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

As an incoming Fall 2023 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.

As a Software Engineering Systems student, you are required to complete CSYE 6200: Concepts of Object Oriented Design and INFO 6205: Program Structure and Algorithms, as part of your degree requirements. These are the only required courses in the Software Engineering Systems program and are important building blocks for your subsequent courses. **CSYE 6200 is a mandatory course for the Fall semester.** INFO 6205 is recommended to be taken in your second semester. You will need to pair one of the recommended electives below with CSYE 6200 in your first semester. 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 Software Engineering 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.

**CSYE 6200: Concepts of Object-Oriented Design (required):** This class will focus on the ins-and-outs of the Java programming language. The course introduces object-oriented design and programming via the Java programming language; the use of inheritance, composition, and interface classes in software design. The course is an excellent way for students to strengthen their development skills in preparation for the heavily programming courses that will be taken in later semesters.

*Sections Available:*
Wednesday & Friday 1:00 PM-2:30 PM, CRN 20157

**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, 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:
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 Software Engineering Systems program, will host a meeting with all Arlington students during the Fall semester.

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

**What is the duration of the Software Engineering 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.

**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.

**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.

**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/.

**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](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!

Sincerely,

Graduate School of Engineering
Northeastern University