DATA SCIENCE, AS

Program Code: Data Science-AS

Program Description

The Associates of Science in Data Science is a general transfer degree program designed for students who are planning to transfer to a baccalaureate-level institution. This degree will also provide employment opportunities for student upon completion. The Associate of Science degree in Data Science includes skills in mathematics, science, data literacy and analysis, programming, and general education for transfer to a four-year institution.

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

Recommended Course Schedule

1st semester		Units
DATA 101	Introduction to Data Science	3
DATA 210	Introduction to SQL for Data Science	3
CS 105	Introduction to Computing	3
ENG 101 or ENG 100 or ENG 113	Composition I or Composition Enhanced or Composition I for International and Multilingual Students	3
MATH 124	College Algebra (or higher)	3
	Semester Total	**15**
2nd semester		
APST 207 or STAT 152	Practical Statistics or Introduction to Statistics	3
ENG 102 or ENG 114	Composition II or Composition II For International and Multilingual Students	3
Fine Arts [3]		3
Humanities/Diversity [4]		3
Social Science/U.S & NV Constitution [3]		3
	Semester Total	**15**
3rd semester		
DATA 220	Research Methods for Data Science	3
CS 138	Programming for Data Science in Python I	3
Electives		6
Science [3]		3
	Semester Total	**15**
4th semester		
Science [3]		3
Elective		12
	Semester Total	**15**
	Total Units	**60**

[3] See approved General Education list for the AA/AS Degree. (https://catalog.tmcc.edu/degrees-certificates/general-education/aa-as/)

[4] 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		
English		*3 - 6*
Must include ENG 102 or ENG 114 [1]		
Fine Arts		*3*
Recommended:		
ART 100	Visual Foundations	
Humanities		*3*
Recommended: [2]		
PHIL 210	World Religions	
Mathematics		*3*
Required:		
MATH 124	College Algebra (or higher)	
Science		*6*
Social Science		*3*
Recommended: [2]		
PSY 101	General Psychology	
PSC 101	Introduction to American Politics	
HIST 111	Survey of U.S. Constitutional History	
ADDITIONAL COLLEGE REQUIREMENTS		
Diversity		*[3]*
Recommended:		
ENG 231	World Literature I	
PHIL 210	World Religions	
U.S. and Nevada Constitutions		*[3]*
Science courses (satisfied by degree requirements)		*[6]*
DEGREE REQUIREMENTS		
DATA 101	Introduction to Data Science	3
DATA 210 or CIT 180	Introduction to SQL for Data Science Database Concepts and SQL	3
DATA 220	Research Methods for Data Science	3
APST 207 or STAT 152	Practical Statistics Introduction to Statistics	3
CS 138	Programming for Data Science in Python I	3
ELECTIVE REQUIREMENTS		
Select 21 units from transferable electives		21
Recommended:		
CS 151	Introduction to Cybersecurity	
PSY 240	Introduction to Research Methods	
ECON 102	Principles of Microeconomics	

	BUS 107	Business Speech Communications
	COM 113	Fundamentals of Speech Communications
	CS 105	Introduction to Computing
	PBH 101	Introduction to Public Health
	PBH 281	Introduction to Biostatistics in Public Health
Total Units		**60**

[1] If you place into ENG 102 or ENG 114 the additional 3 required units will become elective units. Course sequence is based on placement into ENG 102.

[2] Recommended courses also meet Diversity and U.S. & NV Constitution requirements.

Program Outcomes

Students completing the degree will:

PSLO1: Apply appropriate mathematical and scientific principles to Data Science applications.

PSLO2: Demonstrate proficiency in technical fundamentals to analyze and resolve technology problems.

PSLO3: Apply knowledge and skills to develop, interpret, and select appropriate technological processes.

PSLO4: Demonstrate the ability to assist in research, development, design, production, testing and various other functions associated with Data Science.

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.