



**2015-2016 PETITION/PROGRAM SHEET**  
**Degree: Associate of Science**  
**Major: Liberal Arts**  
**Emphasis: Computer Science**

**About This Emphasis . . .**

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)

**NAME:** \_\_\_\_\_ **STUDENT ID #:** \_\_\_\_\_

**LOCAL ADDRESS AND PHONE NUMBER:** \_\_\_\_\_

\_\_\_\_\_ ( ) \_\_\_\_\_

I, (Signature) \_\_\_\_\_, hereby certify that I have completed (or will complete) all the courses listed on the Program Sheet. I have read and understand the policies listed on the last page of this program sheet. I further certify that the grade listed for those courses is the final course grade received except for the courses in which I am currently enrolled and the courses which I complete next semester. I have indicated the semester in which I will complete these courses.

\_\_\_\_\_  
Signature of Advisor \_\_\_\_\_ 20\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Department Head \_\_\_\_\_ 20\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Registrar \_\_\_\_\_ 20\_\_\_\_\_  
Date

**DEGREE REQUIREMENTS:**

- Minimum of 60 semester hours total (A minimum of 15 of the final 30 semester hours of credit at CMU).
- Pre-collegiate courses (usually numbered below 100) cannot be used for graduation.
- 2.50 cumulative GPA or higher in all CMU coursework and in coursework toward major content area.
- A grade of "C" or higher must be earned in all Essential Learning courses in order to be accepted for the transfer under the Core Transfer Agreements.
- A student must follow the CMU graduation requirements either from 1) the program sheet for the major in effect at the time the student officially declares a major; or 2) a program sheet for the major approved for a year subsequent to the year during which the student officially declares the major and is approved for the student by the department head. Because a program may have requirements specific to the degree, the student should check with the faculty advisor for additional criteria. It is the student's responsibility to be aware of, and follow, all requirements for the degree being pursued. Any exceptions or substitutions must be approved by the student's faculty advisor and Department Head.
- When filling out the program sheet a course can be used only once.
- See the "Undergraduate Graduation Requirements" in the catalog for additional graduation information.

**ESSENTIAL LEARNING REQUIREMENTS** (31 semester hours)  
 See the current catalog for a list of courses that fulfill the requirements below. If a course is on the Essential Learning list of options and a requirement for your major, you must use it to fulfill the major requirement and make a different selection within the Essential Learning requirement. The Essential Learning capstone course and co-requisite Essential Speech course (required for bachelor's degrees) cannot be used as options for the below requirements.

Course	No	Title	Sem.hrs	Grade	Term/Trns
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**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 \_\_\_\_\_

**Math** (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\* \_\_\_\_\_  
 \*3 credits apply to the Essential Learning requirements and 1 credit apply to elective credit

**Humanities** (3 semester hours)

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**Social and Behavioral Sciences** (6 semester hours)

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\_\_\_\_\_

Course	No	Title	Sem.hrs	Grade	Term/Trns
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**Natural Sciences** (7 semester hours, one course must include a lab)

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\_\_\_\_\_ L \_\_\_\_\_

**History** (3 semester hours)

HIST \_\_\_\_\_ 3 \_\_\_\_\_

**Fine Arts** (3 semester hours)

\_\_\_\_\_

**WELLNESS REQUIREMENT** (2 semester hours)

KINE 100 Health and Wellness 1 \_\_\_\_\_  
 KINA 1 \_\_\_\_\_ 1 \_\_\_\_\_

**COMPUTER SCIENCE EMPHASIS REQUIREMENTS**

(21 semester hours)

**Core Class**

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 & Assembly Language	4	_____	_____
CSCI 250	CS3: Intro to Algorithms	3	_____	_____

3 Hrs from the following:

CISB 205	Advanced Business Software	3	_____	_____
CSCI 310	Advanced Programming: ()	3**	_____	_____
CSCI 130	Intro to Engineering CS	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 hrs but no language may be counted more than once.

**Electives** (6 Semester Hours) Any college level undergraduate courses.

*MATH 113	College Algebra	1	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

MATH 119 Precalculus, MATH 151 Calculus I, and/or MATH 152 Calculus II are strongly recommended particularly for those students who are considering going on to the Bachelor of Science in Computer Science degree.

## SUGGESTED COURSE SEQUENCING FOR THE ASSOCIATE OF SCIENCE WITH A MAJOR IN LIBERAL ARTS - EMPHASIS IN COMPUTER SCIENCE

This is a recommended sequence of course work. Certain courses may have prerequisites or are only offered during the Fall or Spring semesters. It is the student's responsibility to meet with the assigned advisor and check the 2 year course matrix on the Colorado Mesa website for course availability.

### FRESHMAN YEAR

Fall Semester	Hours	Spring Semester	Hours
ENGL 111      English Composition	3	ENGL 112      English Composition	3
MATH 113      College Algebra	4	Computer Science Choice	3
CSCI 111      CS1: Foundations of Computer Science	4	CSCI 112      4CS2: Data Structures	4
Essential Learning      Social/Behavioral Science	3	Essential Learning      Fine Arts	3
KINE 100      Health and Wellness	<u>1</u>	Essential Learning      Social/Behavioral Science	<u>3</u>
	15		16

### SOPHOMORE YEAR

Fall Semester	Hours	Spring Semester	Hours
Essential Learning      History	3	CSCI 206      Web Page Design II	3
CSCI 250      CS3: Intro to Algorithms	3	CSCI 241      Computer Architecture & Assembly Language	4
Essential Learning      Natural Science with Lab	4	Essential Learning      Natural Science	3
Elective	3	Essential Learning      Humanities	3
KINA      Activity	<u>1</u>	Elective	<u>2</u>
	14		15

#### POLICIES:

1. Please see the catalog for a complete list of graduation requirements.
2. This program sheet must be submitted with your graduation planning sheet to your advisor during the **semester prior to the semester of graduation, no later than October 1 for spring graduates, no later than March 1 for fall graduates.** You must turn in your "Intent to Graduate" form to the Registrar's Office **by September 15 if you plan to graduate the following May, and by February 15 if you plan to graduate the following December.**
3. Your advisor will sign and forward the Program Sheet and Graduation Planning Sheet to the Department Head for signature. Finally, the Department Head will submit the signed forms to the Registrar's Office. (Students cannot handle the forms once the advisor signs.)
4. If your petition for graduation is denied, it will be your responsibility to reapply for graduation in a subsequent semester. Your "Intent to Graduate" does not automatically move to a later graduation date.
5. NOTE: The semester before graduation, you may be required to take a capstone exit assessment/project.