



2018-2019 PROGRAM REQUIREMENTS
Award: Professional Certificate
Program of Study: Web Application Development

About This Certificate . . .

The certificate in Web Application Development is designed to provide students with the knowledge and skills needed to build modern web applications. The program's goal is to provide a hands-on degree in web application development to meet the growing needs and demands from various industries.

All CMU certificate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student learning outcomes, graduates of this major will be able to:

1. Identify strengths and weaknesses of competing web application tools, languages, frameworks and defend a choice for a given situation. (Critical Thinking)
2. Write back-end server-side code for web applications using SQL and NoSQL and configure web and database servers. (Applied Learning)
3. Design and develop secure and modern web applications. (Applied Learning)
4. Demonstrate clear and effective communication on the design of web applications. (Communication Fluency)
5. Demonstrate independent learning and use of new technologies in web application design. (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

- 16 total semester hours for the Professional Certificate in Web Application Development.

PROFESSIONAL CERTIFICATE: Web Application Development REQUIREMENTS (16 semester hours)

- CSCI 206 – Web Page Design II (3) *
- CSCI 260 – Intro to Database (3)
- CSCI 306 – Web Page Design III (3)
- CSCI 310 – Advanced Programming: Python (2)**
- CSCI 310 – Advanced Programming: Data Science with Python (2)
- CSCI 337 – User Interface Design (3)

*It is assumed that students are familiar with basic HTML and CSS; otherwise the students will need to take CSCI 106 Web Page Design I.

**Students who have not taken any programming classes may substitute with CSCI 110/110L - Beginning Programming with Python and Lab.

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 7 credits

- CSCI 206 – Web Page Design II (3)*
- CSCI 260 – Intro to Database (2)

Freshman Year, Spring Semester: 5 credits

- CSCI 306 – Web Page Design III (3)
 - CSCI 310 – Advanced Programming: Python (2)**
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Sophomore Year, Fall Semester: 6 credits

- CSCI 310 – Advanced Programming: Data Science with Python (2)
- CSCI 337 – User Interface Design (3)