

**Secondary to Postsecondary Pathway for
Programming & Software Engineering**

Suggested High School Courses


High School	9 th	Core Academic Courses*:	English 9, American Government or Geography, Earth Science, Algebra 1 or Algebra Principles, Physical Education	Suggested Electives: Introduction to Business
		Career Path Courses:	Computer Science, Web Communications/Designs 1	
	10 th	Core Academic Courses*:	English 10, American History, Biology, Geometry or Geometry Principles	Suggested Electives: Business Law
		Career Path Courses:	Web Communications/Designs II, Web Management	
	11 th	Core Academic Courses*:	English 11, Algebra 2 or Algebra 2 for Process Science, World History	Suggested Electives: Marketing
		Career Path Courses:	Introduction Computer Programming, Intermediate Computer Programming	
	12 th	Core Academic Courses*:	English 12, Government/Economics	Suggested Electives: Accounting
		Career Path Courses:	Advanced Computer Programming, AP Computer Programming, Computer Networking	

Secondary to Postsecondary Linkages & Certifications

Postsecondary Credit Options:

CSC 119 Intro to Programming; CIS 240 Database Design and Development; CIS 251 Intro to Structured Query Language; CNG 101 Intro to Networking; CNG 121 Computer Tech I: A+; CNG 122 Computer Tech II A+

Red Rocks Community College Department of High School Relations: For more information on postsecondary course options for high school students and for admission to RRCC, please contact, Ernie Navarette at 303-914-6320 or ernie.navarette@rrcc.edu.

		Pathway: Information Technology		Plan of Study: Programming & Software Engineering	
Career Goal (O*Net Code): 15-1131.00 Computer Programmers 15-1121.00 Computer Systems Analysts 15-1141.00 Database Administrators 11-3021.00 Computer and Information Systems Managers 15-1134.00 Web Developer 15-1199.11 Video Game Designer		Relevant Occupational Experience (Your Life Experiences may be worth College Credit!): CCCCS Credit for Prior Learning Guide Contact Julie Schneider (julie.schneider@rrcc.edu) for inquiries concerning earning college credit for life experience in programming, software engineering, and database design/development. LMI Gateway Link to Related Occupations			
Possible Pathways to your Career!					
	Programs Available	Program Length (*Based on meeting Program Entrance Requirements)	Estimated Tuition	Career Options	Salary Range
Certificate Option(s)	Programming Specialist Web Development Microsoft Certified Technology Specialist (MCTS) Game Development	All certificates are 35 credits in length (3 semesters)	\$4523	Entry positions: computer programmer, web developer/designer, database designer/administrator, video game designer; software developer/engineer	\$ - \$\$\$
Associate Degree(s)	Programming Specialist Web Development Microsoft Certified Technology Specialist (MCTS) Game Development Associate of Science: Computer Science	All degrees are 63-64 credits in length (4 sem)	\$7900	computer programmer, web developer/designer, database designer/administrator, video game designer, computer systems analysts; software developer/engineer	\$ - \$\$\$
Articulation Opportunities to Advanced Degrees:					
Advanced Degree(s)	Bachelor's Degrees: Computer Science	Associates Degree + 60 Credits	Regis, UNC, Metro State University; UCD, UC Boulder, CSU Colorado School of Mines	computer programmer, web developer/designer, database designer/administrator, video game designer, computer systems analysts; software developer/engineer, IT Manager/Director	\$ - \$\$\$\$

	Graduate Degree:	Bachelor's Degree + 30 or more credits	CU Boulder CSU CU Denver Colorado School of Mines	computer programmer, web developer/designer, database designer/administrator, video game designer, computer systems analysts; software developer/engineer, IT Manager/Director; computer science researcher	\$\$\$\$\$
College Tuition Comparison Guide					

* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

Extended Learning Experiences

Support Structures:

Childcare facilities, Counseling Services, Tutoring Services, Academic Advising and Career Counseling
<http://www.rccc.edu/advising/>

Financial Aid:

Federal Student Loans, Pell Grant, RRCC Foundation Grant
<http://www.rccc.edu/finaid/>

Professional Affiliations

Cisco, A+, Net +, MCAD, MCDBA, NCWIT

Practical Learning Experiences:

Paid and Un-paid job shadowing and internships

Red Rocks Community College is accredited by the Higher Learning Commission and a member of the North Central Association of Colleges and Schools.

Red Rocks Community College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. Please direct inquiries to: : Bill Dial, Director of HR, Red Rocks Community College, 13300 W. 6th Ave., Lakewood, CO 80228

**** This document is a guide only. It does not act as a legally binding contract.*