

# COURSE ROADMAP

**Week 1 - 2 :** Introduction to Swift - Beginners concepts.

## What you will learn:

- ✓ Swift Fundamentals
- ✓ Object Oriented Programming & Swift
- ✓ Creating Your First User Interface

## Topics covered :

- |                    |                  |
|--------------------|------------------|
| ➤ Basic Syntax     | ➤ Data Types     |
| ➤ Variables        | ➤ Constants      |
| ➤ Literals         | ➤ Operators      |
| ➤ Decision Making  | ➤ Loops          |
| ➤ Strings          | ➤ Characters     |
| ➤ Arrays           | ➤ Dictionaries   |
| ➤ Functions        | ➤ Closures       |
| ➤ Enumerations     | ➤ Structures     |
| ➤ Classes          | ➤ Properties     |
| ➤ Methods          | ➤ Subscripts     |
| ➤ Inheritance      | ➤ Initialization |
| ➤ Deinitialization | ➤ Type Casting   |
| ➤ Extensions       | ➤ Protocols      |
| ➤ Generics         | ➤ Access Control |

**Week 3 – 6:** Developing Using Swift - Intermediate concepts.

## What you will learn:

- ✓ Developing a Basic App
- ✓ Auto Layout, Navigation, Segues
- ✓ Creating adaptive layouts
- ✓ Protocols and Delegates
- ✓ Table Views

## Topics covered :

### UI Elements:

- |                         |                         |
|-------------------------|-------------------------|
| ➤ Viewcontroller        | ➤ Navigation Controller |
| ➤ Storyboard            | ➤ UitableviewController |
| ➤ Collectionview        | ➤ Tab Bar Controller    |
| ➤ Split View Controller | ➤ Page View Controller  |
| ➤ Label                 | ➤ Button                |
| ➤ Text Field            | ➤ Slider                |
| ➤ Switch                | ➤ Activity Indicator    |
| ➤ Progress View         | ➤ Page Controller       |
| ➤ Stepper               | ➤ Table View            |

- Table View Cell
- Text View
- Date Picker
- Map Kit
- Tap Gestures
- Container View
- Bar Button Item
- Icons
- Image Assets

- Image View
- Scroll View
- Picker View
- Web View
- View
- Tab Bar
- Search Bar
- Flash Screens
- Alert View Controller

## Frameworks

- Social framework
- UIKit framework
- WebKit framework
- Photos framework
- Foundation framework
- PushKit framework

## Week 7-12: Advanced Swift Topics

### What you will learn:

- ✓ Command Line and CocoaPods
- ✓ Data persistence
- ✓ Networking & Networking Requests
- ✓ App Project
- ✓ Launching the App

### Topics Covered:

- Push Notifications
- Local notifications
- Core Data
- Core Data pods
- XML parsing
- JSON Parsing
- NSURL Connection
- SQLite

### App Project :

You will have the option to build your own app, improve upon an app using an existing API or build an app with your classmates. Depending on your willingness to put in work outside of class, you will be building a project that has the potential to be basic or complex. This application will use all aspects of the topics covered in the course and will be implemented using industry level libraries and techniques.