

COMPUTER PROGRAMMING AND ANALYSIS

ASSOCIATE IN SCIENCE

Program Code: 1610

Effective Fall 2026 (202710)

Description of Program: The A.S. degree in Computer Programming and Analysis prepares you to become a software applications specialist or entry-level programmer in the microcomputer/business environment. A variety of programming languages and software applications are available, so you may individualize the program depending on your personal career and interests. Hands-on computer experience is emphasized throughout the program.

Length: 60 credit hours

Prefix Number	Course Title	Credit Hrs.
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Fall Term

CET 1600C	Networking Fundamentals	3
# CGS 1100C	Introduction to Microcomputers using Windows (GE)	3
COP 2034	Python Programming I	3
*^ ENC 1101	Freshman English I (GE)	3
*^ MAC 1105	College Algebra (GE)	3
SLS 1106	First-Year Experience Seminar	<u>1</u>
		16

Spring Term

COP 2041	Python Programming II	3
COP 2704	Introduction to SQL	3
* COP 2810	Programming for the Internet	3
OST 2335	Business Communications	3
**	Natural Sciences Core (GE)	<u>3</u>
		15

Summer Term

Professional Elective or		
Programming/Application Elective		<u>2-3</u>
		2-3

Fall Term

* COP 2224	Introduction to C++ Programming	3
COP 2360	C# Programming	3
AMH 1010	Introductory Survey to 1877 or	(GE)
AMH 1020	Introductory Survey Since 1877 or	(GE)
POS 1041	American Government (GE)	3
	Programming/Application Elective	<u>3</u>
		12

Spring Term

* COP 2250	Java Programming	3
COP 2362	Advanced C# Programming	3
**	Humanities Core (GE)	3
	Professional Elective	3
**	Programming/Applications Elective	<u>3</u>
		15

Programming/Applications Electives:

Client-Side Programming

CGS 2820	Introduction to Web Design	3
* COP 2842	Developing Websites using PHP/MySQL	3

Data Analysis

* CGS 2510C	Spreadsheet Applications	3
* CGS 2565C	Principles of Computer Information Systems	3

Network

* CET 1660C	Computer Network Security	3
* CET 2662C	Security Testing and Auditing	3

Other

CTS 2142	IT Project Management	3
COP 2930	Selected Topics in Computer Programming	1-4
CIS 2949	Co-op Education Training in Computer Information Systems	1-4

Professional Electives:

ACG 2001	Financial Accounting I or	3
ACG 2021	Financial Accounting	3
ENT 1000	Introduction to Entrepreneurship	3
FIN 1100	Personal Finance	3
GEB 1011	Introduction to Business	3
LDR 2001	Introduction to Leadership	3
MAN 2021	Principles of Management	3
MAR 2011	Principles of Marketing	3

* Check the course description for prerequisites.

** It is your responsibility to meet with the instructional supervisor or counselor to select the proper course to fulfill this requirement.

^ It may be necessary to first enroll in a lower-level English, math, or reading course depending on college placement test scores.

If you do not have basic keyboarding skills, it is suggested that you take OST 1100C Introduction to College Keyboarding as the elective course in the first term.

NOTE: Fundamentals of Speech Communication general education requirement is covered within the Computer Programming and Analysis curriculum for the associate degree.