THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI-15

(A Govt. Aided Autonomous Institution affiliated to Anna University)

- where Quality and Ethics matter

QEEE COURSES

8085 AND 8086 MICROPROCESSOR: ARCHITECTURE, ASSEMBLY LANGUAGE PROGRAMMING AND SYSTEM DESIGN - COMPUTER ORGANIZATION AND ARCHITECTURE

COURSE CONTENT:

Module 1: Architecture of a Generic Processor: RISC, CISC, DSP architectures with examples: ARM, IA-32, Blackfin. The 8085 microprocessor architecture, Programmer's model, Instruction set, instruction Format, Addressing modes, Machine cycle, Timing diagrams, memory map.

Module 2: Assembly language programming of 8085 and ARM, Looping, block transfer, bit manipulation, time delay routines, stack and subroutine, Interfacing memory and I/O devices. I /O programming, interrupt handling.

Module 3: The 8086 microprocessor architecture, EU and BIU, Segmentation, DMA, multiprocessor configuration.

Advanced Concepts: Cache and virtual memory. Pipelining, superscalar processor, multicore Processors.