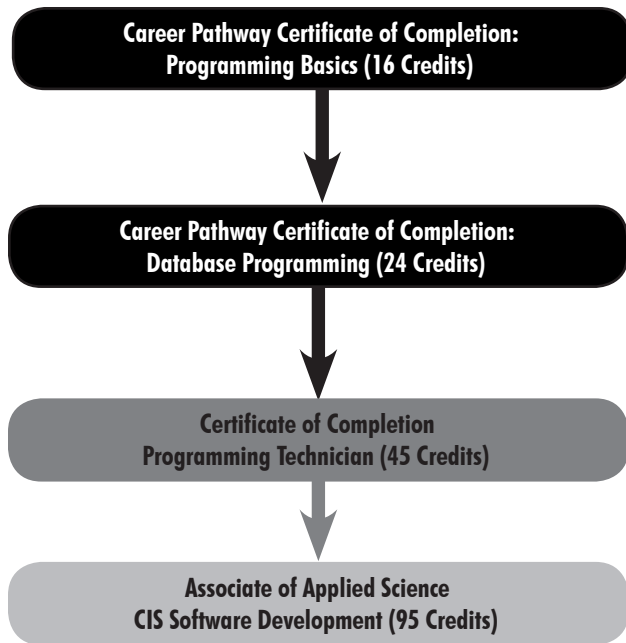


ASSOCIATE OF APPLIED SCIENCE CIS SOFTWARE DEVELOPMENT



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.

PROGRAM STUDENT LEARNING OUTCOMES

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

- Demonstrate the skill and knowledge to install, configure, maintain and troubleshoot workstation and server hardware, and 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.

GRADUATION REQUIREMENTS

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

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

PROGRAM
REQUIREMENTS

COMPUTER INFORMATION SYSTEMS

ASSOCIATE OF APPLIED SCIENCE CIS SOFTWARE DEVELOPMENT

PREREQUISITES	WR90 (3) Paragraph Fundamentals (or placement test score)	MTH60 (4) Algebra I (or placement test score)	Reading Score of ASSET42 COMPASS81	CIS90 (2) Computer Basics (or demonstrate proficiency)
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FALL = 15 CREDITS	CS160 (4) Computer Science Orientation	CIS151 (4) Network Essentials	WR115 (3) Introduction to Expository Writing (or higher)	MTH86 (4) Computer Technology Mathematics ¹
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WINTER = 15 CREDITS	CS161 (4) Introduction to Computer Science I	CIS140U (4) Introduction to Operating Systems - Unix	CS195 (3) Web Development I	CIS145 (4) Hardware Installation Support
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SPRING = 15 CREDITS	CS162 (4) Introduction to Computer Science II	(4) Specific Elective ²	CIS133WS (4) Computer Language I - Web Scripting	BA110 (3) Group Dynamics for Teams ³
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45 CREDITS = FIRST YEAR TOTAL REQUIREMENT

FALL = 15 CREDITS	CS261 (4) Data Structures	CS275 (4) Database Management	CIS250 (3) Small Business Management Entrepreneurship	CS233WS (4) Computer Language I - Web Scripting
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WINTER = 18 CREDITS	CS271 (4) Computer Organization	CIS244 (3) System Analysis	CS276 (4) Advanced SQL	CIS279 (4) Network Management I (Network Hardware)	(3) Specific Elective ²
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SPRING = 17 CREDITS	SP100 (3) Basic Speech Communi- cation (or higher)	CS297 (4) Capstone Project	CIS280 (4) CWE: Computer Information Systems	PE231 (3) Wellness for Life ⁴	(3) Specific Elective ²
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50 CREDITS = SECOND YEAR TOTAL REQUIREMENT

95 CREDITS = TOTAL PROGRAM REQUIREMENT

PROGRAM NOTES

¹MTH105 or higher may be substituted for MTH86.

²Specific Electives: Any CS/CIS, BA, AC course not required for the degree; WR227, MTH65, 95, or higher; ART115, 116, 117, 225, or MFG4101.

³BA120, 285; HS150; PSY100, 201, 203 may be substituted for BA110.

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