Congratulations on your acceptance to the Master of Science (MS) Information Systems program at Northeastern University's Graduate School of Engineering!

As an incoming Spring 2024 student, there are some steps that you need to take before the Spring 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 faculty advisors and administrative contacts.

Professor Kal Bugrara
Program Director, Information Systems

Professor Maricla Pirozzi
Program Director, Information Systems – Bridge, and Data Architecture & Management

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Step 3: Complete your course registration.
As an Information Systems student, you are **required to complete INFO 5100: Application Engineering Development** and the accompanying lab, **INFO 5101: Lab for INFO 5100, in your first term**. This is the only required course in the Information Systems program and it is an important building block for your subsequent courses. Your second course will be the first elective course in your program. The available elective options for our first-year students will help you develop the skills you will need to be successful throughout the rest of your program. **It is strongly recommended that you take one of the elective courses listed below in addition to INFO 5100 and INFO 5101, as some of these courses are prerequisites to other courses that will be offered in following semesters.**

Professor Kal Bugrara, the Director of the Information Systems program, has created the following advising guide for you to refer to as you choose your courses for this Spring. Please register for Boston sessions of the courses. You will not be able to take courses from other campuses. Please note class information is subject to change.

INFO 5100 (required): Application Engineering and Development
Students will learn innovative software programming techniques that will enable them to design and build any kind of application properly and quickly. Through hands-on weekly lab sessions, students practice the development of applications as an assembly of components. Object-oriented techniques for building business architectures that map to software applications will be introduced. You will learn how to master ways of taking vague requirements and turn them into systems of eco-system scale. This class was designed to meet the needs of engineering students with a limited programming background. Students who do have a programming background will learn how to design and architect software the right way. This class with its emphasis on solid design of socio-technical systems is the cornerstone of what we do in Information Systems.

Sections Available:
Section 04: Wednesday 3:00 – 6:00 PM
CRN 32600

INFO 5101 (required): Lab for INFO 5100

This required lab session is complementary to the main lectures of INFO 5100. The lab will cover the syntax and semantics of programming in the Java programming language. The teacher will emphasize all aspects of the Java programming language in depth to ensure students are ready to tackle complex problems. The lab will be especially useful for students with a minimum programming background.

Sections Available:
Section 04: Sunday 9:00 AM – 12:00 PM
CRN 33806

INFO 6105: Data Science Engineering Methods and Tools

This class is for students who are planning to build a career in engineering machine learning and data science applications. The class covers the fundamentals of probability and statistics, data analysis and engineering, classification and clustering techniques, statistical inferencing, machine learning methods and tools. In a step-by-step manner, students will learn how to code in and make extensive use of the python programming language. Minimum expertise in programming is required to take this class. Though very demanding, this class is a good fit with the Application Engineering class (INFO 5100) for students with prior development experience.

Sections Available:
Section 01: Saturday 1:00 – 4:30 PM
CRN 39506

Section 02: Tuesday & Friday 9:50 – 11:30 AM
CRN 32831

Section 04: Wednesday & Friday 11:45 AM – 1:25 PM
CRN 32833

Section 10: Monday & Thursday 11:45 AM – 1:25 PM
CRN 35433

INFO 6150: Web Design and User Experience Engineering

This course gets into the front-end design of web-based user interfaces using Javascript. You learn the latest tools, techniques, and frameworks for building attractive user interfaces that engage the user in meaningful ways. You'll learn about various ways that users interact with systems,

color theory, and how to implement solid client-side user interfaces. Meant for students with minimal programming background but ready to program in Javascript and html. This class goes well with the Application Engineering class (INFO 5100). These two classes will prepare you well for becoming a front-end developer. Tools covered include Javascript, Typescript, AnglurJS, Node, and various aspects of the React framework. This is a popular course that we recommend highly due to its relevance to co-op job opportunities.

> **Sections Available:**
> Section 01: Saturday 1:00 – 4:30 PM
> **CRN 32079**
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> Section 02: Wednesday 6:10 – 9:40 PM
> **CRN 32597**
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> Section 05: Thursday 6:10 – 9:40 PM
> **CRN 35479**
>
> Section 07: Thursday 6:00 – 9:30 PM
> **CRN 36582** *(Livecast Instructional Method)*

INFO 6215: Business Analysis and Information Engineering
This class provides an overview of the software life-cycle with special emphasis on client engagement, requirements gathering, use-case development, UML class diagrams, etc. This is an excellent class for students who are new to the software industry and want to take their time in building their programming skills. The class complements the Application Engineering class very well.

