

# SWIFT PROGRAMMING - ACADEMIC CERTIFICATE (AC)

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop an understanding of object-oriented principles and design.
- Develop skills to work collaboratively on application design.
- Apply knowledge of the Integrated Development Environment (IDE) to develop and deploy working code.
- Examine the use of variables, constants, and literals in arithmetic expressions.
- Design and develop an application Graphical User Interface (GUI).
- Describe different types of views within Swift and how to use scroll, table and collection views.
- Demonstrate interactions between controls and views within the Model-View-Controller (MVC) architecture.
- Describe the concurrency model of an iOS app.
- Develop a new augmented reality-based project using ARKit.
- Develop scenes and scene objects within an augmented environment.
- Examine and analyze image detection and scaling.
- Perform simple animations.