Coding Fundamentals
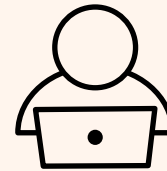
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An online, part-time intro to coding course for beginners, taught in JavaScript.

Start Coding Today
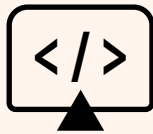
Are you thinking about a career switch?

Join Coding Fundamentals to see if you enjoy coding before joining a bootcamp.

Do you work _with_ software engineers?

Boost your career by learning how software engineers think and work.

Find out more from our alumnis

Learn Online With Guidance

Facilitated pre-class learning with expert help over Slack

Never let yourself get stuck! Get on-demand help from your instructors over Slack.

Real-time online classes, twice a week

Clarify concepts with instructors and apply what you've learnt via pair programming with peers.

Time-efficient remote learning

Pre-class lectures, readings, and coding exercises done at your own time.

Course Curriculum

Coding Fundamentals applies a flipped classroom model that consists of self-learning before class and pair programming exercises.

Classes: Mons and Thurs, 7:30pm – 9:30pm HKT

Week 1

Topics

What is coding? · Web browsers · Command line · Operations · Variables

Week 2

Topics

Functions · Errors · Conditionals · Pseudo code · Booleans

Projects

Project 1: Scissors paper stone

Week 3

Topics

Global variables · Git · GitHub

Week 4

Topics

Arrays · Loops

Projects

Project 2: Beat that!

Week 5

Topics

JavaScript objects (hash tables) · GitHub deployment

Week 6

Topics

HTML · CSS · DOM

Projects

Project 3: Blackjack
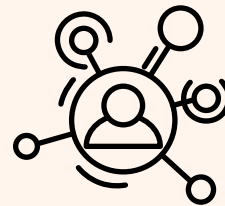
R Coding Bootcamp

Learn in-demand skills and launch a new career path as a Software Engineer

Become a Software Engineer

Build a unique project portfolio

· Frontend & backend frameworks
· Data structures & algorithms

Network with tech leaders regularly

· Capable & ambitious peers
· Live AMAs with software engineers
· Access to Rocket's high-value alumni network

Unlimited interview prep

· Resume & portfolio review
· Dedicated interview prep and career support
· On-demand technical & career guidance

Find out more from our alumnis

Guided Learning Model

Facilitated pre-class learning with expert help over Slack

Never let yourself get stuck! Get on-demand help from your instructors over Slack.

Leverage high-calibre community

Clarify concepts with instructors, pair-program with peers.

Time-efficient remote learning

Pre-class lectures, readings, and coding exercises done at your own time.

Course Curriculum

Coding Bootcamp applies a flipped classroom model that consists of self-learning and live classes. Both full-time & part-time bootcamp courses cover the same material at different paces.

Full Time

Classes (HKT):
Mondays to Thursdays, 10:00am – 12:00pm

Revision (HKT): *Fridays, 10:00am – 12:00pm*

Duration: *4 months*

Part Time

Classes (HKT):
Tuesdays, 7:30pm – 9:30pm
Saturdays, 10:00am – 12:00pm

Duration: *8 months*

Technologies

Command line Git · GitHub · HTML · CSS · Node.js

Algorithm

Intro to algorithms · Arrays

Technologies

JavaScript · JSX · Node modules · NPM · React components & props · React state & lifecycle · React event handling, conditional rendering, lists & keys

Algorithm

Arrays · Complexity analysis · Binary search algorithm · Sliding window algorithm

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Technologies

React forms · React component architecture

Algorithm

Sliding window algorithm · Hash tables

App Development

Project 1: Frontend app

Technologies

Internet 101 · HTTP requests & responses · AJAX · JavaScript promises · Firebase realtime database · Firebase storage · Firebase authentication

Algorithm

Stacks

Technologies

React hooks · React router · React higher-order components · React context · Firebase hosting

Algorithm

Queues · Object-oriented programming · Linked lists

App Development

Project 2: Full-Stack App

Algorithm

Recursion

App Development

Project 2: Full-Stack App

Technologies

Express.js · Async/await · SQL · Sequelize ORM · SQL & sequelize 1-to-many relationships

Algorithm

Trees

Technologies

SQL & sequelize 1-to-many relationships · SQL schema design · Backend authentication · SQL indexes & transactions · Sequelize aliases, eager loading, validations

Algorithm

Trees · Graphs

App Development

Project 3: Backend App

Algorithm

Graphs

App Development

Project 3: Backend App

Technologies

Automated testing · Continuous integration · TypeScript · Security

Algorithm

Dynamic programming

App Development

Project 4: Capstone

Algorithm

Bit manipulation

App Development

Project 4: Capstone

Algorithm

Heaps

App Development

Project 4: Capstone