

INT405:COMPUTING PRACTICUM-III

L:0 T:0 P:3 Credits:2

Course Outcomes: Through this course students should be able to

- CO1 :: understand the basic concept of swift language
- CO2 :: understand MVC architecture for simulating
- CO3 :: demonstrate different UI Kit controls to develop application
- CO4 :: categorize the concept of various Table controls view
- CO5 :: illustrate project template to develop app using Cocoa frameworks
- CO6 :: demonstrate auto- layout and webservices

List of Practicals / Experiments:

MVC architecture

- Introduction to Xcode
- Workspace window
- Interface-builder
- Attribute inspector
- Simulator & creating project
- Looking at view-controller
- Understanding outlets
- Actions
- Designing UI
- Application-delegate
- Working with navigator pane
- Utility pane

UIKit controls

- Implementing UIButton
- Creating small application with these controls
- Understanding & working with Views
- Multi-view applications
- Calling another view-controller using navigation-controller
- Passing & receiving data in them
- UITextField and customizing inputs
- UITextView & keyboard handling
- UISwitch
- UISegmented control
- UISlider
- UIImageView
- UIAlertView
- UIActionSheet

- Concept of segue

TableViews

- Implementing simple table
- Customizing TableView cells
- Grouped & indexed sections
- Adding header, footer & image
- Displaying item-selected
- Navigating to another view
- UITableView basics

iPhone Project templates

- Using navigation controllers
- Concept of auto-layout
- Playing audio & video files
- Implementing UICollectionView
- Implementing UIToolbar and UITabBar in applications

Web Services

- Displaying maps & monitoring changes using MapKitFramework
- UIWebView

Introduction to iPhone and iOS platform with Swift

- Difference between iOS and MAC OS
- Object-oriented programming
- Declaring & defining classes
- Variables
- Arrays
- Methods & messages
- Closure
- Dictionary

Text Books: 1. SWIFT IOS PROGRAMMING (24-HOUR TRAINER) by ABHISHEK MISHRA, WILEY

References: 1. MASTERING SWIFT 5 by JON HOFFMAN, PACKT PUBLISHING