

COURSE SYLLABUS

iOS Development, 7.5 credits

iOS-utveckling, 7.5 högskolepoäng

Course Code:	TISK18	Education Cycle:	First-cycle level
Confirmed:	Apr 06, 2018	Disciplinary domain:	Technology
Valid From:	Jan 18, 2027	Subject group:	Computer Technology
		Specialised in:	G1F First cycle, has less than 60 credits in first-cycle course/s as entry requirements
		Main field of study:	Computer Engineering

Intended Learning Outcomes (ILO)

On completion of the course the student shall:

Knowledge and understanding

- display an understanding for how iOS software is packaged and distributed to users.

Skills and abilities

- display an ability to program using the Swift language and the XCode development environment
- display an ability to apply established design patterns for iOS development
- display an ability to use GPS and other sensor systems through iOS APIs
- display an ability to use iOS APIs to synchronise documents and data between mobile devices
- display an ability to design and implement user interfaces for different types of iOS-based devices.

Judgement and approach

- display an ability to evaluate iOS applications' design and implementation, taking into consideration both technical and usability factors.

Content

The purpose of the course is to give an introduction to and experience of iOS-programming, from start to finished and published app.

The course includes the following topics:

- XCode and Swift
- Memory management
- Design patterns in the iOS APIs
- GUI development with iOS
- Software quality
- Testing and debugging
- Sensor usage
- Network communication in iOS
- Other key APIs
- Publishing on the App Store

Type of instruction

Tuition will consist of lectures, lab work and project work.

Language of instruction is English.

Entry requirements

General entry requirements and completed courses in Objectoriented Software Design, 7,5 credits, Linear Algebra 6, credits and Web Development Fundamentals, 7,5 credits (or the equivalent).

Examination and grades

The course is graded 5, 4, 3 or U.

Registration of examination:

Name of the Test	Value	Grading
Laboratory Work	2.5 credits	G/U
Project Work ¹	5 credits	5/4/3/U

¹Determines the final grade of the course, which is issued only when all course units have been passed.

Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

Title: iOS 11 Programming Fundamentals with Swift

Author: Matt Neuburg

Publisher: O'Reilly Media, Inc

ISBN: 9781491999318