## **Area of Interest:** Computer Technology, Engineering & Math **Degree:** Software Development, Associate of Applied Science (AAS)

**Stackable Certificates:** Computer Programing/Software Development



**College Catalog:** 2024-2025

**Program Location:** All Campuses

**Program Description:** The Software Development AAS concentrates on analysis and design of algorithms through a variety of programming languages; teaching the programming skills necessary to prepare students for a career in the fast-growing software industry or to transfer to a 4-year college or university.

Contact Information: Andres Gonzalez (Faculty) andres.gonzalez@centralaz.edu

Advising: <a href="mailto:stem.advisor@centralaz.edu">stem.advisor@centralaz.edu</a>

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

Legend					
<b>Bold Course</b> =Required Course	Recommended Course	e (R)	Stackable Certificate (SC)		
AGEC Course list (Arizona General Education Curriculum) and other degree requirements.					
Written Communication (WC)	Oral Communication (OC)	Arts/Humanities (AH)	Social/Behavioral Science (SB)		
Lab Science <b>(LS)</b>	Mathematics (M)	Core Course (CC)	Emphasis Course (EC)		

Semester 1: New Students-Find your suggested starting point for English/Reading & Math courses.					
		COURSE	CREDITS	SEMESTER/GRADE	NOTES
SC	СС	CIS120 Survey of Computer Information Systems	3		
	сс	CIS121 Windows Operating System Fundamentals	3		
SC	СС	CIS123 Introduction to Programming	3		
	М	BUS101 Business Mathematics or MAT118 Essential Mathematics or higher	3-4		MAT151 College Algebra is strongly recommended for Transfer Students
	WC	ENG101 College Composition I or ENG121 Applied Technical Writing	3		
		Semester Credits:	15-16	Meet with yo	ur CAC advisor each semester!

Sen	Semester 2				
		COURSE	CREDITS	SEMESTER/GRADE	NOTES
sc	сс	CIS112 Web Design Fundamentals with HTML	3		
	СС	CIS115 Customer Service & Workplace Success	3		
SC	СС	CIS178 Database Fundamentals & Programming	3		
SC	СС	CIS216 Java Programming	4		
R	SB	ECN200 Contemporary Economic Issues	3		
		Semester Credits	16	Research career resources and opportunities!	

Ser	Semester 3				
		COURSE	CREDITS	SEMESTER/GRADE	NOTES
sc	сс	CIS162 Comparative Programming Languages	3		
sc	сс	CIS213 Linux Server	3		
SC	СС	CIS231 Object Oriented Programming & Data Structures	4		
SC	СС	CIS176 Python Programming	3		
	АН	Arts and Humanities AGEC course	3		
		Semester Credits:	16	Apply for graduation and attend career events!	

Semester 4					
		COURSE	CREDITS	SEMESTER/GRADE	NOTES
SC	СС	CIS218 C++ Programming	4		
	СС	CIS233 Web Application Development using PHP	4		
R	ОС	COM259 Professional Communications	3		
	LS	Biological & Physical Sciences AGEC course	4		
		Semester Credits:	15	Finish strong-don't get distracted before finals!	
		Total Degree Credits:	62-63		
		Total Certificate Credits:	33		

## **Career Information**

CAC Career Center: centralaz.edu/career FREE CAC career resources and assistance

**O\*NET:** Visit <u>onetonline.org</u>, search for Occupations in Computer Programmer. Careers include Application Developer, Programmer/coder

- Education needed for specific occupations. Associate Degree or Certificate=12%
- Occupation tasks, knowledge, skills, and abilities Problem Solving, Critical Thinking, Active Listening, Customer Service, Integrity
- Salary/wages for specific occupations (\$)60,000 annually

## **Transfer Information**

CAC University Transfer Center: centralaz.edu/transfer FREE CAC transfer resources and assistance.

AZTransfer Computer Information Systems Major Guide has a list of transfer programs at ASU, NAU, or UA.

**Note:** Use this Program MAP as a guide to choose courses with your advisor and track progress towards milestones and completion of program. Work with an advisor to customize your plan to align with your specific career and/or transfer goals.

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

Student Name:	Advisor Name:		
Student ID Number: 880	Date:		