

COMPUTER PROGRAMMING, COMPUTER INFORMATION TECHNOLOGY, AAS

Program Code: Computer Programming-AAS

Program Description

The AAS, Computer Information Technology, Computer Programming provides students with entry level programming skills. Computer programming professionals must also have a broad knowledge of computer systems and technologies, as well as strong problem solving and analysis skills. They must be able to think logically and have strong verbal and written communication skills.

Recommended Course Schedule

1st semester		Units
CIT 114	IT Essentials	4
CS 105	Introduction to Computing	3
English ³		3
CIT 130 or CIT 134	Beginning Java or Beginning C# Programming	3
Semester Total		13
2nd semester		Units
CIT 112	Network +	3
CIT 151	Beginning Web Development	3
Mathematics		3
Fine Arts/Humanities/Social Science/Diversity ³		3
CIT 230 or CIT 234	Advanced Java or Advanced C# Programming	3
Semester Total		15
3rd semester		Units
CIT 180 or DATA 210	Database Concepts and SQL or Introduction to SQL for Data Science	3
Communications ³		3
Science ²		3
CIT 236 or CIT 130 or CIT 134 or CIT 237	Common Programming Patterns or Beginning Java or Beginning C# Programming or Test-Driven Development	3
Electives		4
Semester Total		16
4th semester		Units
CIT 235 or CIT 230 or CIT 234 or CIT 236 or CIT 237	Fluent Entity Framework in C# or Advanced Java or Advanced C# Programming or Common Programming Patterns or Test-Driven Development	3
CIT 263	Project Management	3
Electives		4

Human Relations ³	3
U.S. and Nevada Constitutions ²	3
Semester Total	16
Total Units	60

² See approved General Education list for the AAS Degree. (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

³ See program recommendations or requirements.

Program Requirements

AAS degrees are generally non-transfer degrees designed for students to enter the workforce.

To earn an AAS 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 AAS (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).
4. Have no financial or library obligation to the college.

Code	Title	Units
GENERAL EDUCATION REQUIREMENTS		
<i>Communications</i>		3
Highly Recommended:		
BUS 107 or COM 113 or COM 215	Business Speech Communications Fundamentals of Speech Communications Introduction to Group Communication	
<i>English</i>		3
Highly Recommended:		
ENG 101 or ENG 113 or ENG 100 or ENG 102 or ENG 114 or ENG 107	Composition I Composition I for International and Multilingual Students Composition Enhanced Composition II Composition II For International and Multilingual Students Technical Communications I	
<i>Fine Arts/Humanities/Social Science</i>		3
Recommended:		
Course that counts for Diversity		
<i>Human Relations</i>		3
Highly Recommended:		
MGT 212	Leadership and Human Relations	
<i>Mathematics</i>		3
Recommended:		
MATH 124	College Algebra (or higher)	
<i>Science</i>		3
<i>Additional College Requirements</i>		
<i>Diversity</i>		(3)
<i>U.S. and Nevada Constitutions</i>		3
Degree Requirements		
CIT 112	Network +	3

CIT 114	IT Essentials	4
CIT 151	Beginning Web Development	3
CIT 180	Database Concepts and SQL	3
or DATA 210	Introduction to SQL for Data Science	
CIT 263	Project Management	3
CS 105	Introduction to Computing	3
Students must complete the beginning and advanced of one programming language for a total of 6 units:		6
JAVA		
CIT 130	Beginning Java	
CIT 230	Advanced Java	
C#		
CIT 134	Beginning C# Programming	
CIT 234	Advanced C# Programming	
Select 6 units from the following courses or programming language		6
CIT 130	Beginning Java	
CIT 230	Advanced Java	
CIT 134	Beginning C# Programming	
CIT 234	Advanced C# Programming	
CIT 235	Fluent Entity Framework in C#	
CIT 236	Common Programming Patterns	
CIT 237	Test-Driven Development	
Electives		8
CSCO 120	CCNA Internetworking Fundamentals	
CS 135	Computer Science I	
CIT, CS, CSCO or DATA		
MATH 127	Pre-Calculus II	
MATH 126	Pre-Calculus I	
DATA 101	Introduction to Data Science	
Total Units		60

Program Outcomes

Students completing the degree will:

PSLO1: Have the technical proficiency required to design and program a solution to a stated problem.

PSLO2: Demonstrate an understanding of dynamic data structures and generic methods.

PSLO3: Have the ability to communicate and work effectively with members of a team and members of external groups.