Facultat d'Informàtica de Barcelona
Universitat Politècnica de Catalunya

Real-Time Systems

1-LAB Cyclic scheduler (arduino)

Antonio Camacho Santiago
antonio.camacho.santiago@upc.edu

Lab 1 Cyclic scheduler (Arduino)

Build and check a cyclic scheduler for the Arduino board that supports a flight control system with the following properties:

Task τ_i	Computing time c_i (ms)	Period T_i = Deadline D_i (ms)
τ_1 sampling	15	200
τ_2 control	25	400
τ_3 update	10	200
τ_4 check subsystems	250	600

Write a trace debugger inside the code to check the scheduler
Cyclic scheduler and trace debugger can be designed as you want
At the end of the lab, send the files to the RACO.