

CIS SOFTWARE DEVELOPMENT, ASSOCIATE OF APPLIED SCIENCE

The Associate of Applied Science (AAS) CIS Software Development program represents a broad exposure to multiple disciplines across various contemporary technologies. Students will be offered opportunities to explore computing systems from small micro-systems to enterprise solutions. Courses in this degree represent meaningful tools used in industry and mastery of them brings personal value to each student. Graduates of this program are capable of entering the workplace as a junior level developer, mobile application development.

Software developers are one of the most in-demand careers throughout the world. As technology grows and engrosses more of the American life, more automation and software systems are needed. The future is very bright.

[Click here to learn about Career Pathway certificates that lead to an AAS in CIS Software Development.](#)

GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. All courses must be completed with a grade of 'C' or better.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

PROGRAM STUDENT LEARNING OUTCOMES

The Associate of Applied Science (AAS) CIS Software Development is designed for students planning to complete an associate degree in Computer Information Systems (CIS) Software Development. Students have the opportunity to transfer to most Oregon public and private universities as the program at Southwestern Oregon Community College aligns with the first two-year computer science programs in those universities.

Upon successful completion of this program, the student will be able to:

- Demonstrate the skill and knowledge to install, configure and maintain PC and server hardware/software in a network environment.
- Research, interpret and communicate technical information in written, graphic, diagrammatic, electronic and oral forms.
- Demonstrate the ability to work independently or in a group environment with sensitivity to the needs of customers and coworkers.
- Demonstrate the ability to plan and implement both wired and wireless networks sufficient for small business use.
- Demonstrate basic ability to develop new products and services to meet the needs of a changing economy.

- Plan, write, and debug software applications within multiple programming environments.

AWARD MAP

Pathway Option

Career Pathway Certificate of Completion: Programming Basics

Career Pathway Certificate of Completion: Database Programming

Certificate of Completion: Programming Technician

Associate: CIS Software Development

PRE-PROGRAM COURSES

Students are required to take the following courses *prior* to the program courses, depending on students' college placement information. See advisor for details:

Code	Title	Credits
CIS90	Computer Basics (or demonstrate proficiency)	2
MTH60	Algebra I (or placement in a higher math course)	4
WR90R	Academic Literacy (or placement in higher writing course)	4

PROGRAM GUIDE

Course	Title	Credits
First Year		
Fall		
CIS151	Network Essentials	4
CS160	Computer Science Orientation	4
MTH86	Computer Technology Mathematics ¹	4
WR115	Fundamentals of Report Writing (or higher) ⁶	3
		Credits
		15
Winter		
CIS140U	Intro to Operating Systems: Unix	4
CIS145	Hardware Installation Support	4
CS161	Introduction to Computer Science I	4
CS195	Web Development I	3
		Credits
		15
Spring		
BA110	Group Dynamics for Teams ²	3
CS133WS	Computer Language I: Web Scripting	4
CS162	Introduction to Computer Science II	4
Specific Elective ³		4
		Credits
		15
Second Year		
Fall		
CIS250	Technology Entrepreneurship	3
CS233WS	Computer Language II: Server-Side Web Scripting	4
CS261	Data Structures	4
CS275	Database Management	4
		Credits
		15
Winter		
CIS279	Network Server Administration	4
CS244	Systems Analysis	3

CS276	Advanced SQL	4
SP100	Basic Speech Communications ⁷	3
Specific Elective ³		3
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	Credits	17
Spring		
CS165	Mobile Application Development	4
CS297	SD Professional Capstone	4
CS280	CWE: Computer Science ⁵	4
PE231	Wellness for Life ⁴	3
Specific Elective ³		3
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	Credits	18
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	Total Credits	95

¹ MTH105 or higher excluding MTH211 may be substituted for MTH86.

² BA120, BA285, PSY100, PSY201, PSY203 may be substituted for BA110.

³ Specific Electives: Any AC, BA, CIS/CS, course not required for the degree; WR227; MTH65; MTH95, or higher; ART115; ART116; ART117; ART225.

⁴ HE250 or three (3) credits of PE185 sport/activity courses may be substituted for PE231.

⁵ See Internship Coordinator to schedule an appointment one month prior to term. 541-888-7405

⁶ Excluding WR241, WR242, WR243, and WR250.

⁷ SP111, SP218, SP219 may be substituted.

* All Honors courses may substitute for their equivalent requirements.