



Embedded systems: introduction to the course

Embedded systems

- Embedded system: specialized computer system
 - combination of a computer processor, computer memory, input/output peripheral deviceswithin larger (mechanical, electronic...) system
- It typically controls physical operations of the machine it is embedded within
 - -> real-time computing constraints
- Most of produced microprocessors used in embedded systems
- Modern embedded systems often based on microcontrollers (MCUs) or Field Programmable Gate Arrays (FPGAs)

This course

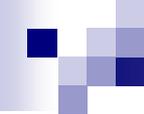
... this year is provided in one version (9 cfu):

- Part 1a, «Microcontrollers (bare metal)», 3 cfu, prof. Carrato
- Part 1b, «Microcontrollers (with RTOS)», 3 cfu, prof. Tenze
- Part 2, «High speed PCB design and instrumentation control», 3 cfu, prof. Cautero, c/o Elettra

The “official” web site

- ... is this one:

https://sites.units.it/carrato/didatt/ES_web/index.html



Some technical details

- Please register yourself on Moodle
 - the teacher may use Moodle mailing list for communications
- Timetable
 - Tue: part 1a
 - Wed: part 1b
 - Thu: part 2, c/o Elettra
- Exam:
 - see the course syllabus