

Scheda Laboratori di Ricerca

<p>Denominazione del Laboratorio</p>	<p><i>Italiano</i> Laboratorio di Automatica <i>Inglese</i> Automatic Control Laboratory</p>
<p>Gruppo di Ricerca di Riferimento</p>	<p><i>Italiano</i> Robotica e Meccatronica <i>Inglese</i> Robotics and Mechatronics</p>
<p>Descrizione sintetica delle attrezzature, della strumentazione e delle attività di ricerca</p>	<p><i>Inglese</i> The activities carried out in the Automatic Control laboratory mainly concern:</p> <ul style="list-style-type: none"> • Development of sensors for advanced robotic systems. • Multi-physics simulation and control of electronic aeronautical equipment • Robotic applications • Active control of vibrations of flexible structures • Simulation of dynamic systems <p>Main equipment available in the laboratory:</p> <ul style="list-style-type: none"> • 2 dSpace stations for rapid prototyping of real-time control systems • 1 3D printer – Mojo model, for plastic materials with washing station • 1 mobile manipulator mounted on an omnidirectional mobile platform with PC on board • 2 Universal Robot collaborative manipulators, model UR5e, one with Robotiq Hand-e parallel gripper, and one with three-finger gripper • piezoelectric and magnetostrictive actuators for the active vibration control • standard instrumentation: oscilloscopes, signal generators, multimeters, personal computers • silicone materials for casting • other tools: soldering iron, electric drill, compressor, fluid dispenser