

# **PHD AWARDS**

POLITECNICO

**MILANO 1863** 

Chairman's award assigned to Neda Taymourtash for her 47th European Rotorcraft Forum, 2021 paper

Congratulations to Neda Taymourtash (<u>neda.taymourtash@polimi.it</u>), a 33rd cycle Ph.D. student of Aerospace Engineering supported by the NITROS MSCA EJD. She just received the prestigious Chairman's Award from the <u>47th European Rotorcraft Forum</u>, held online in September 2021. The prize consists of a fully paid invitation to present her work on "Simulation and Testing of Helicopter-Ship Aero-dynamic Interaction" to the next Asian/Australian Rotorcraft Forum, scheduled in late 2022.



## **CALLS AND EVENTS**



### **ERASMUS+ (OUTGOING MOBILITY FOR STUDY PURPOSES)**

The call for the 2022/2023 International Mobility for study has been issued.

The Erasmus Programme offers support for mobility of students within European programme countries (KA103) as well as within a selection of Extra-UE partner countries (KA107). All Politecnico di Milano students apply in the "International mobility for study" section of their Online Services. After selection for the programme, the host university has to accept the students for mobility, so for PhD candidates it is advisable to make contact with a research group in advance, to plan the visit.

For general information about the Erasmus Programme, for the Call and for the lists of destinations available to PhD students please visit the webpage <a href="https://www.polimi.it/en/services-and-opportunities/international-mobil-ity/study-abroad/erasmus-and-other-programmes/1-how-to-apply/">https://www.polimi.it/en/services-and-opportunities/international-mobil-ity/study-abroad/erasmus-and-other-programmes/1-how-to-apply/</a> For further administrative information please contact <a href="https://www.polimi.it">bando-mobilita@polimi.it</a> (please specify that you are a PhD student).

Deadline for application: 11th January 2022 (12:00 midday)

### **SEMINARS AND WORKSHOPS**



1ST EDITION OF THE POST GRADUATE COURSE "DESIGN FOR ALL STRATEGY. OPERATIONAL CRITERIA FOR ACCESSIBLE AND INCLUSIVE DESIGN: THE ROLE OF THE INCLUSIVE DESIGNER"

The Course promoted by the DABC Department will address theory and norms, design approaches and best practices of Design for All strategy. Among the experts the program includes both professors and professionals of the topic.

Deadline subscription: January 11<sup>th</sup> 2022

Course held from January 18, 2022 to March 22, 2022

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# **STARTING COURSES – DOCTORAL PROGRAMMES**

### PHD IN INFORMATION TECHNOLOGY

#### ADVANCED MEMS GYROSCOPES Prof. Giacomo Langfelder

The goal of the course is to introduce basic and advanced concepts of MEMS gyroscopes system design, including technology, sensor and electronics levels. MEMS gyroscopes are currently employed in consumer goods (smartphones, cameras), automotive applications (stability control, roll-over detection) and further widespread applications are envisioned in the same fields or in other fields (e.g. biomedical applications) if performance are improved.

The course therefore, starting from a historical background and state-of-the-art technologies, highlights current limits and traces guidelines for novel approaches in terms of future technologies and sensor working principle. The course will also make the students aware of the very active and lively environment in the MEMS (and specifically in the gyroscopes) research and industrial field in the Milano area.

From 10<sup>th</sup> January to 1<sup>st</sup> February 2022



# ADVANCES IN RADIATION DETECTORS, MICROELECTRONICS READOUT AND APPLICATIONS Prof. Marco Carminati

The goal of the course is to provide the fundamentals on radiation detectors, on the architectures and building blocks of integrated circuits for their readout and the recent advances in their applications from physics to industrial analysis with special focus on nuclear medical imaging.

From 10<sup>th</sup> to 27<sup>st</sup> January 2022

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# EMBEDDED AND EDGE ARTIFICIAL INTELLIGENCE

#### **Prof. Manuel Roveri**

Advances in Internet of Things (IoT) and Cyber-Physical systems (CPSs) have opened the way to a pervasive presence of distributed embedded applications in our everyday lives as well as in diversified segments of the market. However, in order to meet user expectations and satisfy application, constraints intelligent functionalities are requested so as to design collaborative intelligent devices and autonomous systems. The aim of this course, thought for Ph.D. and Master students, is to address such a novel technological and scientific challenge, called Embedded and Edge AI (i.e., AI on the edge of the system), by exploring hardware, software and algorithmic solutions to support the training and inference of Machine and Deep Learning solutions on (networks of) devices constrained in computation resources, memory and energy.

From 13th January to 17th February 2022

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### STATISTICAL SIGNAL PROCESSING AND SUPERVISED LEARNING Prof. Umberto Spagnolini

Mission is 1) to provide basics of statistical methods in signal processing and supervised classification of discrete classes by following a pragmatic approach, 2) to illustrate the methodology to approach some broad-interest problems. After fundamentals, some topics will be agreed with attendees to guarantee that the majority of the students could broad their cultural knowhow still being focused to their PhD research area. Exam can be based on the use of analytical tools from statistical signal processing and deep learning to solve one topic of the ongoing research within the PhD thesis as proposed by the students.

From 24th January to 7th February 2022



### PHD IN ENERGY AND NUCLEAR SCIENCE AND TECHNOLOGY

### COMPUTATIONAL FLUID DYNAMICS WITH OPEN-SOURCE SOFTWARE Prof. Tommaso Lucchini

The course is focused on the application and development of the open-source OpenFOAM code for research activities.

From 2<sup>nd</sup> February 2022

### **OTHER NEWS**

### FINALIST PROJECTS SWITCH2PRODUCT 2021: INCLUD (INCLUSIVE & UNIVERSAL DESIGN).

The project has been selected among the 25 finalist projects of Switch2Product 2021. INCLUD is a digital platform to promote inclusive environments, through a performance assessment tool based on Design for All strategy. The Team is composed by: Arch. Erica Isa Mosca (Postdoctoral researcher, DABC) team leader, Dott. Alessandro Morganti (PhD student, DABC) and Arch. Silvia Mangili (PhD student, DABC) in the core team, Arch. Andrea Brambilla (Postdoctoral researcher, DABC) and Professors Stefano Capolongo from DABC. The grants from Politecnico and prizes from S2P Partners have been awarded during the event held on December 1st at MADE Competence Center Industria 4.0, at the presence of the rector Ferruccio Resta and the S2P Partners