

**Area of Interest:** Computer Technology, Engineering & Math

**Certificate:** Computer Programming

**College Catalog:** [2024-2025](#)



**Program Location:** All Campuses

**Program Description:** Gain the programming skills necessary for a career in the fast-growing software industry. Computer Programming concentrates on analysis and design of algorithms through a variety of programming languages.

**Contact Information:** Linda Friedel (Faculty) [Linda.Friedel@centralaz.edu](mailto:Linda.Friedel@centralaz.edu)

**Area of Interest Website:** [Computer Technology, Engineering and Math - Central Arizona College \(centralaz.edu\)](#)

### Legend

**Bold Course**=Required Course

Core Course (**CC**)

Stackable Certificate (SC)

### AGEC Course list (Arizona General Education Curriculum)

Written Communication (**WC**)

Oral Communication (**OC**)

Arts/Humanities (**AH**)

Social/Behavioral Science (**SB**)

Lab Science (**LS**)

Mathematics (**M**)

Core Course (**CC**)

Transfer Elective (**TE**)

**Special Awareness Requirements** for transfer degrees met through courses on the AGEC Course list.

Cultural Awareness (**CU**)

Global/Historical Awareness (**GI/HI**)

Intensive Writing (**IW**)

### Semester 1: New Students-Find your suggested starting point for English/Reading & Math courses.

	COURSE	CREDITS	SEMESTER/GRADE	NOTES
CC	<b>CIS112 Web Design Fundamentals with HTML</b>	3		
CC	<b>CIS120 Survey of Computer Information Systems</b>	3		
CC	<b>CIS121 Windows Operating System Fundamentals</b>	3		
CC	<b>CIS123 Introduction to Programming</b>	3		
	<b>Semester Credits:</b>	<b>12</b>	<b>Apply for graduation and attend career events!</b>	

### Semester 2

	COURSE	CREDITS	SEMESTER/GRADE	NOTES
CC	<b>CIS162 Comparative Programming Languages</b>	3		
CC	<b>CIS176 Python Programming</b>	3		
CC	<b>CIS178 Database Fundamentals and Programming</b>	3		
CC	<b>CIS216 Java Programming</b>	4		
	<b>Semester Credits:</b>	<b>13</b>	<b>Research career resources and opportunities!</b>	
	<b>Total Computer Programming Certificate credits:</b>	<b>25</b>		

Arizona Resident Tuition for 2024-2025 is \$75 per credit hour; see [Paying for College](#). Financial aid may be available.

### Career Information

**CAC Career Center:** [centralaz.edu/career](http://centralaz.edu/career) FREE CAC career resources and assistance

**O\*NET OnLine:** Visit [onetonline.org](http://onetonline.org) and search for:

**Occupations in Computer Programming, including:** Education needed for specific occupations, Occupation tasks, knowledge, skills and abilities, Salary/wages for specific occupations (\$)

### Transfer Information

**CAC University Transfer Center:** [centralaz.edu/transfer](http://centralaz.edu/transfer) FREE CAC transfer resources and assistance.

[AZTransfer Technology Major Guide](#) has a list of transfer programs at ASU, NAU, or UA.

**Note:** Use this Program MAP as a guide to choose courses and track progress towards completion of program. Work with an advisor to customize your plan.

**Part-Time Students:** Plans can be modified to fit the need of part-time students.

**Student Name:**

**Advisor Name:**

**Student ID Number: 880**

**Date:**