

# 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- 124

Course Name: Embedded System

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### LEARNING OBJECTIVES:

In this course, the learners will be able to gain experience related to the following: -

1. Acquire knowledge of basic structure and function of embedded systems.
2. Learn process to design embedded Systems.
3. Understand operating system concepts, its types and choosing RTOS.
4. Learn interfacing of embedded system with peripherals and memory devices.

### PRE-REQUISITES:

1. Microprocessor & Microcontroller concepts.
2. Operating system concepts.

### 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	Recall Embedded system, architecture and the design process of an Embedded Systems	BTL1	PO1, PO2
CO2	Explain working of different memory devices and memory management techniques.	BTL2	PO1, PO2, PO3
CO3	Identify interrupt and interfacing of firmware with I/O and memory	BTL3	PO1, PO2, PO3, PO4 PO5
CO4	Discover basics of operating system and its types along with different task synchronization techniques	BTL4	PO1, PO2, PO3, PO4, PO6, PO10
CO5	Appraise RTOS, memory interface, and communication interfaces.	BTL5	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO9, PO10, PO11