Congratulations on your acceptance to the Information Systems program at Northeastern University!

Please remember to confirm your enrollment at Northeastern. 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 through the Graduate Admissions Support Center.

As an Information Systems student you are required to complete INFO 5100, Application Engineering Development, in your first term. This is the only required course in the Information Systems program and it is an important building block for all of your subsequent courses. Your second course will be the first elective course in your program. We have seven different elective options for our first year students that will help you develop the skills you will need to be successful throughout the rest of your program.

Professor Kal Bugrara, the Director of the Information Systems program and your Academic Advisor, has created the following advising guide for you to refer to as you choose your courses for this Fall.

**INFO 5100 (required), Application Engineering and Development:** Students will learn innovative software programming techniques that will enable them to properly design and build any kind of application 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 ecosystem 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 IS.

**Sections Available:**
- **Section 01:** Friday 8:00 - 10:30 AM **CRN 11521**
- **Section 02:** Friday 11:45 AM - 2:15 PM **CRN 14090**
- **Section 04:** Friday 2:45 - 5:15 PM **CRN 17064**

**INFO 5101 (required), Lab for INFO 5100:** This is a required two-hour class session complementary to the main lectures of INFO 5100. The lab will cover the syntax and semantics of programming in the Java programming language. The teachers 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 minimum programming background.
**Sections Available:**

**Section 01-03:** Saturday 9:00 - 11:00 AM **CRN 14095, 16620, 16621**
**Section 04-06:** Saturday 11:00 AM - 1:00 PM **CRN 16622, 16623, 16624**
**Section 07-09:** Saturday 1:00 - 3:00 PM **CRN 16627, 16628, 16625**

**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 be 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 coop job opportunities.

**Sections Available:**

**Section 03:** Saturday 1:00 - 4:00 PM **CRN 16589**
**Section 04:** Wednesday 6:00 - 9:30 PM **CRN 17067**

**INFO 6205, Program Structure and Algorithms:** This class is recommended for students who have had programming experience before but lack the algorithmic approach to solving complex programming challenges. The class covers all kinds of data structures from stacks, queues, trees, graphs, and algorithmic performance complexity. In addition, the class covers various problem solving techniques such as divide and conquer, dynamic programing, randomized and greedy algorithms, backtrack search, etc. After the completion of this class you will be in a position of solve any programming problems. Though this class is optional, is highly recommended for students aiming to be software developers. There is a lot of technical work involved here, so it will be a challenge along with the Application Engineering class. Students with a strong technical background may wish to take up this challenging opportunity right away.

**Sections Available:**

**Section 01:** Wednesday & Friday 11:45 AM - 1:25 PM **CRN 18583**
**Section 02:** Tuesday 11:45 AM - 1:25 PM & Thursday 2:50 - 4:50 PM **CRN 16613**

**To register for INFO 6150 or INFO 6205, please email Haley Lyons at h.lyons@northeastern.edu with the CRN of your preferred section. The first 40 students in each section will be accommodated**
INFO 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. This class will prepare you well for Web Methods and Tools in the Spring semester.

Sections Available:
- Section 05: Tuesday 11:45 AM - 1:25 PM & Thursday 2:50 - 4:50 PM CRN 16612
- Section 06: Wednesday & Friday 11:45 AM - 1:25 PM CRN 14094

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. The class runs as a combination of online lectures and classroom discussions.

Sections Available:
- Section 01: ONLINE CRN 11990 (highly advanced digital product approach)
- Section 03: Tuesday 6:00 - 9:30 PM CRN 18594
- Section 04: Thursday 6:00 - 9:30 PM CRN 18595

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: Monday 6:00 - 9:30 PM CRN 16818

INFO 6105, Machine Learning: This class is for students 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 for students with prior development experience.
Sections Available:

Section 01: Tuesday 11:45 AM - 1:25 PM & Thursday 2:50 - 4:50 PM CRN 18647
Section 02: Tuesday 11:45 AM - 1:25 PM & Thursday 2:50 - 4:50 PM CRN 18657

**To register for INFO 6105 please email Haley Lyons at h.lyons@northeastern.edu with the CRN of your preferred section. The first 40 students in each section will be accommodated**

**CSYE 6200, Concepts of Object-Oriented Design:** This class will focus on the ins-and-outs of the java programing language. Students who did not program before will be asked to take this class in addition to Application Engineering. The combination of these two courses is an excellent way for students to strengthen their development skills in preparation for the heavily programming courses such as the Algorithms, Web Methods and Tools, Big-Data Engineering classes during the Spring semester.

