



## Introduction to Objective-C Programming for iOS Development

*Gain a solid foundation and understanding of how Objective-C works, a strong familiarity of working with Xcode, and be ready to start learning iOS App development for iPhone and iPad by participating in this introductory Objective-C training class.*

### What you'll learn in this training course

- Working with variables and datatypes
- Using Expressions and Arithmetics
- Using Loops
- Working with Conditionals and Decision Making
- Working with and Understanding Inheritance
- Dynamic Binding, Typing, and Polymorphism
- Understanding the Foundation Framework
- Using the File System
- Introduction to iOS App Development

### Audience for this training course

This Introduction to Objective-C Programming for IOS Development is for students looking to gain a solid knowledge of how Objective-C works, familiarity with Xcode, and to be ready to begin learning iOS app development.

### Training course duration

This class is a five days in length. It runs from 9:30 am- 4:30 pm. Lunch break is approximately from noon - 1:00 pm.

### Training course curriculum

This training course uses provided lesson files and instructor selected resources.

### Enrolling in this Objective-C training course

You can register for this training class online at [agitraining.com](http://agitraining.com), or by calling 781-376-6044 or 800-851-9237.

### Locations for this Objective-C training course

You can attend classes at your training centers located in Boston, New York City, Philadelphia, on site at your office, or on-line. You can select the course location at the time of your registration.

### Private and customized training course options

This training course can be offered as a private class for groups or individuals, and the content can be customized to meet your specific needs. You can call to speak with a training representative at 781-376-6044 or 800-851-9237 to discuss customizing this training course.

### Goals and objectives for this training course

American Graphics Institute is focused on providing high-quality training courses for your professional development. We provide regularly scheduled small group courses along with private or customized training.



## Objective-C Training Class Topics:

### Working with Variables and Data Types

- Writing basic programs
- Using the Console
- Understanding:
  - Integers
  - Doubles
  - Floats
  - Chars
  - Booleans
  - NSString

### Using Expressions and Arithmetics

- Addition, Subtraction, Multiplication, Division, and Modulus
- Operators Sequence and Precedence
- Type conversions with mixed operations
- Type-casting
- Assignment and Comparison operators
- Understanding Math Library functions

### Using Loops

- Using the For, While, and Do-While Loops
- Working with Nested Loops
- Using Break and Continue statements

### Working with Conditionals and Decision Making

- Using If, If-Else, and If-Else-If statements
- Understanding Nested Conditionals
- Working with Compound Relationals
- Using Boolean Variables
- Understanding the Switch Statement

### Custom Classes

- Creating custom Classes with @interface
- Implementing custom classes with @implementation
- Creating Instance Variables and Instance Methods
- Understanding Getters & Setters for property values
- Instantiating Objects from Classes
- Executing Methods onto Objects
- Using a Self parameter
- Declaring Properties
- Synthesizing Accessor methods
- Working with and Understanding Inheritance
  - Using Root Class, Super-class, Subclass
  - Using Inheritance to share Variables and Methods
  - Locating Methods in Classes
  - Extending Classes through Inheritance
  - Overriding Methods
  - Using Super
  - Understanding Class and Object Ownership
  - Working with Memory Allocation
  - Using Variable Scope

### Dynamic Binding, Typing, and Polymorphism

- Reusing method names in different classes
- Dynamic Type Binding
- Static Type Binding
- Querying of Objects and Classes at Runtime
- Using the ID type

### Understanding the Foundation Framework

- Number, String, and Array Objects
- Dictionary Objects
- Set Objects

### Using the File System

- Understanding NSFileManager
- Working with Directories
- Reading, writing, and copying files
- Working with NSData
- Understanding File-Paths and NSURL

### Introduction to iOS App Development

- Creating your first iOS App
- Working with Interface Builder
- Creating Graphical User Interfaces
- Using ViewControllers
- Understanding of the View Lifecycle
- Working with IBOutlets and IBActions
- Creating an interactive iOS App