

ASSOCIATE IN SCIENCE, (AS) DEGREE

Maricopa County Community College District (MCCCD) 2022-2023

Description

The Maricopa County Community College District Associate in Science (AS) degree requires a minimum of 60 semester credits for the program of study; minimum total credits vary by specific emphasis (for example, Associate in Science, Emphasis in Physics). Refer to the Program (Degree) Search at curriculum.maricopa.edu (<http://curriculum.maricopa.edu>) for credit minimums for individual degree programs by emphasis. A minimum grade point average of 2.0 is required to earn the degree. The AS degree is governed by the MCCCD General Academic Policies for Transfer Degrees (<https://curriculum.maricopa.edu/curriculum/degrees-certificates/associate-degrees/academic-policies/>).

The Associate in Arts degree includes the following components:

- I. Program Prerequisites (if applicable, for versions with an emphasis only)
- II. Required Courses (for versions with an emphasis only)
- III. Restricted Electives (for versions with an emphasis only)
- IV. Arizona General Education Curriculum for Science (AGEC-S)
- V. MCCCD Additional Requirements (Oral Communication and Critical Reading)
- VI. General Electives (if needed to reach minimum credits for degree)

Purpose of the Degree

The Associate in Science (AS) degree is designed for students planning to transfer to four-year colleges and universities. In general, the components of the degree meet requirements for majors with more stringent mathematics and mathematics-based science requirements. Generally, the degree will transfer as a block without loss of credit to Arizona's public universities and other institutions with district-wide articulation agreements.

In most cases, courses used to satisfy the MCCCD Associate in Science (AS) will apply to general university graduation requirements of the majors that align with the AS degree; however, students need to be aware of any specific requirements of their intended major at the university to be sure they select courses that will meet them. Information regarding the articulation of the AS with majors at the Arizona public universities can be accessed via the following website: aztransfer.com (<http://aztransfer.com>)

It is recommended that students select courses that meet more than one general education and/or awareness area requirement. Doing so will maximize the number of math and science electives the student can take as part of his/her Associate in Science degree.

Special Academic Policies that Govern the Associate in Science Degree

- The AGECS does not require a course with [CS] Computer/Statistics designation.
- Unlike the AGECA and AGECS, the same course is allowed to satisfy the ([L] and [HU]) or ([L] and [SB]) areas of the AGECS's Core Area.

The credits for such a "shared" course are only counted one time toward the required minimum for the degree.

Degree Requirements

The requirements for the Associate in Science follow. All versions of the Associate in Science require at least 60 credits; for major-specific pathways within the degree, prescribed courses and minimum credits for categories within the degree, as well as the total, vary. Refer to the Program (Degree) Search at curriculum.maricopa.edu (<https://curriculum.maricopa.edu/>) for credit minimums for major-specific pathways within the degree. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGECS (<https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/2/wo/qEBwEeu9k5ESxdFSGt3Jxw/5.0.105.13>) and the AGECS Matrix (<http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport/?inst=001075>). Courses available for both Areas during a current or upcoming semester can also be found using the "Find a Class" tool on each MCCCD college's website.

Degree Requirements

I. Program Prerequisites - Credits: Number varies

Program prerequisites for the Associate in Science degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu (<http://curriculum.maricopa.edu>) for specific courses and credit minimums by emphasis.

II. Required Courses - Credits: Number varies

Students must complete FYE101 (1) or FYE103 (3) and select the required courses for the specific Associate in Science degree emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu (<http://curriculum.maricopa.edu>) for specific courses and credit minimums by emphasis.

III. Restricted Electives - Credits: Number varies

Restricted electives for the Associate in Science degree vary by specific emphasis, and are not required for the version of the degree without a specific emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu (<http://curriculum.maricopa.edu>) for specific courses and credit minimums by emphasis.

IV. Arizona General Education Curriculum—Science (AGEC-S) - Credits: Up to 56

The AGECS requires a minimum of 36 credits (33 if FYC is met by single transfer course).¹ However, prerequisite/required/restricted elective courses may also meet AGECS requirements and credits count once toward the total for the degree. Therefore, the AGECS may be met with fewer than 36 credits (33 if FYC is met by single transfer course)¹ as long as all requirements listed in this section (IV) are completed.

