

WEB DEVELOPMENT, COMPUTER INFORMATION TECHNOLOGY, AAS

Program Code: Web Development-AAS

Program Description

Graduates of the Associate of Applied Science Degree in Computer Information Technology with an emphasis in Web Development will possess the knowledge and skills necessary to design, develop, deploy, and maintain dynamic, secure, and accessible web applications. The program prepares students for entry-level careers in web and application development, user interface design, and digital content management while establishing a strong technical foundation for further study in information technology or related disciplines.

Recommended Course Schedule

	Units
1st semester	
CIT 114 IT Essentials	4
CIT 112 Network +	3
CIT 151 Beginning Web Development	3
English/Communications ³	3
Mathematics ⁴	3
Semester Total	16
2nd semester	
CIT 148 Beginning Python Programming	3
CIT 173 Introduction to Linux	3
English/Communications ³	3
Human Relations ³	3
CIT 180 Database Concepts and SQL or Introduction to SQL for Data Science DATA 210	3
Semester Total	15
3rd semester	
CIT 152 Web Script Language Programming	3
Fine Arts/Humanities/Social Studies/U.S. & Nevada Constitutions. ⁴	3
CIT 263 Project Management	3
Science ³	3
Elective	3
Semester Total	15
4th semester	
CIT 251 Advanced Web Development	3
Elective	5
CIT 271 Cyber Threat Intelligence	3
Diversity ³	3
Semester Total	14
Total Units	60

³ See Approved General Education List for the AAS Degree. (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>)

⁴ 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>English/Communications</i> ¹		6
<i>Fine Art/Humanities/Social Science</i> ¹		3
Choose a course that satisfies U.S. and Nevada Constitutions		
<i>Human Relations</i> ¹		3
<i>Mathematics</i>		3
Recommended:		
MATH 124	College Algebra (or higher)	
<i>Science</i> ¹		3
Additional College Requirements		
<i>Diversity</i> ¹		3
<i>U.S. and Nevada Constitutions</i> ²		(3)
Course also will satisfy Fine Arts/Humanities/Social Science.		
Degree Requirements		
Core		
CIT 271	Cyber Threat Intelligence	3
CIT 112	Network +	3
CIT 114	IT Essentials	4
CIT 148	Beginning Python Programming	3
CIT 173	Introduction to Linux	3
CIT 180	Database Concepts and SQL	3
	or DATA 210 Introduction to SQL for Data Science	
CIT 263	Project Management	3
Emphasis		
CIT 151	Beginning Web Development	3
CIT 152	Web Script Language Programming	3
CIT 251	Advanced Web Development	3
Electives		
8		
Select 8 units from any college-level courses.		
Total Units		60

¹ See Approved General Education List for the AAS Degree (<https://catalog.tmcc.edu/degrees-certificates/general-education/aas/>).

² Course may also count toward degree requirements. Please consult with Academic Advising.

Program Outcomes

Students completing the degree will:

- PSLO 1: Demonstrate proficiency in front-end and back-end web development technologies, including HTML, CSS, JavaScript, and server-side scripting languages.
- PSLO 2: Design and implement relational databases for dynamic web applications, demonstrating the ability to integrate database functionality using SQL and server-side code.
- PSLO 3: Apply programming logic, data structures, and software development principles to build, test, and troubleshoot functional web applications.
- PSLO 4: Develop responsive and accessible user interfaces that comply with current web design standards, usability principles, and accessibility guidelines.
- PSLO 5: Implement secure coding practices and data protection methods to safeguard web applications from common vulnerabilities and threats.
- PSLO 6: Demonstrate project management, teamwork, and professional communication skills in planning, developing, and presenting web development projects.
- PSLO 7: Integrate technical, creative, and analytical skills to produce professional-quality web solutions that meet client or organizational needs.