

# C++ and Mobile Device Programming One-Year Certificate

## PROFESSIONAL TECHNICAL 2017-2018 Certificate Requirements

### Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems <i>or</i>	5		
CS	225	SQL Server Programming	5		
CS	115	HTML5-Cascading Style Sheets	5		
CS	117	Computer Ethics <i>or</i>	2		
CS	118	Customer Service	3		
CS&	131	Computer Science I C++	5		
CS	150	Computer Security	5		
CS	162	C++2	5		
CS	250	HTML5-JavaScript/JQuery	5		
CS	260	Data Structures in C++	5		
CS	262	Game Programming Design and Development	5		
CS		Select any CS course	5		

**Subtotal 47-48**

### General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENG&	101+	English Composition <i>or</i> above	5		
MATH&	141, 142, 144, 146, 148, 151, 152, or 153		5		
<b>Psychology or Sociology (select 5 credits)</b>					
PSYC&	100+	General Psychology <i>or</i> above <i>or</i>	5		
SOC&	101	Intro to Sociology <i>or</i>	5		
SOC&	201	Social Problems	5		
<b>Communication Studies (select 3-5 credits)</b>					
CMST	101	Speech Essentials <i>or</i>	3		
CMST	110	Communication Behavior <i>or</i>	3		
CMST&	220	Public Speaking <i>or</i>	5		
CMST&	210	Interpersonal Communication <i>or</i>	5		
CMST	260	Multicultural Communication	5		

**Subtotal 18-20**

**Total Credits Required 65-68**

Note: MATH 094 or MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.5 grade in all CS courses.