ASSOCIATE IN SCIENCE, (AS) DEGREE

Maricopa County Community College District (MCCCD) 2023-2024

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 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.

The Associate in Arts degree includes the following components:

I. Program Prerequisites (as specified by emphasis area)
II. Required Courses
III. Restricted Electives (as specified by emphasis area)
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.

It does not, however, guarantee acceptance into particular university majors/programs with a limited number of students. Students should consult with their transfer institution for any specific admission requirements (e.g., GPA, letters of reference, work experience).

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/tools (http://aztransfer.com/tools/)

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 the Associate in Science degree.

Special Academic Policies that Govern the Associate in Science Degree

- The AGEC-S does not require a course with [CS] Computer/Statistics designation.
- Unlike the AGEC-A and AGEC-B, the same course is allowed to satisfy the ([L] and [HU]) or ([L] and [SB]) areas of the AGEC-S. 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 (AS) follow. The AS degree requires at least 60 credits; however, minimum credits for the AS may vary for a specific area of emphasis. Refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis and credit minimums. The following websites identify the courses that apply to the different General Education Core and Awareness Areas: AGEC-S (https://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/2/wo/qEBwEeu9k5ESxdFSGt3Jxw/5.0.105.13) and the AGEC Matrix (http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/3/wa/agecMatrixReport/?inst=001075).

Requirements

I. **Program Prerequisites - Credits: Number varies**
Program prerequisites for the AS degree vary by specific emphasis, and are neither required for all emphases nor for the general AS degree without a specific emphasis. Refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.

II. **Required Courses - Credits: Number varies**
Students must complete FYE101 (1) or FYE103 (3) and select the required courses for the specific AS degree emphasis. Refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.

III. **Restricted Electives - Credits: Number varies**
Restricted electives for the AS degree vary by specific emphasis and are not required for the general AS degree without a specific emphasis. Refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.

IV. **Arizona General Education Curriculum—Science (AGEC-S) - Credits: Up to 56**
The AGEC-S requires a minimum of 36 credits (33 if FYC is met by single transfer course).[1] Courses applied to meet AGEC-A requirements vary by emphasis. Refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis for specific courses required and credit minimums.

Any prerequisite/required/restricted elective courses that also have one or more AGEC designation(s) may be applied toward both requirements. Credits for such shared courses are only counted once toward the total credits for the degree.

AGEC 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. Some of the courses have been approved for more than one designation. Notes below will show how such courses may be used to meet multiple degree requirements.

[1] 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 or to use CRE101 or COM225 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). AGEC designations are subject to change. [3]		0-3	_____
Mathematical Applications (MA)			_____
The AGEC-S requires the first semester of a calculus sequence designed for scientists and engineers (MAT220 or MAT221) 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 (HU) courses also have Awareness Areas designations and can be used to satisfy (C), (G) and/or (H) requirement(s) as well as their respective Core Area(s). [3]		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 (SB) courses also have Awareness Areas designations and can be used to satisfy (C), (G) and/or (H) requirement(s) as well. [3]		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. [4]			_____
Select one of the following sequences:		8-10	_____
General Chemistry			_____
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		_____
University Physics			_____

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		_____
General Biology for Majors			_____
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		_____
Physical and Historical Geology			_____
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			_____
Students should 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 the selected major.		6-10	_____
This Math/Science requirement can be met by selecting Mathematics course(s) (MAT) that require Calculus I as a prerequisite and/or Computer Science course(s) (CSC) and/or additional Science courses from the following disciplines: Astronomy, Biology, Botany, Chemistry, Engineering, Environmental Science, Geology, Physical Geography, Physics, Zoology (MCCCD prefixes AST, BIO, CHM, ECE, EEE, ENV, GLG, GPH, and/or PHY)			_____
Awareness Areas			_____
The same course(s) may be used to satisfy one or more Awareness Area(s) as well as other AGEC requirements. Credits for such shared courses may only be counted once. [5]		0-6	_____
Cultural Diversity in the United States (C)			_____
Global Awareness (G) **or** Historical Awareness (H)			_____

[1] 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.

[2] 0 only if shared with HU or SB

[3] AGEC 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.

[4] Consult specific requirements of university transfer major for guidance or refer to curriculum.maricopa.edu (https://curriculum.maricopa.edu/) and click on Current Programs to search for the corresponding area of emphasis.

[5] See AGEC matrix (http://aztransmac2.asu.edu/cgi-bin/WebObjects/agec.woa/1/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: 60-64[1]

[1] 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.