Sections Available:

Section 01: Monday 6:00 - 9:30 PM CRN 15265
Section 02: Wednesday 6:00 - 9:30 PM CRN 16592
Section 04: Monday 2:00 - 5:00 PM CRN 18677

Frequently Asked Questions

**How do I register?:**
For INFO 5100, 5101, 6210, 6215, 6105, 7385, and CSYE 6200: Please enter the CRN numbers listed above directly into your registration worksheet. Please note that these sections are not available to view online as they are reserved for first term students only. 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 MyNEU account please watch the following webinars for instructions on how to register using your MyNEU account:

♦ Course Search Webinar: http://www.northeastern.edu/registrar/webinar-search.html
♦ Course Add/Drop Webinar: http://www.northeastern.edu/registrar/webinar-adddrop.html

For INFO 6150, 6205 and 7390: please email Haley Lyons at h.lyons@northeastern.edu with the CRN of your preferred section. Students will be accommodated on a first come first serve basis. If your selected class fills you will have to join a different elective that has seats.

**What if I already registered for classes?:** Please drop them immediately, unless they are the courses listed above. As a first term student you can only take the sections of the classes listed above. There are specific sections set aside for first term students that are not visible on the online schedule. If you are registered in a section whose CRN number does not match with a number above you are in the wrong section.
**What if I do not get the elective I wanted?:** If your first preference fills, 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 Fall. 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 six 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.

**Meeting with Professor Bugrara:** You will have an opportunity to meet with Professor Bugrara, the Director of the Information Systems program and your Academic Advisor at Orientation.

**Can I skip the Application Engineering class (INFO 5100) or take it later in the Spring or Summer?:**
No, you must take INFO 5100 this Fall. The class is only available in the Fall terms and 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 of our courses require projects that count as much as 30% of your final grade and it is extremely 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 other department Information Systems students are allowed to take classes from is CSYE (Computer Systems Engineering). CSYE is a sister program to IS and is being repositioned to focus exclusively on big-data technologies and programming platforms. Courses such as java, multi-threading, managing big-data projects, advanced big-data programming, as well as Scala/Spark programming will be available to IS students after your first term in the program.

**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 three 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) batter 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. You are allowed to begin your first co-op after the Spring semester ends. 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. This course will be available in both the Fall and Spring terms. Please search for ENCP 6000 on the Fall schedule to register.

**Sections Available:**
- **Section 02:** Wednesday 11:45 AM - 1:25 PM CRN 14263 Laura Meyer
- **Section 06:** Wednesday 11:45 AM - 1:25 PM CRN 16249 Jessica Pike
- **Section 07:** Thursday 2:50 – 4:30 PMPM CRN 16961 Maricla Pirozzi

**How long can I go on Co-op?** Co-ops are a minimum of four months and a maximum of eight months. You can start a co-op in May after the Spring term ends or in December after the Fall term of your second year ends.

**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: [http://www.northeastern.edu/financialaid/contact/](http://www.northeastern.edu/financialaid/contact/).

**How do I get a MyNEU account?** After you confirm your enrollment, you will be able to utilize your MyNEU portal using this link, [http://myneu.neu.edu/cp/home/displaylogin](http://myneu.neu.edu/cp/home/displaylogin). If you have not set up your MyNEU account, login to your electronic application and look for instructions to do so: [https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=neu-grad](https://app.applyyourself.com/AYApplicantLogin/fl_ApplicantConnectLogin.asp?id=neu-grad)

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