PROGRAMMING - CERTIFICATE OF COMPLETION

(21-23 credits)

A Suggested Plan of Study

The contents of this roadmap may vary depending on initial student placement in mathematics and English. This is only a suggested plan of study for students, and is not intended as a contract. Individual student academic plans may vary. Please contact your academic advisor to create a plan that works for you. Course availability may vary from fall to spring semester and may be subject to modification or change.

NOTE: Students must complete all University certificate requirements to total at least 21 credits and must achieve a cumulative grade-point average of at least 2.0. Developmental coursework will not count towards the degree requirements and/or elective credits. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Semester 1		**Credits**
CIST 2311	Database Concepts and Principles	3
CTEC 152 or CIST 1261	JAVA Programming or JavaScript Web Programming	3
Choose one from the following:		3-4
CSCI 1110	Computer Science Principles	
BCIS 1160 or CIST 1611	Windows or Azure Fundamentals	3
CSCI 1720	Computer Science I	
CIST 1680	Linux Essentials	
CIST 2237	Android Application Development with Java and Kotlin	
CIST 2251	Python Programming II	
	Credits	**12-13**
Semester 2		
CIST 2210	Introduction to SQL (Structured Query Language)	3
CTEC 158	Visual Basic Programming	3
Choose one from the following:		3-4
CSCI 1110	Computer Science Principles	
CSCI 1720	Computer Science I	
CIST 1680	Linux Essentials	
CIST 2237	Android Application Development with Java and Kotlin	
CIST 2251	Python Programming II	
BCIS 1160 or CIST 1611	Windows or Azure Fundamentals	
	Credits	**9-10**
	Total Credits	**21-23**