

Syllabus

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The complete How to Code course consists of 2 parts. Each part is 6 weeks long, and each week consists of 1 or 2 modules. All of those modules have a similar structure, comprised of:

- An overview describing the module learning goals and summarizing the work required to complete the module.
- A number of blended topic lectures, consisting of video interspersed with questions for you to answer.
- A set of problems that will let you practice the new design techniques before the quiz.
- A module quiz. The module quiz is either a set of questions on the week's material, or a self-assessed design problem.
- A module wrap up.

The following chart provides an overview of the course topics:

Week	Module Name	Lectures	Time to complete	Practice Problems	Quiz
	Overall learning goal				
Part 1 of the course, Simple Data , covers BSL, the HtDF, HtDD and HtDW Recipes, Compound Data, and arbitrary-sized data including lists and trees.					
1	Mutual Reference	5	6-7 Hours	1	<i>Multiple Choice Design Quiz</i>
	Learn to design with mutually referential data.				
2	Two One-Of Types	2	3-5 Hours	2	<i>Self-Assessed Design Quiz</i>
	Learn to use a cross-product of type templates table to design functions operating on two complex pieces of data.				
	Local	6	8-10 Hours	4	
	Learn to use local expressions in your function designs.				
3	Abstraction	7	8-12 Hours	3	<i>Multiple Choice Design Quiz</i>
	Learn how to design functions that are more general and versatile using abstraction.				
4	Generative Recursion	3	5-6 Hours	2	<i>Multiple Choice Design Quiz</i>
	Learn how to use generative recursion to create fractals.				
	Search	9	8-9 Hours	0	
	Expand on generative recursion to solve search problems, such as Sudoku.				
5	Accumulators	5	9-10 Hours	3	<i>Multiple Choice Design Quiz</i>
	Learn how and when to use accumulators in several ways.				
6	Graphs	4	7-8 Hours	3	<i>Final Project</i>
	Learn to identify when information naturally forms a graph, and learn to write functions operating on such data.				