

General robotics

Number of ECTS credits: 3

Coefficient: 3

Description:

Introduction to Robotics: definitions, typologies of robots and types of applications

- Vocabulary and terminology Robotics
- Direct and inverse geometric model
- Kinematic model

Pedagogical objectives:

At the end of this teaching, students will have learned the basic notions and principles of Robotics. They will be able to define, integrate and operate industrial Robotics systems in production.

Bibliography:

Wisama Khalil et Etienne Dombre, "Modélisation, identification et commandes des robots", 2^{ème} édition, Hermès, 1999.

Prerequisite:

Basic Scientific Culture in Linear Algebra, Basic Scientific Culture in Solid Mechanics, Knowledge in Automation

Lectures Hours: 9

Tutorials Hours: 6

Labs Hours: 16

Knowledge monitoring modalities: continuous assesement (20%), final assesement (50%), labs (30%)

Assesement: 1 continuous exam, 1 final exam, reports of labs

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