

Graduate module: Introduction to building and programming a sensor network

Instructor:

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Background: The module will introduce the different elements required to build a network of sensors. The students will learn the difference between analogues and digital sensors, how to connect the sensors to a sensor node, and how to write programs to operate the sensors. They will learn the requirements to transfer the sensors data inside a local network.

Prerequisites:

Enrollment in a graduate program.

Delivery: This module will be comprised of 6 weeks of 2-hour lectures, discussions, and lab work. The students will discuss the sensor network they will build, choose hardware, and write software.

Evaluation: Assessment of this module will be in the form of participation in the lectures, one report about sensor networking delivered at the fourth week and project demonstration at the end of module.

Class Participation: 20%

Report: 40%

Project demonstration: 40%