Courses applied to meet AGECA requirements vary by emphasis. Refer to the Program (Degree) Search at curriculum.maricopa.edu for specific course requirements. Some courses may be met by Required Courses or Restricted Electives. Some of these courses also have Awareness Areas designations and can be used to satisfy [C], [G] and/or [H] requirement(s) as well as other AGECS requirements, Required Course(s) or Restricted Elective(s). AGECS designations are subject to change. Courses may meet more than one requirement but are only counted once toward the total credits for the degree. See AGECS matrix (<https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport/?inst=001075>) for each course's value(s) in the semester it is taken.

FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

Code	Title	Credits	Semester
First-Year Composition (FYC)			
ENG101	First-Year Composition ¹	3	_____
or ENG107	First-Year Composition for ESL		_____
ENG102	First-Year Composition ¹	3	_____
or ENG108	First-Year Composition for ESL		_____
Literacy and Critical Inquiry (L) ²			
	Students are strongly encouraged to choose an (L) course that also has (HU) or (SB) designation ^{3,4}	0-3	_____
Mathematical Applications (MA)			
	Requires the first semester of calculus courses designed for scientists and engineers ⁵ or any other (MA) designated course for which Calculus I is a prerequisite.	4-5	_____
Humanities, Arts and Design (HU)			
	For the AGEC-S, a single course with both (HU) and (L) designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy (C), (G) and/or (H) requirement(s) as well. ⁴	6	_____
Social-Behavioral Sciences (SB)			
	For the AGEC-S, a single course with both (SB) and (L) designations may satisfy both Areas. Note that some of these courses also have Awareness Areas designations and can be used to satisfy (C), (G) and/or (H) requirement(s) as well. ⁴	6	_____
Natural Sciences (SQ/SG)			
	Students must complete eight (8) to ten (10) credits of General Chemistry, University Physics, General Biology for Majors, or Physical and Historical Geology. Consult specific requirements of university transfer major for guidance.		_____
	Select one of the following sequences:	8-10	_____
	<i>General Chemistry</i>		_____

CHM150 & CHM151LL & CHM152 & CHM152LL	General Chemistry I and General Chemistry I Laboratory and General Chemistry II and General Chemistry II Laboratory		_____
CHM150 & CHM151LL & CHM152AA	General Chemistry I and General Chemistry I Laboratory and General Chemistry II		_____
CHM151 & 151LL & CHM152 & CHM152LL	General Chemistry I and General Chemistry I Laboratory and General Chemistry II and General Chemistry II Laboratory		_____
CHM151 & 151LL & CHM152AA	General Chemistry I and General Chemistry I Laboratory and General Chemistry II		_____
CHM150AA & CHM152 & CHM152LL	General Chemistry I and General Chemistry II and General Chemistry II Laboratory		_____
CHM151AA & CHM152 & CHM152LL	General Chemistry I and General Chemistry II and General Chemistry II Laboratory		_____
CHM150AA & CHM152AA	General Chemistry I and General Chemistry II		_____
CHM151AA & CHM152AA	General Chemistry I and General Chemistry II		_____
<i>University Physics</i>			

PHY115 & PHY116	University Physics I and University Physics II	_____
PHY115 & PHY131	University Physics I and University Physics II: Electricity and Magnetism	_____
PHY121 & PHY116	University Physics I: Mechanics and University Physics II	_____
PHY121 & PHY131	University Physics I: Mechanics and University Physics II: Electricity and Magnetism	_____
<i>General Biology for Majors</i>		
BIO181 & BIO182	General Biology (Majors) I and General Biology (Majors) II	_____
BIO181 & BIO182XT	General Biology (Majors) I and General Biology (Majors) II	_____
BIO181XT & BIO182	General Biology (Majors) I and General Biology (Majors) II	_____
BIO181XT & BIO182XT	General Biology (Majors) I and General Biology (Majors) II	_____
<i>Physical and Historical Geology</i>		
GLG101 & GLG103	Introduction to Geology I - Physical Lecture	_____
	and Introduction to Geology I - Physical Lab	_____
or GLG101IN	Introduction to Geology I - Physical	_____

