

MECHANICAL ENGINEERING

CRT/DIMEAS - Robotic systems for space application

Funded By	Dipartimento DIMEAS FONDAZIONE CRT CASSA DI RISPARMIO DI TORINO [Piva/CF:06655250014]
Supervisor	MAURO STEFANO - stefano.mauro@polito.it
Contact	MAURO STEFANO - stefano.mauro@polito.it
Context of the research activity	The research focuses on the development of mechanical systems for space application, such as robotic arms, docking mechanisms and free flyers to simulate spacecrafts. It includes also the development of control algorithms, even with application of AI.
Objectives	The research is devoted to the development of robotic systems for space application. In particular the candidate will contribute to the development of mechanical systems suitable for robotic applications in orbit, e.g. which robotic arms, docking mechanisms and free flyers for manoeuver simulation. The research includes also the study of control algorithm, even with application of AI. The goal of the work is to contribute to the design and development of experimental systems which will be tested in laboratory condition.
Skills and competencies for the development of the activity	Design of mechanical systems; simulation of mechanical and mechatronic systems; control of mechatronic systems