# TECNIA INSTITUTE OF ADVANCED STUDIES

Grade 'A' Institute

## Department of Information, Communication & Technology

# Master Of Computer Applications (MCA)

Scheme and Syllabus (w.e.f. Academic Session 2020-21 onwards)

**Course Code: MCA-207**                                         **L T C**
**Course Name: Enterprise Computing with JAVA**                  **3 1 4**

## LEARNING OBJECTIVES

In this course, the learners will be able to develop expertise related to the important concepts of web application design and development with understanding of the following concepts:-

1. Dynamic web pages using Servlets
2. Session management
3. Designing custom tags using JSP
4. Data access, searches and queries using HQL
5. Web Application development using Spring framework
6. Handling crosscutting concerns using Spring AOP

### PRE-REQUISITES

Core Java

### COURSE OUTCOMES (COs)
After completion of this course, the learners will be able to:

| CO# | Detailed Statement of the CO | BT Level | Mapping to PO # |
|-----|------------------------------|----------|-----------------|
| CO1 | Model Java EE architectural components, Servlet creation and session management for web applications | BTL3 | PO1, PO2, PO3, PO6, PO10, PO11 |
| CO2 | Inspect the fundamentals of Java Server Pages (JSP) and Struts for web-based applications. | BTL4 | PO1, PO2, PO3, PO5, PO6, PO10 |
| CO3 | Appraise Hibernate Framework of JEE and apply constructs of Object Relational Mapping. | BTL5 | PO1, PO2, PO3, PO4, PO5, PO6, PO10 |
| CO4 | Elaborate principles of Dependency Injection and its application in JEE | BTL5 | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10 |
| CO5 | Design applications based on Spring Boot and Spring AOP. | BTL6 | PO1, PO2, PO43 PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12 |