Computer Technology Certificate Revision
Effective Fall 2021

CGS Agenda Item: 21-20
Effective Fall 2021

Rationale:
This proposal is based on a need to update and correct the Computer Technology 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 computer 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 School of Technology Certificate in Computer Technology 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.

- Electives. Credits: 6

- TEC 5313 - Networking and Advanced Data Communications. Credits: 3
- TEC 5323 - Advanced Database Technology. Credits: 3
- TEC 5333 - Management of Computer Technology. Credits: 3
- TEC 5343 - Multimedia and Web Technology. Credits: 3

Elective Courses

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6 semester hours from the following list:

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

- Data Acquisition. Credits: 3
- PLC and Robotics. Credits: 3
- Advanced 3D Modeling. Credits: 3
- Data Acquisition and Data Communication. Credits: 3
- Automatic Identifications. Credits: 3
- Microcomputer Interfacing and Control Systems. Credits: 3
- Microcomputer Interfacing and Data Acquisition. Credits: 3
- DGT 4814 - Digital Media Strategy Credits: 3
- TEC 4970 - Special Topics in Technology Credits: 1 to 4
- ODL 4850 - Special Topics in Career and Organizational Studies. Credits: 1 to 3
- TEC 5223 - Instructional Technology. Credits: 3
- TEC 5513 - Advanced Computer Integrated Manufacturing. Credits: 3
- TEC 5523 - Systems Simulation. Credits: 3
- TEC 5970 - Special Topics in Technology Credits: 1 to 3

Proposed Revision:
Course/Curriculum Requirements

The ~~School of Technology Certificate in~~ Computer Technology Certificate 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.

- ~~Electives. Credits: 6~~

- TEC 5313 - Networking and Advanced Data Communications. Credits: 3
- TEC 5323 - Advanced Database Technology. Credits: 3
- TEC 5333 - Management of Computer Technology. Credits: 3
- TEC 5343 - Multimedia and Web Technology. 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.

- DGT 4814 - Digital Media Strategy. Credits: 3
- DGT 4823 – Web Content Management Systems. Credits: 3
- DGT 4833 – Web Search Engine Optimization. Credits: 3
- DGT 4923 – Emerging Web Technologies. Credits: 3
- ~~TEC 4970 - Special Topics in Technology Credits: 1 to 4~~
- ~~ODL 4850 - Special Topics in Career and Organizational Studies. Credits: 1 to 3~~
- ~~TEC 5223 - Instructional Technology. Credits: 3~~
- TEC 5353 – Cybersecurity. Credits: 3
- TEC 5363 – Database Security and Reliability. Credits: 3
- TEC 5373 – Java Application in Technology. Credits: 3
- TEC 5383 – Advanced Web Technologies. Credits: 3
- TEC 5413 – Biometric Security. Credits: 3
- ~~TEC 5513 - Advanced Computer Integrated Manufacturing. Credits: 3~~
- TEC 5523 - Systems Simulation. Credits: 3
- TEC 5823 – Big Data – Map Reduce. Credits: 3
- TEC 5853 – System Analysis and Design. Credits: 3
- TEC 5863 – Advanced Cloud Computing. Credits: 3
- ~~TEC 5970 - Special Topics in Technology Credits: 1 to 3~~
- TEC 5980 – Industrial Internship in the Technologies. Credits: 1 to 6
- TEC 5990 – Independent Study Credits: 1 to 4
    - Data Acquisition, PLC and Robotics, Advanced 3D Modeling, Data Acquisition and Data Communication, Automatic Identifications, Microcomputer Interfacing and Control Systems, Microcomputer Interfacing and Data Acquisition, Advanced Computer Integrated Manufacturing, etc.

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: