

Associate in Applied Science in Programming and Software Development

PROFESSIONAL TECHNICAL
2012-2013 Degree Requirements

Major Courses

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS	101	Intro to Computers & Information Technology	5		
CS	102	Programming Fundamentals	5		
CS	106	Database Systems	5		
CS	117	Computer Ethics	2		
CS	118	Customer Service	3		
CS	123	PC Hardware	5		
CS	127	Windows Configuration	5		
CS	150	Computer Security	5		

Subtotal 35

Major Support

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
CS&	131	Computer Science I C++	5		
CS	162	C++2	5		
CS	173	C# Programming or	5		
CS	202	Programming Fundamentals 2	5		
CS	260	Data Structures in C++	5		
CS	273	Advanced C# Programming	5		
CS	275	Secure Coding & Software Deployment/Sr. Project	5		

Subtotal 45

Select 15 credits from the following:

CS&	141	Computer Science I Java w/ Android Devices	5		
CS	225	SQL Server Programming	5		
CS	236	Java I/O with Android Devices & Integration	5		
CS	262	Game Programming Design	5		
CS	264	Android Application Development	5		
CS	265	Objective-C/iPhone Programming	5		
CS	272	Windows Phone Programming	5		

Subtotal 45

General Education

Course	No.	Course Title	Credits	Qtr. Completed	Comments/Substitution
ENGL&	101+	English Composition I or above	5		
MATH	106+	MATH 106 or above	5		

Psychology **or** Sociology (select 5 credits)

PSYC&	100+	General Psychology or above or	5		
SOC&	101	Intro to Sociology or	5		
SOC&	201	Social Problems	5		

Communication Studies (select 3-5 credits)

CMST	101	Speech Essentials or	3		
CMST	110	Communication Behavior or	3		
CMST&	210	Interpersonal Communication or	5		
CMST&	220	Public Speaking or	5		
CMST	260	Multicultural Communication	5		

Subtotal 18-20

Total Credits Required 98-100

Note: MATH 095 or MATH 098 with minimum grade 2.0 is prerequisite for all programming classes. Students must receive minimum 2.0 grade in all CS courses, except as noted above.

Students who complete this degree have entry-level skills in these areas: C++, Java, C#, Integrated Development Environment tools such as MS Visual Studio, NetBeans, Eclipse and J2EE, Java SDK, GNUStep, MINGW, and/or XCode writing, maintaining, debugging, and compiling programs, designing business applications and writing well structured code. The students also have mobile device programming skills for iPhone, Androids, and/or Windows phones.

Career opportunities: C++ programmer, C# programmer, Java programmer, mobile device programmer, web programmer, software application developer, software engineer, computer software manager, and computer system analyst.