

# Computer Information Systems A.A.S. Programming Concentration

## Program Code

AAS-CIS-PROG

## CIP

11.0101

## Type

A.A.S.

**When are the CIS courses you need offered? [Click here](#) to see a list of CIS courses by semester availability.**

**[Click here](#) to see the recommended Programming course sequence.**

The CIS department offers concentrations in Cybersecurity/IT and Programming, and these short term certificates: Computer Technician, Server Administration, Cisco CCNA Preparation, Cybersecurity Essentials, Computer Science Essentials, Programming Essentials, Software Applications, and Swift App Development.

This program is designed for students seeking employment in the field of Computer Information Systems with a technical concentration. The program is not designed for transfer, although many of the courses are transferable to some senior institutions. Please note that some required courses may not be offered every semester. Due to limited course offerings, degree-seeking students may find it necessary to extend completion timelines, and attend both day and evening classes and attend classes on both campuses or online.

**Students completing the CIS coursework required for this degree also fulfill the requirements for the Programming Essentials short-term certificates.**

## GENERAL EDUCATION CORE REQUIREMENTS

Item #	Title	Credits
ORI 110	Freshman Seminar	1
ENG 101	English Composition I	3
BUS 215	Business Communications	3
BUS 271	Business Statistics I	3
	MTH 100 or higher	3-4
ECO 231	Principles of Macroeconomics	3
	Humanities/Fine Arts Elective (Excluding Speech and Foreign Language)	3

# MAJOR COURSE REQUIREMENTS

Item #	Title	Credits
CIS 134	IT Fundamentals (CompTIA ITF+)	3
CIS 155	Intro. to Mobile App Development	3
CIS 171	Linux I	3
	CIS 199 Network Communications or CIS 270 CISCO CCNA I	3
CIS 202	Python Programming	3
CIS 207	Introduction to Web Development	3
CIS 209	Advanced Web Development	3
CIS 222	Database Management Systems	3
CIS 251	C++ Programming	3
CIS 255	Java Programming	3
CIS 262	Data Structures and Algorithms	3
CIS 266	Software Engineering with Secure Coding	3
CIS 280	Network Security (CompTIA Security+)	3
CIS 283	Software Development Capstone	3
CIS 285	Object-Oriented Programming	3
	<b>Total Credits</b>	<b>64-65</b>