

iOS Course Syllabus

Introduction to Development MAC OS, IDE – XCODE, Interface Builder

- Mac versions –Features
- iOS versions -Features
- Introduction to Xcode tool and Compilers

Introduction to Objective-C

- Creating Objective C classes and Methods
- Creating Properties and methods
- OOPS in Objective C
- Inheritance ,Polymorphism,Dynamic Typing ,Dynamic Binding
- Arrays,set,Dictionaryes
- Categories and protocols
- Application Lifecycle
- Xib,Storyboard and Interface builder
- Creating and building simple applications
- UIState Preservation
- View application sandbox and CrashLogs of Application

Cocoa Design patterns

- What is MVC ?
- Model ,View and Controller Classes
- Delegate and Datasource
- Singleton Pattern
- Observer pattern
- Target-Action
- Cocoa coding standards

Memory Management

- Introduction (alloc init,retain Release)
- Auto release pool

Objective -C ARC

- Migrating your application to ARC
- Basic Interaction with UIControls
- Button,label,Textfields
- switch,slider,progress bar
- Alerts ^ Action sheet
- Tableviews
- Scrollview, Web view,maps
- SearchBar,popovers
- Picker,Date picker,Imageview, Image picker controller
- Gestures , Mouse events
- Mail,Message,Phone call

Orientation and iPhone sensors

- The iPhone Accelerometer
- Detecting shakes
- Determining orientation
- Responding to the accelerometer

WorkingWithTableView

- UITableViewController
- Working with multiple TableViews
- UITableViewCell
- TableView practices
- CustomCell creation.

Multi View Application

- view to view (Present model view controller)
- Navigation controller
- Tabbar controller
- Pageview controller
- Split view controller

CoreGraphics and QuartzCore

- UIKit and view lifeCycle
- Draw lines and transforms.
- Alpha ,Opaque ,hidden
- Create PDF fields
- Merge Images
- SplashView and Basic animation
- Adding Views with animation

Maps SDK

- Introduction to MapKit Framework
- Showing a simple Map
- Update User Location
- Background location updates of user .

REST and SOAP services , XML and JSON Parsing

- Asynchronous and synchronous request
- Soap service
- Rest service
- Xml and JSON Parsing
- KeyValue coding and Nested JSON objects
- Error handling
- Lazy loading

MultiTasking in iOS

- NSThread and management of multiple threads
- Synchronous and Asynchronous
- Introduction to NSTimers
- GCD in iOS
- NSOperation and NSOperationQueue

Data Base Persistence

- User Defaults



- Plist
- sqlite
- Core Data

Media Interaction

- AVAudio player
- MediaPlayer
- MPMovie player

Notifications

- Local notifications
- App level Notifications
- Push Notifications

Social Network Integration

- FaceBook
- Twitter
- Google +

Testing and Deployment

- Debugging application in device.
- iOS5,iOS6,iOS7 features and differences
- App store Submission