

## Programming Specialist AAS Degree (2017-2018)

This area of emphasis prepares you to become an entry-level programmer. You will design, develop, build, troubleshoot, debug, maintain, and test computer application software programs in a variety of programming languages. Programs will range from simple business programs to the design and completion of a complex business system. The Computer Information Systems Programming Specialist Associate of Applied Science degree prepares you for entry-level position. You must earn a minimum grade of C in all CIS, CNG, CSC, and CWB courses.

**Prerequisite:** Working knowledge of computers, computer basics and Community College Placement Test required scores.

Required General Education Courses	Credits
ENG 121 English Composition I	3
MAT 121 College Algebra (or higher)	4
<b>Choose 1 from the following</b>	<b>3</b>
Faculty approved Business Course (3) <i>Approved choices: BUS 115, BUS 120, BUS 216, BUS 226, MAN 210</i>	
ACC 121 Accounting Principles I (4)	
<b>Choose 1 from the following</b>	<b>3</b>
ENG 122 English Composition II (3)	
ENG 131 Technical Writing (3)	
<b>Choose 1 from the following</b>	<b>3</b>
COM 115 Public Speaking (3)	
COM 125 Interpersonal Communication	
THE 118 Acting Skills: Trades/Business	
<b>Credit from any two of the following three areas:</b>	<b>6</b>
Arts & Humanities (ART, FRE, GER, HUM, ITA, JPN, LIT, MUS, PHI, RUS, SPA, THE)	
Natural & Physical Sciences (AST, BIO, CHE, ENV, GEY, PHY, SCI)	
Social & Behavioral Sciences (ANT, ECO, GEO, HIS, POS, PSY, SOC)	
Required Computer Courses	Credits
CSC 119 Introduction to Programming	3
CIS 220 Fundamentals of Unix	3
CIS 240 Database Design and Development	3
CIS 268 Systems Analysis and Design - <i>Last Semester Course</i>	3
CIS 289 Capstone - <i>Spring Only</i>	3
<b>Choose 1 from the following</b>	<b>4</b>
CSC 160 Computer Science I: C++ (4)	
CSC 236 C# Programming (4)	
<b>Choose 1 from the following</b>	<b>3</b>
CNG 101 Networking Fundamentals (3)	
CNG 131 Principles of Information Assurance (3)	
<b>Choose 9 Credits from the following</b>	<b>9</b>
CSC 161 Computer Science II: C++ (4)	
CSC 217 Advanced Python (3)	
CSC 237 Advanced C# Programming (4)	
CSC 240 Java Programming (3)	
CSC 241 Advanced Java Programming (3)	
CSC 246 Mobile App Development (3)	
Any OOP Faculty Advisor Approved Elective (3)	
<b>Choose 9 Credits from the following</b>	<b>9</b>
CIS 243 Introduction to SQL (3)	
CSC 225 Computer Architecture/Assembly Lang. Programming (4)	
CSC 280 Internship (3)	
Faculty Advisor Approved Elective (3)	
<b>Total Credits: 62</b>	

**Faculty Advisor:** Julie Schneider | [julie.schneider@rrcc.edu](mailto:julie.schneider@rrcc.edu)

# Programming Specialist AAS Course Sequencing Plan

<b>Semester 1:</b>	
CSC 119	3
CNG 101	3
Ged Ed - ENG 121	3
Ged Ed - MAT 121	4
Gen Ed - Arts & Humanities, Sciences, Social & Behavioral	3
<b>Semester 2:</b>	
CSC 160 or CSC 236	4
CIS 220	3
CIS 240	3
CIS 243 (recommended faculty elective)	3
COM 115 or COM 125	3
<b>Semester 3:</b>	
Gen Ed - ENG 122 or ENG 131	3
Gen Ed - Arts & Humanities, Sciences, Social & Behavioral	3
CSC 225 or CSC Faculty Approved Elective (CWB 110, CNG 131, Other Faculty Approved Electives)	3
Choose 2 from the following	
CSC 161 (Fall only)	
CSC 217	
CSC 237	
CSC 240	
CSC 246 (Spring only)	
<b>Semester 4:</b>	
CIS 268	3
CIS 289 or CSC 280	3
BUS course	3
Choose 2 from the following that weren't already chosen above for semester 3	
CSC 161 (Fall only)	
CSC 217	
CSC 237	
CSC 240	
CSC 241 (Spring only)	
CSC 246 (Spring only)	

**Total Credits: 62**

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