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

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 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.

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 Fall. Please **register for Arlington 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 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 corner stone of what we do in IS.

**Sections Available:**
Tuesday & Thursday 1:00 PM-2:30 PM, CRN 20159

**INFO 5101 (required), Lab for INFO 5100:**

**Sections Available:**
N/A, CRN 20153

**INFO 6105, Data Science Engineering Methods & Tools:** 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:**
Wednesday 6:00 PM-9:00 PM, CRN 20156
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, AngularJS, 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:
Tuesday 6:00 PM-9:00 PM, CRN 21358

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:
Tuesday 6:00 PM-9:00 PM, CRN 21359

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. This class will prepare you well for Web Methods and Tools in the Spring semester.

Sections Available:
Monday 6:00 PM-9:00 PM, CRN 20158

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:
♦ New Registration Experience: https://registrar.northeastern.edu/article/new-registration-experience/

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. If you are registered in a section whose CRN number does not match with a number above, you are in the wrong section.

Can I take an elective other than those listed above? No. The class options 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. Please make sure you are always registered for 8 SH if you are a full-time student.

**Meeting with Professor Bugrara:** You will have an opportunity to meet with your Academic Advisor at Orientation. Professor Bugrara, the Director of the Information Systems program, will host a meeting with all Arlington students during the Fall semester.

**Can I skip the Application Engineering class (INFO 5100) and take it later?**
No, you must take INFO 5100 this Fall. 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 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 departments IS students can take courses from are INFO (Information Systems), DAMG (Data Architecture and Management), and CSYE (Software Engineering 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 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) 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. To register, check Banner for available sections at your campus.

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

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