

**TECNIA INSTITUTE OF ADVANCED STUDIES**  
Grade 'A' Institute  
**Department of Information, Communication & Technology**  
**Bachelor of Computer Applications (BCA)**  
Scheme and Syllabus (w.e.f. AS 2021-22)

**COURSE CODE: BCA 202**

**COURSE NAME: JAVA PROGRAMMING LEARNING**

**OBJECTIVES:**

In this course, the learners will be able to develop expertise related to the following:

1. Learn how to implement Object Oriented concepts through Java.
2. Identify and apply the Java thread model to program Java applications.
3. Develop GUI applications using Java swings

**PRE-REQUISITES:**

1. Programming fundamental
2. Object-Oriented concepts

**COURSE OUTCOMES (COs):**

After completion of this course, the learners will be able to:-

| CO # | Detailed Statement of the CO   |
|------|--|
| CO1  | Illustrate the Object-Oriented paradigm and Java language constructs   |
| CO2  | To inculcate concepts of inheritance to create new classes from existing ones and design the Classes needed given a problem specification. |
| CO3  | To familiarize the concepts of packages and interfaces.  |
| CO4  | To facilitate students in handling exceptions and defining their own exceptions.   |
| CO5  | To manage input output using console and files   |
| CO6  | To apply the Java Thread model to develop multithreading applications.   |
| CO7  | To understand and apply the concepts of GUI programming using swings.  |