Abstract
Industry 4.0 aims to revolutionize and digitize the manufacturing sector by enabling and facilitating interoperability, solution agility, flexible (re)configuration of production chain(s) while, at the same time, reducing costs by exploiting real-time data. These capabilities require linking the shop floor with data flows from/to the enterprise borders and include as core enabling technologies the Internet of Things (IoT), cloud, and edge computing key to move and execute parts of the business logic. The lecture series will discuss the transition to I4.0 and introduce some of the research opportunities and open challenges around this topic.

Program
In the first part of the lecture series, we will discuss relevant architectural standards and (some) key enabling technologies of the I4.0 vision. In the second part, complementing the material, we will present a series of case studies applying the concepts to real scenarios.

Exam
Students requiring an exam will be asked to produce an essay about possible intersections between their research interests and the topics presented in this course.

Schedule
The course will be held online via Microsoft Teams (links will be announced soon).
- 14/02/2022 h10-13
- 16/02/2022 h10-13
- 18/02/2022 h10-12
- 22/02/2022 h10-12
- 24/02/2022 h10-13

Participation
Students willing to follow the course are kindly asked to send a notification of interest to the teachers.
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