



Computer Programmer - Business Applications

College Credit Certificate | Code: 66045 | 36 Credits

CIP (0511020200)

Effective Term: Spring 2025 (2253)

The College Credit Certificate program in Computer Programmer - Business Applications is designed to provide an opportunity to establish a foundation in computer programming for employment in scientific, commercial, industrial and government data processing applications. Graduates are prepared for positions as entry-level programmers, programmer specialists, and software developers for both applications and systems software.

MAJOR COURSE REQUIREMENTS (16.00 Credits)

CGS 1060C	Introduction to Computer Technology and Applications	(4 credits)	
CGS 1540C	Database Concepts and Design	(4 credits)	
COP 1334	Introduction to C++ Programming	(4 credits)	
COP 2800	Java Programming	(4 credits)	Prerequisites: COP 1047C, COP 1334, or COP 2270

PROGRAM CONCENTRATION CORE (15.00 Credits)

COP 1047C	Introduction to Python Programming	(4 credits)
GEB 1432	Applied Artificial Intelligence (AI) in Business	(3 credits)

Must take 8 credits from the following group:

COP 2041C	Python Programming 2	(4 credits)	Prerequisite: COP 1047C
COP 2335	Object Oriented Programming Using C++	(4 credits)	Prerequisite: COP 1334
COP 2805C	Advanced Java Programming	(4 credits)	Prerequisite: COP 2800

PROGRAM ELECTIVES (5.00 Credits)

CAI*, CEN*, COP*, CTS*		
CGS 2091	Professional Ethics and Social Issues in CS	(4 credits)
CIS 2331	Systems Analysis, Design and Implementation	(5 credits)
EET 1033C	Electrical Fundamentals	(4 credits)
PHI 2680	Artificial Intelligence (AI) Ethics	(3 credits)