

## **EMARO** **European Master in Advanced Robotics**

**Duration:** 2 years

**Course description:**

The Masters is designed to promote high-quality educational offer in the area of advanced and intelligent robotics. After graduation the students will have mastered the different areas of robotics (Mathematical Modeling, Control Engineering, Computer Engineering, Mechanical Design) in order to be able to deal with Robotics Systems as a whole rather than just to concentrate on one particular area. The career prospects for EMARO graduates are very good as the proposed courses are relevant to today's high technology society. Students may take the Master as a professional terminal degree, or to join PhD programmes afterwards.

**Duration and mobility:**

The programme of study lasts two academic years (120 ECTS) split into four equally loaded semesters. The student has to spend the first two semesters in one institution and the second two semesters in another institution.

**Summary of study programme:**

The language of instruction is English, but local language and culture courses of the hosting countries are included in the programme of study. The programme of the first two semesters is the same in the consortium institutions, it provides the students with a solid interdisciplinary background across the main areas of robotics (Cognition, Action, Perception). During the third semester, more specialised courses are proposed. The programme of this semester is based on the specific research strengths of the partners institutions (thus varying from partner to partner). It contains courses on Research Methodology, Advanced Control and Modeling, Humanoid Robots, Biologically Inspired Robots, Motion Synthesis, Service Robotics.

**Degrees awarded:**

Students that graduate from the EMARO Masters course will obtain two Masters degrees from the institutions where they studied. The degrees are officially recognised and give full access to PhD study programmes. The Consortium will deliver a diploma supplement describing the nature, level, context, and content of the studies that were successfully completed by the student.

**Admission requirements:**

The Masters course applies to European and third country-students who already hold a first university degree after at least three years of university studies, with 180 ECTS, in a field related to Robotics area such as: Mechatronics, Automatic Control, Computer Science, Electrical Engineering, Mechanical Engineering, and Applied Mathematics. The applicants have to be fluent in writing and reading in English. Admission is decided on the basis of excellence of the academic records of the student, the quality of her/his former studies, motivations, reference letters and general skills for foreign languages. The EMARO Consortium recruits about 45 students each year, about 15 in each institution. The professor/student ratio is about 1:2.

**Website:** <http://emaro.irccyn.ec-nantes.fr>

**Partners:**

Central School of Nantes, France (Co-ordinating institution)  
Warsaw University of Technology, Poland  
University of Genova, Italy

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**Grant:**

907 000 € (15 000 € consortium + 892 000 € scholarships), 2008  
865 000 € (15 000 € consortium + 850 000 € scholarships), 2009