EL-502 (Embedded System Design)

Credit Structure (L-T-P-Cr): 3 0 2 4

Content:
The concept of embedded systems design. Embedded microcontroller (ARM Architecture) cores, embedded memories. Examples of embedded systems.; Technological aspects of embedded systems: interfacing between analog and digital blocks, signal conditioning. Implementation of Low-power schemes, interfacing with external systems, user interfacing. Design trade-offs due to process compatibility, thermal considerations, temperature compensation methodologies. Software aspects of embedded systems: real time programming languages and operating systems for embedded systems.

Suggested Text/s:


Course structure:

1) Mid Sem: 30%
2) End Sem: 40%
3) Lab assignments and project: 30%