BOARD INFINITY

COURSE 1 OF 3 · END-TO-END IOS DEVELOPMENT MASTERY SPECIALIZATION

Mastering iOS Development: Swift, SwiftUI, and Beyond

Full course syllabus - every module, video lesson, reading and assignment, from your first lines of Swift to SwiftUI apps that talk to APIs.

Board Infinity
Instructor · Offered on Coursera

3	19	10	8 hours
Modules	Video lessons	Assignments	Flexible schedule

INSIDE THE COURSE

01	Foundations of Swift Programming	4 hours to complete
02	Building User Interfaces with SwiftUI	2 hours to complete
03	Data Management and Networking in SwiftUI	2 hours to complete

Enroll on Coursera

https://www.coursera.org/learn/mastering-ios-development-swift-swiftui-and-beyond

01 ABOUT THE COURSE

From Swift basics to connected apps.

Mastering iOS Development: Swift, SwiftUI, and Beyond takes you from your first lines of Swift to apps that store data and talk to APIs. Across three modules you learn the fundamentals of Swift programming in Xcode, build dynamic user interfaces with SwiftUI, and add data management and networking to your apps.

Everything is delivered through short video lectures, readings and graded assignments - 19 videos, 3 readings and 10 assignments in all. It combines theory with hands-on practice, and suits both beginners and experienced developers sharpening their skills.

WHO IT'S FOR

Aspiring iOS developers
Starting out with Swift - the course begins with the very basics.

Experienced developers
Sharpening their skills in Swift, SwiftUI and data handling.

Students
Building a foundation in mobile app development for Apple platforms.

Web & Android developers
Adding native iOS development to their toolkit.

WHAT YOU'LL LEARN

01 **Master Swift fundamentals** Module 1
Understand the core concepts of Swift programming and Xcode setup - variables, loops, functions and closures

02 **Build SwiftUI interfaces** Module 2
Apply SwiftUI to build dynamic user interfaces and navigation systems with views, modifiers, state and bindings

03 **Manage app data** Module 3
Manage data locally with UserDefaults and FileManager, and persistently with CoreData

04 **Connect apps to APIs** Module 3
Implement networking to fetch data from APIs, including API integration with authentication

02 SYLLABUS

Three modules, one complete app toolkit.

About 8 hours to complete. Flexible schedule - learn at your own pace.

01 Foundations of Swift Programming

Swift and Xcode, core concepts, functions and closures

4 hours
7 videos

BY THE END OF THIS MODULE YOU CAN

- Explore Swift Playgrounds and get set up with Swift and Xcode
- Work with variables, constants, data types, conditionals and loops
- Write functions, closures and higher-order functions
- Use advanced closures - capturing values and escaping closures

CONTENTS: 7 videos (46 min) · 3 readings (90 min) · 4 assignments (105 min) · 1 plugin (5 min)

TOPICS: Getting Started with Swift and Xcode · Core Concepts of Swift · Functions and Closures in Swift · Quick Course Check-In (plugin)

You'll leave with: a solid grounding in Swift - from Playgrounds and core syntax to functions and closures - ready to build real apps.

02 Building User Interfaces with SwiftUI

Declarative UI, views and modifiers, state and bindings

2 hours
6 videos

BY THE END OF THIS MODULE YOU CAN

- Explain SwiftUI and the declarative approach to building UI
- Build interfaces and navigation from SwiftUI views and modifiers
- Create interactive components with SwiftUI state and bindings
- Reinforce Swift data types, conditionals and loops in your UI code

CONTENTS: 6 videos (44 min) · 3 assignments (90 min)

TOPICS: SwiftUI and Declarative UI · Views and Modifiers · State and Bindings · Core Concepts of Swift

You'll leave with: the ability to build dynamic, interactive SwiftUI interfaces with views, modifiers, state and bindings.

03

Data Management and Networking in SwiftUI

Local storage, CoreData, networking and APIs

2 hours
6 videos

BY THE END OF THIS MODULE YOU CAN

- ✓ Explain how data is handled in SwiftUI apps
- ✓ Save and retrieve data locally with UserDefaults and FileManager
- ✓ Persist app data with CoreData
- ✓ Implement network requests and integrate APIs with authentication

CONTENTS 6 videos (29 min) · 3 assignments (90 min)

TOPICS Data Handling in SwiftUI | Networking and API Integration

You'll leave with: apps that remember data and talk to the web - local storage, CoreData persistence and authenticated API calls.

03 TOOLS & SKILLS

The themes that run through the course.

Swift programming
Core language

Variables, data types, control flow, functions and closures - the language under every iOS app.
In this course: Module 1 builds it step by step in Swift Playgrounds and Xcode.

SwiftUI
UI framework

Apple's declarative framework for interfaces built from views, modifiers, state and bindings.
In this course: Module 2 builds dynamic interfaces and navigation.

Data persistence & CoreData
Data

UserDefaults, FileManager and CoreData for keeping app data on the device.
In this course: Module 3 covers local storage and persistent storage.

Networking & APIs
Connectivity

Network requests, fetching data from APIs, and authentication.
In this course: Module 3 closes with API integration with authentication.

SKILLS YOU LEAVE WITH

Swift foundations
- Xcode & Swift Playgrounds
- Variables, constants & data types
- Conditionals & loops
- Functions & closures

SwiftUI interfaces
- Declarative UI design
- Views & modifiers
- State & bindings
- Navigation

Data & networking
- UserDefaults & FileManager
- CoreData persistence
- Network requests
- API authentication

04 CERTIFICATE & CAREER

Finish with a shareable certificate.

Add it to LinkedIn
Add this credential to your LinkedIn profile, resume, or CV.

Share it anywhere
Share it on social media and in your performance review.

Earned, not attended
Awarded on completion of the graded assignments in all three modules.

Course 1 of 3
Part of the End-to-End iOS Development Mastery Specialization from Board Infinity.

ENTRY-LEVEL ROLES THESE SKILLS SUPPORT

Junior iOS Developer · Mobile App Developer · Swift Developer · SwiftUI Developer · Mobile UI Developer · Apprentice App Developer

Board Infinity
Instructor · Offered on Coursera

Beginner level · Taught in English · 7 languages available · Flexible schedule

Ready to build your first iOS app?

Enrollment, lessons, grading and the certificate all happen on Coursera.

Enroll on Coursera

Course page:
coursera.org/learn/mastering-ios-development-swift-swiftui-and-beyond

Want a coach alongside the course?

Board Infinity 1:1 coaching is a separate, optional Board Infinity offering - it is not part of the Coursera course.
Details: https://www.boardinfinity.com/career-coaching/

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