

# 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-249

Course Name: Numerical and Scientific Computing

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### LEARNING OBJECTIVES

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

1. Fundamentals of Experiment Design and Statistics.
2. Reading and Analyzing Research Papers.
3. Data Processing.
4. Paper Writing and Citation Management.
5. Oral Presentations.

### PRE-REQUISITES

1. Basic Statistics and Basic Applied Mathematics

### 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	Identify how Research is done in Computer Science to improve Individual Research Productivity	BTL3	PO1, PO2, PO3, PO4
CO2	Discover the types of Experiments and Measurements possible in Research.	BTL4	PO1, PO2, PO3, PO4, PO5, PO6, PO10
CO3	Analyze the fundamental concepts of Sampling and Data Analysis.	BTL4	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10
CO4	Develop appropriate Technical Writing Skills	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11