



## 2017-2018 PROGRAM REQUIREMENTS

### Award: Professional Certificate

### Program of Study: Cyber Security

#### About This Major . . .

The certificate in Cyber Security is designed to provide students with the knowledge and skills needed to engage in activities pertaining to protecting computer systems, networks, applications, and data. The program also prepares students for successfully completing internationally recognized certifications such as Certified Information Systems Security Professional (CISSP), CEH (Certified Ethical Hacker), etc.

All CMU professional certificate recipients are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning.

Upon completion of this program, students will be able to:

1. Identify strengths and weaknesses of competing cyber defense tools and defend a choice for a given situation. (Critical Thinking)
2. Write simple scripts in scripting languages (e.g., to automate system administration tasks). (Applied Learning)
3. Evaluate the security of computer systems, networks, and applications. (Applied Learning)
4. Demonstrate clear effective communication on the importance of cyber security. (Communication Fluency)
5. Demonstrate independent learning and use of new technologies in cyber security. (Specialized Knowledge)

#### Advising Process and DegreeWorks

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a certificate. Some courses are critical to complete in specific semesters while others may be moved around. Meeting with an academic advisor is essential in planning courses and discussing the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended certificate.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a certificate and determine eligibility for graduation. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head. Discrepancies in requirements should be reported to the Registrar's Office.

#### Graduation Process

Students must complete the following in the first two months of the semester prior to completing their certificate requirements (for one semester certificates complete in the first week of class):

- Review their DegreeWorks audit and create a plan that outlines how unmet requirements will be met in the final semester.
- Meet with their advisor and modify their plan as needed. The advisor must approve the final plan.
- Submit the "Intent to Graduate" form to the Registrar's Office to officially declare the intended graduation date and commencement ceremony plans.
- Register for all needed courses and complete all requirements for each degree sought.

Submission deadlines and commencement details can be found at <http://www.coloradomesa.edu/registrar/graduation.html>.

If your petition for graduation is denied, it will be your responsibility to apply for graduation in a subsequent semester. Your "Intent to Graduate" does not automatically move to a later graduation date.

### **INSTITUTIONAL CERTIFICATE REQUIREMENTS**

The following institutional requirements apply to all CMU professional certificates. Specific programs may have different requirements that must be met in addition to institutional requirements.

- Consists of 5-59 semester hours.
- Primarily 300-400 level courses.
- At least fifty percent of the credit hours must be taken at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A course may only be used to fulfill one requirement for each degree/certificate.
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- Capstone exit assessment/projects (e.g., Major Field Achievement Test) requirements are identified under Program-Specific Certificate Requirements.
- The Catalog Year determines which program sheet and certificate requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

### **PROGRAM-SPECIFIC CERTIFICATE REQUIREMENTS**

- 9 semester hours for the Professional Certificate in Cyber Security.
- A "C" or better must be achieved in coursework toward major content area.

### **PROFESSIONAL CERTIFICATE: CYBER SECURITY REQUIREMENTS** (9 semester hours)

- \*CSCI 370 - Computer Security (3)
- CSCI 420 - Cyber Security (3)
- CSCI 465 - Net/App Security (3)

\*Consult with a Computer Science faculty advisor regarding prerequisite classes that might be necessary to take.

### **SUGGESTED COURSE SEQUENCING**

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#### **First Year, Fall Semester: 3 credits**

- CSCI 370 - Computer Security (3)

#### **First Year, Spring Semester: 3 credits**

- CSCI 420 - Cyber Security (3)
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#### **Second Year, Fall Semester: 3 credits**

- CSCI 465 - Network and Application Security (3)
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