

Congratulations on your acceptance to the MS degree program in Cyber-Physical Systems with a concentration in the Internet of Things (IoT) at Northeastern University – Silicon Valley!

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 IoT student you are **required to complete CSYE 6510, Fundamentals of the Internet of Things, and INFO 5100, Application Engineering and Development (substitute for CSYE 6200), in your first term.** These classes are an important building block for all of your subsequent courses. You will have a structured course plan throughout the program to ensure the quality of learning. The subsequent classes and course plan will be shared with you at Orientation in September.

NOTE: If you took CSYE 6200, Concepts of Object-Oriented Design as part of the [Summer Online Scholarship](#) in Summer 2 2020, you do not need to take INFO 5100. Please consult your academic advisor at coe-sv-gradadvising@northeastern.edu for your second Fall 2020 course.

Professor Peter O'Reilly, the Program Director of the Internet of Things program and program support staff, have created the following advising guide for you to refer to as you choose your courses for this Fall.

CSYE 6510 (required), Fundamentals of the Internet of Things: Explores the foundations of and technologies involved in the Internet of Things (IoT). Topics include machine-to-machine (M2M) communications and its relationship with IoT. Examines fundamental components of the IoT architecture reviewing industry standards. Presents a large array of case studies. Discusses the fundamentals of data networks with a focus on different wireless technologies relevant to IoT, including the latest developments in IEEE 802.11, IEEE 802.15.4, and BLE, as well as network layer protocols such as 6LoWPAN that are critical to the deployment of wireless IoT networks. Discusses a range of IoT application protocols, especially MQTT, CoAP, and AMQP. Also explores IoT security and privacy considerations and identification mechanisms for IoT devices. Introduces wireless sensor networks and routing protocols for wireless networks.

Sections Available:

TBD (Online) CRN 14915

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 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 corner stone for future INFO and CSYE courses.

Sections Available:

Saturday 9:00 AM-12:00 PM CRN 16831

INFO 5101 (required), Lab for INFO 5100:

Sections Available:

TBD CRN 15226

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 (Online) CRN 13258

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 Advising department:
coe-sv-gradadvising@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 the number above, you are in the wrong section.

Meeting with Professor O'Reilly: You will have an opportunity to meet with key staff members at Orientation. Professor O'Reilly, the Director of the Internet of Things program will visit the Silicon Valley campus during the Fall semester, **COVID restrictions permitting**.

Can I skip the CSYE 6510 or INFO 5100 and take it later?

No, you must take both classes this Fall. The classes are essential for advancing yourself through the program and engaging in a successful co-op experience.

Am I allowed to take three courses? No, IoT students are limited to two courses their first year. Based on feedback from our students we found that three courses were too demanding, especially in terms of final exams and projects. No exceptions to this policy will be considered until after your first year.

Can I take courses from other departments? IoT students may take INFO and CSYE courses not listed as approved electives in the course catalog as well as up to two courses from Khoury (Computer Science) programs with prior approval from Professor O'Reilly. The elective options will be available to IoT students after your first year in the program.

What is the duration of the Internet of Things 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 a 6 or 8-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.

Am I eligible for Co-op? You are not eligible for co-op during 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. In addition, you must be enrolled full-time, have at least a 3.2 GPA, and completed 16 credits while actually on the Silicon Valley campus. During your last semester of study (in your second year), you must be fully on campus as a full-time student. 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