

# Java, Web, and Mobile Device Programming One-Year Certificate

PROFESSIONAL TECHNICAL  
2012-2013 Certificate Requirements

## Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	106	Database Systems	5		
CS	114	HTML	5		
CS	117	Computer Ethics <i>or</i>	2		
CS	118	Customer Service	3		
CS&	141	Computer Science I Java	5		
CS	223	Unix/Linux	5		
CS	225	SQL Server Programming	5		
CS	236	Java I/O and Intro to Integration	5		
CS	264	Java for Android Apps <i>or</i>	5		
CS	265	Objective-C/iPhone Programming <i>or</i>	5		
CS	272	Windows Phone Programming	5		
CS	275	Secure Coding & Software Development/Sr. Project	5		
<b>Select 5 additional credits from any CS courses</b>					
			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	106+	Business Mathematics <i>or</i> above	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 Proglems	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**

The Java programming language provides a set of skills needed for desktop and web programming required by a large number of software solution companies. Students who complete this certificate will have basic skills to design and develop applications and applets, produce mobile and web-based applications in Java using the following tools: J2EE, and/or NetBeans. In addition, students will have the opportunity to work on team projects. Career opportunities: web developer, web design, and mobile device programming jobs. Manufactures/mobile devices: Verizon, AT&T, T-Mobile, and Sprint/Windows phones, Androids, or iPhone/iPad.