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NPTEL >> Courses >> Electronics & Communication Engineering >> Microcontrollers and Applications (Web) >> Syllabus

Coordinators

Dr. S.P. Das
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Syllabus | **References**

1. Introduction to the general structure of 8 and 16 bit Microprocessors and Microcontrollers. (6 lectures)
2. Discussions on instruction sets, memory hierarchies of 8 and 16 bit microcontrollers such as, Intel 8048, 8051, 8096, Motorola MC68HC11, PIC Microcontrollers. (16 Lectures)
3. Interfacing of external Memory, I/O devices and serial communication with typical miccrocontrollers. (10 Lectures)
4. System design with microcontrollers: Typical examples such as Remote Terminal Unit (RTU), Prepayment Energy Meters, or any other suitable examples, highlighting development of schematic, circuit layout and PCB design and development of system software in assembly language, debugging and troubleshooting (8 Lectures)

Total 40 Lectures

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