COLORADO MESA UNIVERSITY

2017-2018 PROGRAM REQUIREMENTS
Degree: Associate of Science
Major: Liberal Arts
Emphasis: Computer Science

About This Major . . .
Computer science is the study of algorithms and the issues involved in implementing them. The Computer Science Associates Degree includes courses in web page design, various programming languages, data structures and computer architecture. While the degree prepares students to complete a BS in Computer Science (which is strongly recommended), employment opportunities are open to the successful graduate, including positions such as web development, computer operators, and/or technical support positions.

For more information on what you can do with this major, go to http://www.coloradomesa.edu/career/whatmajor.html and/or http://www.coloradomesa.edu/cs .

All CMU associate 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. Write programs in a general purpose programming language (Specialized Knowledge/Applied Learning)
2. Develop a software solution to a problem given a technical specification (Specialized Knowledge)
3. Demonstrate an understanding of computer hardware (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 degree. The suggested course sequencing outlines how students could finish degree requirements. 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 altering the suggested course sequencing. It is ultimately the student's responsibility to understand and fulfill the requirements for her/his intended degree(s).

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 degree 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 all requirements:
- 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 the 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.

INSTITUTIONAL DEGREE REQUIREMENTS

The following institutional degree requirements apply to all CMU Associate of Science (AS) degrees. Specific programs may have different requirements that must be met in addition to institutional requirements.

- 60 semester hours total.
- Students must complete a minimum of 15 of the final 30 semester hours of credit at CMU.
- 2.00 cumulative GPA or higher in all CMU coursework.
- A grade of "C" or higher must be earned in all Essential Learning courses in order to be accepted for transfer under the Colorado Core Transfer Consortium General Education curriculum or gtPathways, Colorado's guaranteed transfer program.
- A course may only be used to fulfill one requirement for each degree/certificate.
- No more than six semester hours of independent study courses can be used toward the degree.
- Non-traditional credit, such as advanced placement, credit by examination, credit for prior learning, cooperative education and internships, cannot exceed 15 semester credit hours for an associate of science degree; A maximum of 6 of the 15 credits may be for cooperative education, internships, and practica.
- 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 Degree Requirements.
- The Catalog Year determines which program sheet and degree 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 DEGREE REQUIREMENTS

- 2.50 cumulative GPA or higher in all CMU coursework and in coursework toward major content area.

ESSENTIAL LEARNING REQUIREMENTS (31 semester hours)

See the current catalog for a list of courses that fulfill the requirements below. If a course is an Essential Learning option and a requirement for your major, you must use it to fulfill the major requirement and make a different selection for the Essential Learning requirement.

English (6 semester hours, must receive a grade of "C" or better and must be completed by the time the student has 60 semester hours.)
- ☐ ENGL 111 - English Composition (3)
- ☐ ENGL 112 - English Composition (3)

Mathematics (3 semester hours, must receive a grade of "C" or better, must be completed by the time the student has 60 semester hours.)
- ☐ MATH 113 - College Algebra (4) or higher
  *3 credits apply to the Essential Learning requirements and 1 credit applies to elective credit.

Humanities (3 semester hours)
- ☐ Select one Humanities course (3)

Social and Behavioral Sciences (6 semester hours)
- ☐ Select one Social and Behavioral Sciences course (3)
- ☐ Select one Social and Behavioral Sciences course (3)

Natural Sciences (7 semester hours, one course must include a lab)
- ☐ Select one Natural Sciences course (3)
- ☐ Select one Natural Sciences course with a lab (4)

History (3 semester hours)
- ☐ Select one History course (3)

Fine Arts (3 semester hours)
- ☐ Select one Fine Arts course (3)

OTHER LOWER-DIVISION REQUIREMENTS

Wellness Requirement (2 semester hours)
- ☐ KINE 100 - Health and Wellness (1)
- ☐ Select one Activity course (1)

ASSOCIATE OF SCIENCE: LIBERAL ARTS, COMPUTER SCIENCE REQUIREMENTS (27 semester hours)

Core Classes (21 Semester Hours)
- ☐ CSCI 111 - CS1: Foundations of Computer Science (4)
- ☐ CSCI 112 - CS2: Data Structures (4)
- ☐ CSCI 206 - Web Page Design II (3)
- ☐ CSCI 241 - Computer Architecture and Assembly Language (4)
- ☐ CSCI 250 - CS3: Intro to Algorithms (3)
- ☐ One of the following courses:
  CISB 205 - Advanced Business Software (3)
  CSCI 130 - Introduction to Engineering Computer Science (3)
  CSCI 310 - Advanced Programming (3**)
  **CSCI 310 is offered for various current languages for 1-3 credit hours. Students may take any mix of classes to reach a total minimum of 3 hours but no language may be counted more than once.

Electives (6 Semester Hours)
MATH 119 - Precalculus, MATH 151 - Calculus I/MATH 135 - Engineering Calculus I, and/or MATH 152 - Calculus II/MATH 136 - Engineering Calculus II are strongly recommended, particularly for those students who are considering going on to the Bachelor of Science in Computer Science degree.
- ☐ MATH 113 - College Algebra (1)
- ☐ _____
- ☐ _____
- ☐ _____

SUGGESTED COURSE SEQUENCING

Freshman Year, Fall Semester: 15 credits
- ENGL 111 - English Composition (3)
- MATH 113 - College Algebra (4)
- CSCI 111 - CS1: Foundations of Computer Science (4)
- Essential Learning - Social and Behavioral Sciences (3)
- KINE 100 - Health and Wellness (1)

Freshman Year, Spring Semester: 16 credits
- ENGL 112 - English Composition (3)
- Computer Science Choice (3)
- CSCI 112 - CS2: Data Structures (4)
- Essential Learning - Fine Arts (3)
- Essential Learning - Social and Behavioral Sciences (3)

Sophomore Year, Fall Semester: 14 credits
- Essential Learning - History (3)
- CSCI 250 - CS3: Intro to Algorithms (3)
- Essential Learning - Natural Science with lab (4)
- Elective (3)
- Wellness Requirement - Activities Course (1)

Sophomore Year, Spring Semester: 15 credits
- CSCI 206 - Web Page Design II (3)
- CSCI 241 - Computer Architecture and Assembly Language (4)
- Essential Learning - Natural Science without lab (3)
- Essential Learning - Humanities (3)
- Elective (2)

Students that intend to continue with Colorado Mesa University should take ESSL 290 - Maverick Milestone and ESSL 200 - Essential Speech during the final semester of their Associate of Science work.