

# 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-261

Course Name: Design and Analysis of Algorithms Lab.

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### LEARNING OBJECTIVES

In this course, the learners will be able to develop working expertise of implementation and expressing the algorithmic solutions using programming languages.

### 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	Apply logical thinking to build solutions for given problems.	BTL3	PO1, PO2, PO3, PO5
CO2	Evaluate correctness & efficiency of algorithms using inductive proofs and invariants.	BTL5	PO1, PO2, PO3, PO4, PO5
CO3	Design and perform parameter-based analysis of the searching, sorting and tree-based algorithms.	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO10
CO4	Create and test optimal solutions for various problems.	BTL6	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO10, PO11