

# Computer Information Systems, Programming Concentration

**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 Computer Technician and Cybersecurity Essentials short-term certificates.**

**Program:** Computer Information Systems

**Program Code:**

AAS-CIS-PROG

**Type:** A.A.S.

## 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 110 or higher (excluding MTH 116)	3-4
ECO 231	Principles of Macroeconomics	3
	Humanities/Fine Arts Elective	3

# MAJOR COURSE REQUIREMENTS

<b>Item #</b>	<b>Title</b>	<b>Credits</b>
CIS 134	IT Fundamentals (CompTIA ITF+)	3
	CIS 155 OR CIS 220	3
CIS 171	Linux I	3
CIS 202	Python Programming	3
	CIS 207 OR CIS 227	3
CIS 222	Database Management Systems	3
CIS 251	C++ Programming	3
CIS 252	Advanced C++ Programming	3
CIS 255	Java Programming	3
CIS 263	Computer Maintenance (CompTIA A+)	3
CIS 270	Cisco CCNA I	3
CIS 276	Server Administration	3
CIS 280	Network Security (CompTIA Security+)	3
	CIS GENERAL ELECTIVES	6
	<b>Total credits:</b>	<b>64-65</b>