch the following webinars for instructions on how to register using your MyNEU account: <https://registrar.northeastern.edu/article/new-registration-experience/>

If you need additional support, please feel free to contact your Academic Advising department: coe-vancouver-gradadvising@northeastern.edu

What if I already registered for classes? Please drop them immediately, unless they are from the tentative course plan listed above.

Am I allowed to take three courses? DAE students are limited to two courses per semester. Based on feedback from our students we found that three courses were too demanding. No exceptions to this policy will be considered until after your first year.

Am I allowed to take courses from the Boston Campus? You may not take courses from other campuses as you will not be able to participate in the course. In addition, you must maintain an on-ground presence at your designated campus.

Can I take courses from other departments? No. All core courses and electives are from the MIE department (Mechanical and Industrial Engineering).

What is the duration of the Data Analytics Engineering Program? You must take eight courses, for a total of 32 credits. The program takes at least three semesters to complete. The typical student takes 2.5 years to complete the program, which includes an eight-month Co-op.

Am I eligible for Co-op? DAE students are eligible to participate in the co-op program once all eligibility requirements are met. As an eligibility requirement, you can take ENCP 6100 Introduction to Cooperative Education in your first or second semester. More information about co-op will be shared during orientation.

Is there funding or Teaching Assistant jobs available for first year students? Unfortunately, there are no funding options in your first semester. You may apply for a TA position after your first semester. You are expected to be fully dedicated to academic success in the program's first semester.

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

Will I get a 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 payment, please contact the Student Financial Services office directly: [SFS Ask a Question - Northeastern Student Portal \(SFS\)](#)

Will I get a chance to meet with faculties and advisors? Yes, you will have an opportunity to meet with key staff members at Orientation, including Prof. Yingzi Lin (MIE department interim Chair, remote), Prof. Xuemin Jin (DAE program director, remote), Prof. Qurat-ul-Ain Azim (faculty in Vancouver, in-person), and Antonio Fadda (Academic Advisor and Program Manager, in-person). Schedule and information will be shared later. Note that you must attend orientation.

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,

Graduate School of Engineering
Northeastern University