> **Sections Available:**
> Section 02: Tuesday 6:00 – 9:30 PM
> **CRN 39512**

INFO 6255: Software Quality Control and Management
This class examines techniques for the management and evolution of software systems. Topics include managing software as an asset; life cycle development and rapid development technologies; maintainability; quality assurance of software systems including testing strategies and problem analysis; software risk analysis; analysis of software project failures; process models; configuration management; and the impact of new development technologies on software management.

Sections Available:
Section 01: Tuesday 6:00 – 9:30 PM
CRN 32842

INFO 7385: Managerial Communications for Engineers
This course focuses on managerial communication strategies and tactics for engineers at the interpersonal, team, and organizational level. Course topics include forms (oral and written), styles, and differences in communication; coaching and giving feedback to staff; building teams, managing conflict, and special topics in organizational communication (engineering communication skills, leadership and change). The primary goal of this course is to increase your communication and managerial effectiveness to help you progress along your engineering career path.

Sections Available:
Section 01: Wednesday 10:30 AM – 2:00 PM
CRN 35212 *(Livecast Instructional Method)*

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.

Sections Available:
Section 01: Monday 6:00 – 9:30 PM
CRN 35194

Section 02: Wednesday 6:00 – 9:30 PM
CRN 35195

Section 05: Thursday 6:00 – 9:30 PM
CRN 35198

Section 06: Saturday 2:30 – 6:00 PM
CRN 35199

CSYE 7280: User Experience Design and Testing
Introduces user experience concepts while working on Web design projects. Offers students an opportunity to build the necessary skill sets to make better decisions when designing contemporary websites that cater to customer needs. Students practice interview techniques to understand user requirements while keeping user experience central to the effort. Uses wireframes and user scenarios to drive the creative design process. Various case studies are introduced and discussed in team settings to emphasize user perspectives. Uses quality assurance and usability testing to drive validation and user-acceptance testing and approvals.

Sections Available:
Section 01: Monday 6:10 – 9:40 PM
CRN 31936

Section 04: Saturday 12:30 – 4:00 PM
CRN 36570 *(Livecast Instructional Method)*

Section 05: Wednesday 6:10 – 9:40 PM
CRN 36571

Frequently Asked Questions

In addition to the items outlined below, please visit the MGEN 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 MyNortheastern account, please click on the following link for instructions on how to register using your MyNortheastern account:
    General Registration Instructions

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

How do I get a MyNortheastern account?
If you have not set up your MyNortheastern account, please refer to the following link on How do I claim my student account.

What if I already registered for classes?
Please drop them immediately--unless they are the courses listed above. **As a first-term student, you should only take the sections of the classes listed above**. If you are registered in a section whose CRN number does not match with a number above, you are in the wrong section. Please make sure you are always registered for **8 SH** if you are a full-time student.

What if I do not get the elective I wanted?
If your first preference does not have any seats available, please sign up for your second preference (and so on). The schedule is dynamic, and students will continue to change their registrations up until the start of the term so there is still an opportunity for you to get into your first-choice elective this Spring. Please make sure you are always registered for **8 SH** if you are a full-time student.

Can I take an elective other than the ones listed above?
No. These classes were chosen because they are appropriate for first-term students. Please refer to the advising guide to select the class most relevant to your interests.

How do I meet with Professor Bugrara?
You will have an opportunity to meet with Professor Bugrara, the Director of the Information Systems program, at orientation before classes start.

Can I skip the Application Engineering class (INFO 5100) or take it in a later semester?
No, you must take INFO 5100 this Spring. The class is essential for advancing yourself through the program and engaging in a successful co-op experience.

Am I allowed to take three courses?
No. Information Systems 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 courses require projects that count as much as 30% of your final grade and it is extremely hard to complete three of these in one term. **No exceptions to this policy will be considered until after your first year.**

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

Can I transfer credit from other universities?
No. Professor Bugrara 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 Information Systems 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?
Unfortunately, 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** for the Application Engineering course.

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. You can register for this course just as you do with your academic courses, but you need to make sure that you register for a section only for IS students. You can see this information in the course description on your registration portal under "Program Restrictions."

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. Please 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 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 the mode of payment or billing, please contact the Student Financial Services Office at studentaccounts@northeastern.edu. 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!