

Proposal: Addition of an Accelerated Graduate Program for Computer & Information Technology undergraduate majors to pursue the M.S. in Cybersecurity.
Effective Date: Fall, 2018

Rationale: As a result of the newly approved Accelerated Graduate Programs at EIU, the addition of an accelerated graduate program option is requested for Computer & Information Technology (CIT) majors to accelerate pursuit of an M.S. in Cybersecurity (CYB). The following catalog changes are required.

Current Catalog.

Cybersecurity

Program Mission: The M.S. in Cybersecurity will prepare students, in an online and/or face-to-face delivered program, to become leaders and technical managers in cybersecurity, with a solid understanding of security technology and organizational management principles and practices, preparing them to make knowledgeable and responsible decisions.

Admission Requirements: To be eligible for degree candidacy, applicants must meet all the requirements for admission to the Graduate School (see "Admission to Graduate Degree and Certificate Programs"). In addition to the general admission requirements of the Eastern Illinois University Graduate School, the M.S. in Cybersecurity program requires completion of a baccalaureate degree in a related field (i.e. Computer Technology, Computer Science, Management Information Systems, Electrical Engineering, Systems Engineering, and similar fields). Exception can be made for students without a degree in those fields but with documented related practical experience and/or knowledge.

Degree Audit: The graduate plan of study is the EIU Degree Audit, which is generated automatically in the Degree Audit Reporting System (DARS) at the time of degree or certificate candidacy. Modifications of the standard EIU Degree Audit are submitted by the graduate coordinator to the certification officer in the Graduate School at the time modifications are approved. The Degree Audit serves as an unofficial summary of requirements for the program. Degree and certificate candidates are advised to review the comprehensive summary of the Degree Audit process specified on the "Requirements for All Degree and Certificate Candidates" section of the Graduate Catalog. Individual programs may require candidates to submit plans of study in addition to the Degree Audit, candidates should consult with the program coordinator.

Degree Requirements

Degree requirements include those outlined for the master's degree by the Graduate School (see "Requirements for the Master's Degree").

The M.S. in Cybersecurity requires successful completion of 32 semester hours of coursework. Because of its focus on practitioners, a culminating residential capstone experience, rather than completion of a thesis, is also required.

Required Courses:

- [TEC 5313 - Networking and Advanced Data Communications](#). Credits: 3
- [TEC 5323 - Advanced Database Technology](#). Credits: 3
- [TEC 5353 - Cybersecurity](#) Credits: 3
- [MIS 4850 - Systems Security](#) Credits: 3
- [TEC 5363 - Database Security and Reliability](#) Credits: 3
- [AET 4823 - Facility Security](#) Credits: 3
- [MBA 5670 - Management of Information Technologies](#) Credits: 3
- [TEC 5413 - Biometric Security](#) Credits: 3
- [CYB 5550 - Cybersecurity Professional Seminar](#) Credits: 3
- [MIS 4860 - Ethical Hacking and Network Defense](#) Credits: 3

Capstone

The capstone experience will separate students into teams that use the knowledge acquired throughout the program to develop security for a computer network. Each group will then be tasked with breaking into another team's defense system. Post-exercise, evaluation will include discussion, team presentations, and written reports applying program concepts to evaluate the experience, describe lessons learned, produce an IT risk assessment and security audit, and develop organizational security policies and plans.

- [CYB 5900 - Cybersecurity Capstone](#) Credits: 2

Graduate Assistantships

In addition to being admitted to the M.S. in Cybersecurity at EIU, a Graduate Assistantship for this program requires at least one of the following:

1. A professional certification: Cisco CCNA and/or CISCO CISSP and/or, COMPTIA Security +
2. Two years of documented working experience in the field of Cybersecurity.
3. A Bachelor's Degree in Cybersecurity from a recognized Institution.

Contact Information:

Dr. Rigoberto Chinchilla, Graduate Coordinator M.S. Cybersecurity

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New Catalog:

Cybersecurity

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Accelerated Graduate Program

An accelerated graduate degree option is available to students majoring in Computer & Information Technology (CIT) at EIU. Admission to the accelerated graduate program in Cybersecurity requires that students have a minimum undergraduate cumulative GPA of 3.25 and have completed a minimum of 60 hours of undergraduate course credit. In addition, applicants must have completed a minimum of 30 hours of required technical courses in the CIT program, which includes the following courses: 1) CIT 2523 or MIS 3200, 2) CIT 2803, and 3) AET 4163 or MIS 4200.

All applicants must submit two letters of reference, a resume, and a statement of purpose essay, which should include any relevant experience in the field of computer technology, academic background, related work experience, personal and professional goals, and reasons to pursue graduate study in Cyber Security.

Shared Credit Course Options in Cyber Security:

- AET 4823Z - Facility Security. Credits: 3
- TEC 5313Z - Networking & Advanced Data Communications. Credits: 3
- TEC 5323Z - Advanced Database Technology. Credits: 3

Contact Information:

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Approved:

SOT Curriculum Committee: 02/08/18

LCBAS Curriculum Committee: 02/20/18

Council of Academic Affairs: