

COMPUTER SCIENCE, AS

Program Code: Computer Science-AS

Program Description

The Associate of Science, Computer Science is a two-year transferable program. Computer science encompasses the methodology, tools, techniques, and theory of information derivation, storage, manipulation and communication. All courses recommended will partially satisfy the bachelor of science in computer science and engineering at the University of Nevada, Reno.

Computer Science Career Map (<https://sites.tmcc.edu/flipbook/career-maps/>)

Recommended Course Schedule

1st semester		Units
Fine Arts ⁵		3
CS 135	Computer Science I	3
ENG 101	Composition I	3
or ENG 113	or Composition I for International and Multilingual Students	
ENGR 100	Introduction to Engineering Design	3
or CS 105	or Introduction to Computing	
Science ⁵		4
Semester Total		16
2nd semester		Units
CS 202	Computer Science II	3
Diversity ⁵		3
ENG 102	Composition II	3
or ENG 114	or Composition II For International and Multilingual Students	
MATH 181	Calculus I ⁵	4
Semester Total		13
3rd semester		Units
CH 201	Ancient and Medieval Cultures ⁵	3
or CH 202	or The Modern World	
CPE 201	Digital Design	3
MATH 182	Calculus II	4
PHYS 180 & 180L	Physics for Scientists and Engineers I and Physics for Scientists/Engineers Lab I	4
Semester Total		14
4th semester		Units
CH 203	American Experiences and Constitutional Change ⁵	3
CS 219	Computer Organization	3
MATH 283	Calculus III	4
PHYS 181 & 181L	Physics for Scientists and Engineers II and Physics for Scientists/Engineers Lab II	4
Social Science ⁵		3
Semester Total		17
Total Units		60

⁵ See program recommendations or requirements.

Program Requirements

Associate of Science degrees are designed for students who plan to transfer to a four-year college or university.

To earn an AS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AS (<https://catalog.tmcc.edu/degrees-certificates/general-education/as/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
General Education Requirements		
<i>English</i>		3-6
Must include ENG 102 or ENG 114 ¹		
<i>Fine Arts</i>		3
Highly recommended for students wishing to major in Computer Science:		
ART 100	Visual Foundations	
ART 260	Survey of Art History I	
ART 261	Survey of Art History II	
HUM 105	The Art of Film	
MUS 121	Music Appreciation	
THTR 100	Introduction to Theatre	
THTR 105	Introduction to Acting I	
THTR 180	Cinema as Art and Communication	
THTR 210	Theatre: a Cultural Context	
<i>Humanities</i>		3
Highly Recommended:		
CH 201	Ancient and Medieval Cultures	
or CH 202	The Modern World	
<i>Mathematics</i>		[3]
Required:		
MATH 181	Calculus I ²	4
<i>Science</i>		6
Required:		
PHYS 180	Physics for Scientists and Engineers I ³	
PHYS 181	Physics for Scientists and Engineers II ³	
<i>Social Science</i>		3
Recommended: Choose from courses that transfer to UNR.		
Additional College Requirements		
<i>Diversity</i>		3
Recommended:		
ANTH 201	Peoples and Cultures of the World	
ANTH 205	Race and Ethnicity in Everyday Life	
EDU 203	Introduction to Special Education	
HIST 208	World History I	
HIST 209	World History II	

HIST 227	Introduction to Latin American History & Culture I	
PSY 276	Aging in Modern American Society	
SOC 205	Race and Ethnicity in Everyday Life	
SOC 276	Aging in Modern American Society	
<i>Science</i>		
PHYS 180L	Physics for Scientists/Engineers Lab I ³	1
	Transferable Science and Lab ³	4
PHYS 181L	Physics for Scientists/Engineers Lab II ³	1
<i>U.S. and Nevada Constitutions</i>		
Highly Recommended:		
CH 203	American Experiences and Constitutional Change	3
Degree Requirements ⁴		
CPE 201	Digital Design	3
CS 135	Computer Science I	3
CS 202	Computer Science II ³	3
CS 219	Computer Organization	3
ENGR 100	Introduction to Engineering Design	3
or CS 105	Introduction to Computing	
MATH 182	Calculus II ³	4
MATH 283	Calculus III ³	4
Total Units		60

- University of Nevada, Reno (<https://www.unr.edu/admissions/transfer/credits/transfer-agreements/>)

¹ If you place into ENG 102 or ENG 114 the additional 3 required units will become elective units.

² MATH 181 Additional unit used as elective.

³ Courses must be completed with a "C" or better.

⁴ CS Emphasis students must also maintain at least a "C" average in the Mathematics, Science and Degree requirements courses.

Program Outcomes

Students completing the degree will:

PLS01: Have the ability to apply knowledge of computing and logical reasoning necessary to analyze a problem and identify, formulate and use the appropriate analytical skills to obtain a solution.

PLS02: Have the ability to design and implement a computer program to meet the desired specifications for a problem.

PLS03: Have the ability to communicate and work effectively on a team to achieve a common goal.

Transfer Agreements

AA/AS degrees are designed for students who plan to transfer to a four-year college or university. General information about general transfer agreements can be found on the Academic Advisement website (<https://www.tmcc.edu/advisement/transfer-students/transfer-agreements/>).

Students who intend to transfer to another college or university should speak with a TMCC Academic Advisor and consult with that institution.

The transfer institution determines how TMCC courses will transfer.

TMCC has agreements with the following institutions towards a bachelor's degree in the same or similar discipline.