PH.D. IN MATHEMATICS AND COMPUTER SCIENCE

COURSE SCHEDULE

ACADEMIC YEAR 2020/2021

EMBODIMENT OF AI

PROF. ELENA DE MOMI
POLITECNICO DI MILANO

14 - 18 June

Robots are more and more pervading everyday life, assisting driving and professional activities. In the healthcare sectors, they can assist disabled, improve the rehabilitation pathway and increase the surgical action safety, improving the clinical outcome. The PhD course "Embodiment of AI" aims at providing students with elements of robotics, seeing robots as embodiments for AI tools. In detail, the course will provide an overview on methods for model-based and model-free robotic control tasks and on methods (e.g. based on deep learning) for scene interpretation using environmental camera information. In the second part of the course, planning methodologies will be introduced, such as path planning using reinforcement learning and ontologies for decision process modelling. Hands-on activities will be implemented.