



# Initial or Alternative Teacher License Evaluation Worksheet

## Demonstration of Professional Competencies and Depth of Content Knowledge

### Computer Science (Grades K-12)

#### Applicant

Legal name:

Date:

#### Requirements

Endorsement content knowledge must be demonstrated by at least one of the following measures for each content area (see below). Please note, if you select the Portfolio option to demonstrate a content knowledge category, it is your responsibility to ensure that evidence provided aligns with the Colorado Department of Education's teacher preparation standards. For more information about educator preparation standards, please see [this webpage](#). To learn more about content covered on Praxis exams, please visit [this webpage](#).

#### Computer Science

- Praxis 5652: Official score report required (149 or higher)
- Coursework: Minimum of B- (list in grid below); syllabi and official transcript required
- Portfolio: Evidence demonstrating attainment of standards outlined below required

In the grid below, list the evidence by which you are demonstrating content knowledge. It is essential that thorough and complete information is provided for each row inclusive of listing all courses and evidence being utilized. Praxis subscores may be one piece of evidence for a section of content and also must be accompanied by additional evidence such as coursework.

COMPUTER SCIENCE	Praxis Test Code/Name and Score:	
Categories for which you must demonstrate content knowledge	Course #(s)/Title(s) and Grade(s)	Portfolio Description and Evidence
Candidates must possess knowledge of concepts, including:		
<b>Impacts of Computing</b> <ul style="list-style-type: none"> <li>• Impact of obstacles and effects of computing</li> <li>• Issues regarding intellectual property, ethics, privacy, and security in computing</li> <li>• Example courses include the following: computational sciences, artificial intelligence, cybersecurity, machine learning and robotics</li> </ul>		
<b>Algorithms and Computational Thinking</b> <ul style="list-style-type: none"> <li>• Computational thinking such as abstraction, pattern recognition, algorithm formats, etc.</li> <li>• Algorithm analysis</li> <li>• Example courses include the following: algorithms, design and analysis of algorithms, theory of computation</li> </ul>		



<p><b>Programming</b></p> <ul style="list-style-type: none"> <li>• Code comments, testing and debugging</li> <li>• Process of writing code for application or software program</li> <li>• Example courses include the following: coding, introduction to programming, computational thinking and beginning programming, programming with UNIX</li> </ul>		
<p><b>Data</b></p> <ul style="list-style-type: none"> <li>• How to how to collect, store, transform, analyze, evaluate and secure data</li> <li>• Digitalization, data encryption and decryption, and computational tools</li> <li>• Example courses include the following: data structures and algorithms, data science, data analysis</li> </ul>		
<p><b>Computing Systems and Networks</b></p> <ul style="list-style-type: none"> <li>• Hardware and software systems, inputs and outputs, specific functions and use of hardware, and troubleshooting problems</li> <li>• Internet and network systems including the internet's role as facilitator of the transfer of information; a network as a series of interconnected devices and the internet as a series of interconnected networks; and basic internet safety</li> <li>• Example courses include the following: hardware and software systems, internet and network systems</li> </ul>		

Submission of this worksheet must be accompanied by all evidence listed in the grid above. You must receive approval prior to submitting an application for an initial teacher license.