Cybersecurity Certificate Revision
Effective Fall 2021

Rationale:

This proposal is based on a need to update and correct the Cybersecurity certificate in the EIU Graduate Catalog. In summary the proposal includes; 1) removal of courses that have either been dropped or are not in line with current cybersecurity technologies; 2) the sharing of courses utilized in the M.S. Cybersecurity program that will enhance the certificate program; and 3) the updating of special topics course prefixes.

Current Catalog:
Course/Curriculum Requirements

The Cybersecurity Certificate program requires 18 semester hours of study including both required and elective courses. Specific requirements are as follows:

Required Courses

Total. Credits: 18

12 semester hours of required course work are listed below. The remaining 6 semester hours are electives that may be selected from the list below.

- EGT 4823 - Facility Security Credits: 3
- TEC 5333 - Management of Computer Technology. Credits: 3
- TEC 5353 - Cybersecurity Credits: 3
- TEC 5363 - Database Security and Reliability Credits: 3

Elective Courses

6 semester hours from the following list:

Other special topics COS 4850, INT 4970 and TEC 5970 courses as approved by the academic advisor may be used as electives.

- MAT 4870 - Data Structures and Algorithm Analysis. Credits: 3
- CSM 4970 - Principles of Operating Systems. Credits: 3
- MAT 5035 - Topics in Computer Science. Credits: 4
- TEC 5313 - Networking and Advanced Data Communications. Credits: 3
- TEC 5323 - Advanced Database Technology. Credits: 3
- TEC 5343 - Multimedia and Web Technology. Credits: 3
- TEC 5413 - Biometric Security Credits: 3
- TEC 5523 - Systems Simulation. Credits: 3

Proposed Revision:
Course/Curriculum Requirements

The Cybersecurity Certificate program requires 18 semester hours of study including both required and elective courses. Specific requirements are as follows:

Required Courses

Total. Credits: 18

12 semester hours of required course work are listed below. The remaining 6 semester hours are electives that may be selected from the list below.

- ~~EGT 4823 - Facility Security Credits: 3~~
- TEC 5333 - Management of Computer Technology. Credits: 3
- TEC 5353 - Cybersecurity Credits: 3
- TEC 5363 - Database Security and Reliability Credits: 3
- TEC 5413 - Biometric Security Credits: 3

Elective Courses

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6 semester hours from the following list:

Other special topics ODL 4850, TEC 4970 and TEC 5970 courses as approved by the academic advisor may be used as electives.

- ~~MAT 4870 - Data Structures and Algorithm Analysis. Credits: 3~~
- ~~CSM 4970 - Principles of Operating Systems. Credits: 3~~
- ~~MAT 5035 - Topics in Computer Science. Credits: 4~~
- TEC 5313 - Networking and Advanced Data Communications. Credits: 3
- TEC 5323 - Advanced Database Technology. Credits: 3
- ~~TEC 5343 - Multimedia and Web Technology. Credits: 3~~
- TEC 5523 - Systems Simulation. Credits: 3
- TEC 5980 – Industrial Internship in the Technologies. Credits: 1 to 6
- TEC 5990 – Independent Study Credits: 1 to 4
- MIS 4850 – System Security. Credits: 3
- MIS 4860 – Ethical Hacking and Networking Defense. Credits: 3
- CYB 5500 – Cybersecurity Seminar. Credits: 3

Date approved by the department or school: 2-11-2021
Date approved by the college curriculum committee: 02-22-21
Date approved by the Honors Council *(if this is an honors course):*
Date approved by CAA: CGS: