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Module details of Embedded Systems & Interfacing hands-on

S.No.	Module Name	Topics
1.	Embedded Hardware & architecture	Introduction, design characteristics, IO device, ADC / DAC, sensors, actuators, interrupts; ARM architecture fundamentals, ARM instruction set, Thumb set, assembly programming
2.	Interfacing C-Programs with ARM Core Microcontrollers	Bit manipulation, IO port configuration
3.	Processing Elements of an Embedded System	Reconfigurable architectures & FPGAs, ARM and ICs
4.	Embedded OS	how memory is managed, how tasks are scheduled, what interrupts are and how they are handled Linux (monolithic) kernel, micro kernel and modular kernel
5.	Hands-on	Build your own input / output system with the ARM Build your own ADC using ARM Learn how to use serial communication using the ARM Create a timer for polling using the ARM

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