



ANNEX 2.1

DEGREE PROGRAM DIDACTIC REGULATIONS

INDUSTRIAL BIOENGINEERING

CLASS LM-21

Polytechnic and Basic Sciences School

Department of Chemical, Materials and Industrial Production Engineering

Didactic Regulations in force since the academic year 2025-2026

Course: Foundations of Robotics	Teaching Language: English
SSD (Subject Areas): IINF-04/A (former ING-INF/04)	CREDITS: 9 CFU
Course year: 1 st or 2 nd	Type of Educational Activity: D
Teaching Methods: In person	
Contents extracted from the SSD declaratory consistent with the training objectives of the course: The sector studies the methods and technologies for the processing of information (data and signals) aimed at the automation (i.e. planning, management and control, carried out automatically) of plants, processes and dynamic systems in general. These terms can be understood, for example, as industrial production processes (both continuous and manufacturing), automatic operating machines (including robotic systems), transport systems, energy production systems, avionics systems, as well as environmental systems. Despite the physical-structural differences existing between these types of systems, the various classes of process mentioned above are, however, suitable for being represented, modeled and simulated, and finally managed and controlled, using methodological tools that are largely invariant with respect to the particular application domain considered. This unifying approach develops both fields of expertise of a general methodological nature and those oriented towards the study and treatment of issues of interest and commitment to the sector with more relevant technological contents.	
Objectives: The course in Fundamentals of Robotics aims to provide the basic skills for modeling, planning and controlling the motion of robots.	
Propaedeuticities: none	
Is a propaedeuticity for: none	
Types of examinations and other tests: Project	