## SUBJECT NO-EE30004, SUBJECT NAME- EMBEDDED SYSTEMS

LTP- 3-0-0,CRD- 3

## SYLLABUS :-

Embedded Processing Systems â Introduction, Components of Embedded Systems - Embedded Processor, Microprocessors, Microcontrollers, DSP and ASICs, Comparative Assessment of Embedded processors. Memory Devices â ROM and RAM Family, Interfacing Memory, Input-Output Ports and Interfacing, Simple I/O Programming, Interrupts and their Servicing, Timing Devices and Interfacing, Analog I/O Techniques, Field Programmable Devices and Applications, Introduction to Hardware Description Languages, Design of Embedded Processor and Components, Design Case Studies. Embedded Communication â Parallel Bus Standards, Serial Bus Standards, Networking Standards, Wireless Standards.Realtime Operating Systems (RTOS): Introduction, Memory Management , I/O Management and Device Drivers, Scheduling.Introduction to software design â Software Development life-cycle, Software modeling. Tools for design, development and testing of embedded software.