



**ANNEX 2.7**  
**DEGREE PROGRAM DIDACTIC REGULATIONS**  
**AUTONOMOUS VEHICLE ENGINEERING**  
**CLASS LM-33**

**School:** Polytechnic School of Engineering and Basic Sciences

**Department:** Industrial Engineering

**Didactic Regulations in force since the academic year 2024-2025**

<b>Course:</b> IMAGE AND VIDEO PROCESSING FOR AUTONOMOUS DRIVING		<b>Teaching Language:</b> English	
<b>SSD (Subject Areas):</b> ING-INF-03		<b>CREDITS:</b> 6	
<b>Course year:</b> II	<b>Type of Educational Activity:</b> B		
<b>Teaching Methods:</b> In-person			
<b>Contents extracted from the SSD declaratory consistent with the training objectives of the course:</b> The SSD studies methods and tools for processing mono/multidimensional signals for the purposes of filtering, redundancy reduction, synthesis, extraction of information elements; pattern recognition for semantic interpretation of the information content in signals and images.			
<b>Objectives:</b> The aim of the course is to provide students with basic notions and algorithms for processing digital images and videos, with special focus on autonomous driving vehicles. Beyond providing the mathematical and conceptual tools, the course aims to provide the knowledge needed to develop the main algorithms for image processing using Python.			
<b>Propaedeuticities:</b> None <b>Is a propaedeuticity for:</b> None			
<b>Types of examinations and other tests:</b> The exam consists in a computer test and an oral exam. The practical test consists in solving three exercises in Python on image processing applications as developed during the lab, while the oral the aim is also to assess the knowledge of all the concepts and contents given during the course lectures.			