

PROGRAMMING - CERTIFICATE OF COMPLETION

(18-20 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 18 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. If a student has no basic typing skills, OATS 101 Keyboarding Basics is a prerequisite for all CTEC, CSEC, and OECS courses. A grade of C- or better is required in ENGL 1110G Composition I and designated Mathematics courses.

Semester 1		Credits
CTEC 140 or OECS 220	Introduction to Database Design or Database Application and Design	3
CTEC 152 or OECS 195	JAVA Programming or Java Programming I	3
Choose one from the following:		3-4
C S 111	Computer Science Principles	
C S 172	Computer Science I	
CTEC 130 or OECS 204	Linux Workstation or Linux Operating System	
CTEC 135 or OECS 207	Windows Workstation or Windows	
CTEC 150 or OECS 145	Mobile Application Programming or Mobile Application Development	
CTEC 156	Python Programming	
		Credits 9-10
Semester 2		
CTEC 145 or OECS 235	Introduction to Database Management or Structured Query Language (SQL)	3
CTEC 158	Visual Basic Programming	3
Choose one from the following:		3-4
C S 111	Computer Science Principles	
C S 172	Computer Science I	
CTEC 130 or OECS 204	Linux Workstation or Linux Operating System	
CTEC 135 or OECS 207	Windows Workstation or Windows	
CTEC 150 or OECS 145	Mobile Application Programming or Mobile Application Development	
CTEC 156	Python Programming	
		Credits 9-10
Total Credits		18-20