

Program Overview

MobileMakersEdu offers an authentic coding experience as students build apps for mobile devices in this year-long course.

ENGAGING | AUTHENTIC | EXPERIENTIAL

STUDENT EXPERIENCE

Throughout this hands-on course, students build working apps for Apple's mobile devices using the language and tools of professionals – Swift and Xcode. Students experience an authentic workplace environment applying the skills of teamwork, problem-solving, collaboration, and communication. We leverage industry best practices and resources, such as Apple's App Dev with Swift and Developer Documentation. The apps students build grow in complexity throughout the year, culminating in an app showcase, where students demonstrate an app they built of their own design – just like professionals do at technology events. Students leave the class with a portfolio of 8 apps and collection of skills highly valued in the workplace today.

Students who complete the MobileMakersEdu program are eligible to compete in the annual MobileMakersEdu App Competition.

Prerequisites

No prerequisites for this class.

Course Learning Outcomes

1. Use the Swift programming language to develop basic iOS applications.
2. Apply fundamental logical thinking and programming skills to program working iOS applications.
3. Implement common Apple frameworks and design patterns in developing iOS apps.
4. Use professional software development tools and professional project management strategies to develop, store, and manage iOS apps.
5. Employ the necessary social-emotional skills necessary for career-ready software development and collaboration in a team.

Course Snapshot

MobileMakersEdu consists of 8 units, 4 each semester. At the end of each unit, students build a new app, synthesizing their learning gained. The course culminates in a unit, where students build an app of their own design.

SEMESTER 1 TOPICS*

- Data Types
- Conditional Statements
- Functions
- Classes & Inheritance
- Segues

SEMESTER 2 TOPICS*

- Collections
- Optionals
- Persistence
- Arrays and Dictionaries
- Algorithmic Thinking

**Topics included but are not limited to.*

TEACHER PROFESSIONAL DEVELOPMENT & SUPPORT

Member MobileMakersEdu teachers get comprehensive training and support. During the summer training, teachers learn how to develop iOS apps using the same curriculum they will use in the classroom, allowing them walk in the shoes of their future students. Teachers experience firsthand the field of iOS development through field visits with working developers and development teams. Teachers continue to grow during the school year through virtual meetups, collaboration in Slack, and return to level up their skills at the annual MobileMakersEdu summit.

In addition to all the same learning students have, teachers also learn:

- 1.** Classroom management strategies for running an experiential learning environment
- 2.** Instructional strategies to support differentiation
- 3.** Collaboration techniques, including remote teams

Teacher Background

MobileMakersEdu is designed to train and support high school teachers of any discipline.

Startup School Training

4-day Bootcamp

Summer - Dates and location TBD

PLUS

3 Webinars

Three Saturdays in Fall - Dates and times TBD

Launched School Training

National Summit

Summer - Dates and location TBD

Ongoing Support

- iOS Mentors
- Professional Learning Community
- Instructional Coaching
- Newsletters

Program Overview

Continuing Professional Development

- 6 Virtual Meetups
- Professional Learning Network
- FREE registration to annual MobileMakersEdu Summit

Teacher Recognition Program

We believe teachers are expert learners who should be recognized for their continual personal development, as well as their ambition to accept professional challenges. Thus, we created the MobileMakersEdu Teacher Recognition Program to reward teachers when they accomplish specific milestones throughout their journey as an MobileMakersEdu teacher.

mobilemakersedu | **CERTIFIED TEACHER**

mobilemakersedu | **MENTOR**

mobilemakersedu | **LEADER**

mobilemakersedu | **MASTER**

SCHOOL IMPLEMENTATION AND CONSULTATION

MobileMakersEdu provides everything a school needs to help implement this authentic, workplace-like experience in their school. This includes onboarding meetings to discuss how to identify the right teachers, how to convert a classroom into a workplace-like environment, and how to promote the program in your community.

Offering Course as AP CS P

MobileMakersEdu offers an AP Computer Science Principles Course Guide to help those interested in running the course as an AP CS-P course. The guide includes scope and sequence suggestions, additional reference materials to be used to meet the learning outcomes of AP CS-P that are not already directly taught in MobileMakersEdu, and a guide for each of the performance tasks. Note: some modules or topics are truncated to accommodate the time needed to cover the required topics of the AP CS P course.

Tech Requirements

Apple computers that can run the following software:

- Xcode
- iBooks

Although we recommend you use Apple laptops, any Apple computer that can support the recent version of Xcode will support the curriculum.

Students also need internet access and permission to sites like Vimeo.

REACH OUT TO US TO SEE HOW YOUR SCHOOL CAN OFFER THIS PROGRAM: info@unchartedlearning.org