CareerWise Colorado
Tomorrow's Talent Today

IT - Junior Coder

Sector: IT	Occupation: Junior Coder	Credential(s): Portfolio of Coding Work

CareerWise Colorado (CWC) will introduce and support development of these **Career Ready competencies** throughout the apprenticeship (through boot camp, periodic CWC convening's, and training modules delivered by supervisors/coaches over time).

Career Ready Competencies		
Entrepreneurial	**Critical thinking and problem solving**	☐
	Creativity and innovation	☐
	Inquiry	☐
	Risk taking	☐
Personal	**Self-direction**	☐
	Adaptability and flexibility	☐
	Self-management	☐
Civic/Interpersonal	**Collaboration and teamwork**	☐
	Communication	☐
	Global and cultural awareness	☐
	Ethics and integrity	☐
Professional	**Core Academic Foundation**	☐
	Time management	☐
	Grit and resilience	☐
	Work ethic	☐
	Self-advocacy	☐

CareerWise Colorado
Tomorrow's Talent Today

Technical Competencies

For each competency, use the letter X to indicate whether each competency can be taught and evaluated on the job.

Number	Technical Competencies of the Occupation Pathway
☐ 1	Software Engineering – Demonstrates understanding of how operating systems, software modeling, software concepts such as algorithms and data structures work.
☐ 2	Continuous Integration & Deployment - Able to build and setup CI/CD configurations.
☐ 3	Source Code Management - Ability to configure SCM tools to meet a business situation.
☐ 4	Database Design & Interaction -Demonstrate the ability by building a simple database design and interaction model for a business scenario.
☐ 5	SQL and No-SQL Architecture - Able to describe the use case for SQL vs. No-SQL, basic SQL entity relationship approaches, and No-SQL design approaches.
☐ 6	Data Structures & Algorithm - Able to use common data structure and algorithm patterns to solve common business situation problem sets or respond to common interview problem sets.
☐ 7	Object Oriented Programming - Can apply object-oriented concepts and patterns for basic business scenarios using Java or C#.
☐ 8	Web Architecture Orientation - Ability to diagram and apply modern web architecture alternatives to business scenarios. Participate in architecture conversation.
☐ 9	Content Management Systems - Understand the fundamentals of web content management along with the basic understanding of an example CMS.
☐ 10	Experience Design Basics - Understand the function and basic concepts provided by the Experience Design function.
☐ 11	Content Editing Basics - Understand the function and basic concepts provided by the Content Editing function.

CareerWise Colorado
Tomorrow's Talent Today

☐ **12**	HTML and CSS - Demonstrates ability to apply concepts to an ambiguous business situation.
☐ **13**	Java Script Architecture - Demonstrates ability to apply concepts to ambiguous business situations.
☐ **14**	Java Script Programming - Demonstrate the ability by building an interactive website page with JS.
☐ **15**	Advanced Java Script – Frameworks - Demonstrate the ability by building an interactive website page with and advanced JS framework such as Angular, React or similar.
☐ **16**	Web API Consumption - Ability to apply basics to more complex data constructs and process more complex state-based interactions.
☐ **17**	Server-Side Architectures - Demonstrate the ability by building a simple server-side architecture for a business scenario.
☐ **18**	Automation Scripting Scenarios & Languages - Describe basic automation scenarios and when they apply (CI, CD, Infrastructure as Code). Show an understanding of basic cloud concepts such as IaaS, PaaS, SaaS and application of cloud capabilities.
☐ **19**	Node.JS - Full Stack - Apply advanced Node.JS capabilities for 2-3 ambiguous business scenarios while demonstrating an advanced understanding of software engineering principles
☐ **20**	.Net /. C# Full Stack - Apply advanced .Net/C# capabilities for 2-3 ambiguous business scenarios while demonstrating an advanced understanding of software engineering principles.
☐ **21**	Java - Full Stack - Apply advanced Java capabilities for 2-3 ambiguous business scenarios while demonstrating an advanced understanding of software engineering principles.