

## **MICROCONTROLLER AND EMBEDDED SYSTEMS PROGRAMMING**

4 ECTS (CREDITS)

### **Purpose of the subject:**

To explain the IoT principles and solutions followed in the design and development of new IoT projects. To introduce students to microcomputer architecture, the principles of sensors, and the use of hardware and software to realise these types of projects.

### **Study subject annotation:**

Microcontroller and Embedded Systems Programming is designed to introduce students to microcomputers, their extensible sensors, and their programming principles. It provides knowledge of the Internet of Things, the architecture of microcomputers and controllers, their operating systems, programming languages for implementing the Internet of Things, and the applicability of sensors to such projects. At the same time, several typical IoT projects are considered.

### **Evaluation form:**

Exam