

Undergraduate Certificate in Cybersecurity

The Undergraduate Certificate in Cybersecurity is a 12-credit undergraduate-level certificate designed to provide fundamental knowledge of information security concepts, cryptography, information and network security and computer systems security, as well as real-world practice with hand-on experiences in cyber defense. The purpose of this undergraduate certificate is to offer a credential that covers both the theoretical and practical aspects of cybersecurity to students who are currently pursuing baccalaureate work in KU EECS department.

The entrance requirements for students entering the undergraduate certificate of cybersecurity program include:

- Upper-level eligibility in KU EECS **AND**
- Overall GPA of 2.8 or better **AND**
- Three letters of reference.

The proposed Undergraduate Certificate in Cybersecurity requires the completion of three core courses¹ and one elective course² at a total of 12 credit hours³.

Core Courses/Theory (2 courses, 6 credit hours required)

Code	Title	Hours
EECS 563	Introduction to Communication Networks	3
EECS 565	Introduction to Information and Computer Security	3

Core Courses/Practice (1 course, 3 credit hours required)

Code	Title	Hours
EECS 465	Cyber Defense	3

Elective Courses (1 course, 3 credit hours required)

Code	Title	Hours
EECS 569	Computer Forensics	3
EECS 665	Compiler Construction	4
EECS 700	Special Topics: _____ (Mobile Security)	3
EECS 700	Special Topics: _____ (IoT Security)	3
EECS 711	Security Management and Audit	3
EECS 738	Machine Learning	3
EECS 742	Static Analysis	3
EECS 755	Software Modeling and Analysis	3
EECS 765	Introduction to Cryptography and Computer Security	3

The completion requirements of the cybersecurity certificate include:

- Students must have a GPA of 3.0 or better in all certificate courses **AND**
- The minimum grade for any course to be applied toward the certificate is a grade of C

Note 1: Prerequisite and corequisite of three core courses include: EECS 140, EECS 168 EECS 268, EECS 388, EECS 448, EECS 461, and EECS 678.

Note 2: Under unusual circumstances other EECS 690 or EECS 700 security-related courses may be petitioned to satisfy elective requirement, subject to approval.

Note 3: For students who have been enrolled in the BSEE/CoE/CS/IC programs, all the credits obtained in the certification program will count toward the degree. For students who have enrolled in the BSEE/CoE/CS/IC programs, all the credits obtained before applying to the certificate will count toward the certificate.