GLG102IN & GLG104	Introduction to Geology II - Historical and Introduction to Geology II - Historical Lab	_____
or GLG102	Introduction to Geology II - Historical Lecture	_____

Subject Options - Math/Science

Refer to transfer resources, including academic advisement and transfer guides, to select six (6)-ten (10) additional math and/or science credits that meet requirements for selected major. 6-10

Select Mathematics course(s) (MAT) above Calculus I and/or

Computer Science course(s) (CSC) and/or

Science courses from the following disciplines:
Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology⁶

Awareness Areas

Courses may be used to satisfy other AGEC requirements and one or more Awareness Area(s).⁷ 0-6

Cultural Diversity in the United States (C)

Global Awareness (G) or
Historical Awareness (H)

¹FYC may be met with fewer than 6 credits if student has transfer credit from ASU, NAU or UAZ for a single course that meets FYC in full.

²only if shared with HU or SB

³Or³ to use CRE101 College Critical Reading and Critical Thinking or COM225 Public Speaking from the Maricopa Additional Requirements Area to satisfy the [L] requirement. It may also have been approved to satisfy one or more Awareness Areas ([C], [G], [H])

⁴AGEC designations are subject to change. See AGEC matrix (<https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport/?inst=001075>) for each course's value(s) in the semester it is taken.

⁵MAT220 Calculus with Analytic Geometry I or MAT221 Calculus with Analytic Geometry I

⁶MCCCD prefixes AST, BIO (except BIO174), CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY

⁷See AGEC matrix (<https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport/?inst=001075>) for current course values.

V. MCCCD Additional Requirements - Credits: 0-6

Some courses in this area have [SB] and [L] designations and may also be applied to the corresponding AGEC requirements. See the AGEC matrix (<https://aztransmac2.asu.edu/cgi-bin/WebObjects/>

agec.woa/3/wa/agecMatrixReport/?inst=001075) on aztransfer.com (<http://aztransfer.com>) for course designations.

Code	Title	Credits	Semester
Oral Communication			
Select one of the following:		0-3	_____
COM100	Introduction to Human Communication (SB)		_____
COM110	Interpersonal Communication (SB)		_____
COM225	Public Speaking (L)		_____
COM230	Small Group Communication (SB)		_____
or all of the following (SB):			
COM100AA & COM100AB & COM100AC	Introduction to Human Communication Part I and Introduction to Human Communication Part II and Introduction to Human Communication Part III		_____
or all of the following (SB):			
COM110AA & COM110AB & COM110AC	Interpersonal Communication Part I and Interpersonal Communication Part II and Interpersonal Communication Part III		_____
Critical Reading			
Select one of the following:		0-3	_____
CRE101	College Critical Reading and Critical Thinking		_____
OR Equivalent as indicated by assessment			_____

VI. General Electives - Credits: 0-28

Select courses 100-level or higher if needed to complete a minimum of 60 semester credits but no more than a total of 64 semester credits, which is the maximum number of credits accepted toward most degree programs at Arizona's public universities. Ideally, students should select courses that meet requirements for their major/area of interest and transfer institution. See General Associate

Degree Academic Policies for further details, limitations, and guidelines.

Maricopa courses and external courses evaluated as Maricopa equivalents, departmental electives (e.g., HISELC for a history elective), or general electives (GENELC) that are numbered 100 level or higher, and completed with a grade of "C" or higher, may be applied in the elective area, regardless of potential transferability to other institutions. It is recommended, however, that students planning to transfer to a baccalaureate-granting institution meet these general elective requirements with courses that are transferable and applicable to their intended university degree. Transfer and major guides are accessible on the following websites: aztransfer.com (<https://aztransfer.com/>), maricopa.edu/transfer/partners (<https://www.maricopa.edu/degrees-certificates/transfer/pathways-partners/>), as well as those of individual universities. For appropriate course selection, students should consult with an academic advisor.

Total: 60-64¹

64 semester credits is the maximum accepted toward most degree programs at Arizona's public universities. Some exceptions apply; consult with an academic advisor for additional transfer pathways.