

Core CS

Courses	Topic	Predicted Hours	Actual Hours	Predicted End	Actual End
Python for Everybody	Intro CS	100	-	-	-
Introduction to Computer Science and Programming using Python	Intro CS	135	-	-	-
How to Code - Simple Data	Core Programming	70	-	-	Dec 1.
How to Code - Complex Data	Core Programming	60		February 1	
Programming Languages. Part A	Core Programming	40		February 1	
Programming Languages. Part B	Core Programming	24		March 1	
Programming Languages. Part C	Core Programming	24		March 1	
Object-Oriented Design	Core Programming	16		March 1.	
Design Patterns	Core Programming	16		March 1.	
Software Architecture	Core Programming	20		April 7.	
Calculus 1A: Differentiation	Core Math	130		April 7.	
Calculus 1B: Integration	Core Math	130		May 15.	
Calculus 1C: Coordinate Systems & Infinite Series	Core Math	60		July 1	
Mathematics for Computer Science	Core Math	65		July 1	
The Missing Semester of Your CS Education	CS Tools	24			
Build a Modern Computer from First Principles: From Nand to Tetris	Core Systems	80			
Build a Modern Computer from First Principles: Nand to Tetris Part II	Core Systems	110			
Operating Systems: Three Easy Pieces	Core Systems	75			
Computer Networking: a Top-Down Approach	Core Systems	100			
Divide and Conquer, Sorting and Searching, and Randomized Algorithms	Core Theory	32			
Graph Search, Shortest Paths, and Data Structures	Core Theory	32			
Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming	Core Theory	32			
Shortest Paths Revisited, NP-Complete Problems and What To Do About Them	Core Theory	32			
Information Security: Context and Introduction	Core Security	15			
Principles of Secure Coding	Core Security	16			
Identifying Security Vulnerabilities	Core Security	16			
Identifying Security Vulnerabilities in C/C++ Programming	Core Security	20			
Databases: Modeling and Theory	Core Applications	20			
Databases: Relational Databases and SQL	Core Applications	20			
Databases: Semistructured Data	Core Applications	20			
Machine Learning	Core Applications	70			
Computer Graphics	Core Applications	75			
Software Engineering: Introduction	Core Applications	60			
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