Design of telematic systems

Academic Year: (2022 / 2023) **Review date: 14-02-2022**

Department assigned to the subject: Telematic Engineering Department

Coordinating teacher:

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

DESCRIPTION OF CONTENTS: PROGRAMME

1. Basic data structures for distributed systems
2. Algorithms for telematic systems
3. Concurrency in robotics
4. Processes, concurrency, code distribution and communication
5. Client-server communication
6. Peer-to-peer communication
7. Hybrid interaction models
8. IPC, sockets, TCP/IP, UDP/IP interfaces, multicasting
9. Distributed systems design with scripting languages
10. Coding protocols

LEARNING ACTIVITIES AND METHODOLOGY

THEORETICAL PRACTICAL CLASSES.
Knowledge and concepts students must acquire. Receive course notes and will have basic reference texts. Students partake in exercises to resolve practical problems.

TUTORING SESSIONS.
Individualized attendance (individual tutoring) or in-group (group tutoring) for students with a teacher. Subjects with 6 credits have 4 hours of tutoring/ 100% on- site attendance.

STUDENT INDIVIDUAL WORK OR GROUP WORK.
Subjects with 6 credits have 98 hours/0% on-site.

WORKSHOPS AND LABORATORY SESSIONS.
Subjects with 3 credits have 4 hours with 100% on-site instruction. Subjects with 6 credits have 8 hours/100% on-site instruction.

ASSESSMENT SYSTEM

FINAL EXAM.
Global assessment of knowledge, skills and capacities acquired throughout the course. The percentage of the evaluation varies for each subject between 60% and 0%.

CONTINUOUS EVALUATION.
Assesses papers, projects, class presentations, debates, exercises, internships and workshops throughout the course. The percentage of the evaluation varies for each subject between 40% and 100% of the final grade.

% end-of-term-examination:	60
% of continuous assessment (assigments, laboratory, practicals…):	40