Summary of Foundation Computer Science Content

Encompasses all content

Applies to each topic

Dispositions	Impacts and Ethics	Human-Centered Design	Inclusive Collaboration	Computational Thinking
Algorithms	• Define *algorithm*, including traditional and AI/ML algorithms • Compose, modify, and interpret algorithms • Decompose a problem into multiple subproblems • Evaluate aspects of different algorithms			
Programming	• Convert an algorithm to code • Modify a program • Articulate whether a program solves a given problem • Test and debug a program systematically			
Data and Analysis	• Describe, at a high level, the role of data in AI/ML applications • Prepare (e.g., normalize, transform, clean) data • Trace how data moves through a program • Evaluate data visualizations • Work with large data sets			
Computing Systems and Security	• Identify various types of hardware and software • Describe why cybersecurity is important • Explain what networks (including the Internet) are and how they work • Apply troubleshooting strategies to identify and fix problems • Use documentation and other resources to guide tasks			
Preparing for the Future	• Identify pathways and careers that involve computing • Apply computing concepts to other academic disciplines • Examine how emerging technologies are impacting a variety of practices • Evaluate the use of emerging technologies • Plan how an emerging technology could meet a need			

View all foundational content learning outcomes at https://reimaginingcs.org/foundational-content/

Reimagining CS Pathways
High School and Beyond