Congratulations on your acceptance to the Information Systems program at Northeastern University – Seattle! This is a registration guidance for IS Seattle students. Please make sure you read through this email and if you have any questions, please reach out to your Academic Advisor at coe-seattle-gradadvising@northeastern.edu.

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 your subsequent courses. Your second course will be the first elective course in your program. We have six 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 have created the following advising guide for you to refer to as you choose your courses for this Spring. Please note that any class times listed means the class will have a synchronous lecture at that time, in addition to a recorded lecture.

**INFO 5100 (Core Course), 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:*
Tuesday/Thursday 3:30-5:00 PM, CRN 32886

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

*Sections Available:*
TBD, CRN 33394

**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:**
Saturday 10:30 AM-1:30 PM, CRN 34278

**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.

**Sections Available:**
Wednesday 2:30-5:30 PM, CRN 34292

**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.

**Sections Available:**
Thursday 6:30-9:30 PM, CRN 32885

**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:**
Tuesday 6:30-9:30 PM, CRN 33770

**INFO 6215, Business Analysis & Information Engineering:** Covers computer information systems and the decision-making process, determination of information requirements, system development life cycle, and system modeling and analysis. Uses a hands-on approach to introduce the student to software engineering methodologies and practices, business requirements specification, business process design, model-driven object-oriented design, software development, and maintenance. Emphasizes the effective leverage of the Unified Modeling Language (UML) to transform business issues and objectives to concrete software
solutions that meet business needs and usability and user interface design as critical elements of a successful software engineering engagement.

**Sections Available:**
Monday/Wednesday 10:00-11:30 AM, CRN 33263

**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:**
Thursday 6:30-9:30 PM, CRN 33768

**ENCP 6000: Career Management for Engineers:** Designed to introduce engineering students to the cooperative education program and to maximize their learning by helping them become more intentional about learning in co-op and in the transfer of that knowledge and experience to and from their academic program and throughout their entire careers. This course is necessary to be eligible for co-op; this course does not count toward degree requirements.

**Sections Available:**
Thursday 1:15-3:00 PM, CRN 34537

**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/
If you need individual help, please feel free to contact your Academic Advisor: Yingqian “Terri” Gu (coe-seattle-gradadvising@northeastern.edu) or Program Manager Sam Casey at s.casey@northeastern.edu

**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.

**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 those 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 your Academic Advisor at Orientation. Professor Bugrara, the Director of the Information Systems program will host a virtual meeting with all Seattle 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 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 can 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. To register, see the information and CRN in the previous section.

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? After you confirm your enrollment, you will be able to utilize your MyNEU portal. 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

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