

Course Unit Description - (SOTER)

(Real Time Operating Systems)

(Mestrado em Engenharia Electrotécnica e de Computadores)

Academic year: 2009/2010



Subject group: Automação e Robótica

| | Semestral | Optional | | |
|----------------------|----------------|-------------------|-------------------------|---|
| Mode of study | Diurno | Hours/Week | T-Teórica | 2 |
| Year | 1 ^o | | PL-Prática-Laboratorial | 2 |
| Semester | 1 ^o | | OT-Orientação Tutorial | 1 |
| ECTS | | | | 3 |

Objectives

This course intends to provide the theoretical and practical background for the usage, selection, application or development of real time autonomous systems.

Course Contents

Real Time Systems Architectures
Scalability
Temporal Characterization
Hardware interaction /Device Drivers
Software Methods for RTOS
Distributed RTOS
Interprocess/Task communication

Recommended reading

Real-Time Systems, Jane W. S. W. Liu, Prentice Hall, 2000
Modern Operating Systems, Andrew S. S. Tanenbaum, Pearson Education, 2002

Teaching Methods

Assessment methods

| | Name |
|-----------------------------|---|
| Teacher responsible: | Eduardo Alexandre Pereira da Silva (EPS) |
| Lecturer: | Eduardo Alexandre Pereira da Silva (EPS) Carlos Eduardo Valente Almeida (CEA) Jorge Manuel Estrela da Silva (JES) |