



## **CALLS AND EVENTS**



### **EIT URBAN MOBILITY - CALL TO JOIN THE DOCTORAL TRAINING NETWORK**

The EIT Urban Mobility just launched a call to join their Doctoral Training Network.

EIT Urban Mobility (see [website](#)) is one among the Communities of the EIT – the European Institute of Innovation and Technology, and Politecnico di Milano is partner of the network.

One of the main activities of the EIT Urban Mobility is DTN, the Doctoral Training Network. Being part of the DTN, which runs in parallel to your already ongoing career at Politecnico di Milano, offers to doctoral candidates several advantages and opportunities (see [website](#)).

This email is to announce that the 2023 DTN Call has just been launched. The Call and the application details can be accessed at [this link](#). To apply for the DTN you have to prepare and submit (with deadline 11 June 2023) the documents listed in the Call, including a mandatory letter of support from your supervisor

Deadline 11 June 2023



### **AI4GOV**

### **AI4GOV OPEN EVENT: "SHAPING THE AI4GOV LEADERSHIP IN EUROPE AND BEYOND: NETWORKS & COMPETENCES"**

Within the framework of the EU-funded AI4Gov Master, the event involves prominent international exponents to discuss about the present and the future of AI for public administrations in Europe and beyond.

Registration (at [this link](#)) is mandatory for both online and on-site attendance.

23-24 June 2023 - Aula De Carli





## SEMINARS AND WORKSHOPS



**POLITECNICO**  
MILANO 1863

### SUMMER SCHOOL "INDAGINI SCIENTIFICHE PER LA CONSERVAZIONE E IL RESTAURO DI OGGETTI D'ARTE: I DIPINTI SU TAVOLA" (10-14 LUGLIO 2023)

Summer School **Indagini scientifiche per la conservazione e il restauro di oggetti d'arte: i dipinti su tavola** (10-14 Luglio 2023, Villa del Grumello, Como, Italy) organized by the Department of Architecture, Built Environment and Construction Engineering and the Department of Physics of Politecnico di Milano

The summer school, based on theoretical lectures and practical sessions, aims to provide a background on the use of 3D imaging, photonics and environmental monitoring techniques to assess the conservation status of a panel painting. The summer school official language is italian

Registration deadline: 20 June 2023



### SUMMER SCHOOL "DESIGN RESEARCH PROTOTYPING: DESIGN THAT LASTS"

The School will be a theoretical and pragmatic occasion to challenge knowledge systems, based on deterministic blueprints and models, and to reimagine and re-make design as a mode of inquiry and as a practice to interrogate the present. Blended Learning and Flipped Classroom. More info information at [phd.design.polimi.it](http://phd.design.polimi.it) > PhD Summer School

June, 15-16-19-20-21, 2023



### AERODYNAMIC CHALLENGES OF 1915ÇANAKKALE BRIDGE DURING CONSTRUCTION ACTIVITIES

Eng. Ferruh Aytekin (ÇOK A.Ş.)

This talk will focus on the design and the construction process of the 1915Çanakkale Bridge

June 6th, 2023 – 02:30pm



### UNLOCKING THE POTENTIAL: SHAPE MEMORY ALLOY MATERIAL DESIGN FOR ADDITIVE MANUFACTURING

Prof. Mohammad Elahinia (University of Toledo - Ohio)

Prof. Elahinia's talk will focus on shape memory alloys properties and applications

June 19th, 2023 – 02:30pm





## STARTING COURSES – PHD SCHOOL

### STRENGTHENING CRITICAL SPATIAL THINKING

**Prof. Arondi Simonetta, Prof. Pessina Gloria**

The course opens up a set of questions aiming at strengthening critical spatial thinking, as a paramount tool in a polytechnic school. Pivotal to our fields is a capacity to think and engage spatially. The course privileges critical spatial theory approaches space as a medium of power where relations, conflicts, and exchanges occur, particularly thinking about the taken-for-granted category of social-environmental extreme events.

From 27 to 29 June 2023



## STARTING COURSES – DOCTORAL PROGRAMMES

### PHD IN INFORMATION TECHNOLOGY

#### DEALING WITH UNCERTAINTY IN DATA-BASED LEARNING

**Prof. Ruiz Palacios Fredy Orlando**

Many science and engineering problems entail the derivation of mathematical models (learning) from prior information and data. A crucial aspect when learning models from data is handling the uncertainty caused by noisy and incomplete information, and consequently the computation of models with minimal uncertainty. Set Membership (SM) approaches provide a theoretical framework and practical tools to deal with these aspects. This course aims to introduce the general Set Membership estimation theory, and to describe solutions to machine learning problems, in settings like the estimation of models for dynamical systems, data-driven filters and controllers' design, and global black-box optimization, all supported by hands-on sessions.

Jun 26th-Jul 6th, 2023



#### DIGITAL CIRCUITS AND SYSTEMS FOR DSP AND FPGA-BASED PROCESSING

**Prof. Geraci Angelo**

Mission of the course is the interdisciplinary knowledge of fundamental topics of design of complex digital systems, in order to enable the development and deployment of electronic processors and boards employing DSP and FPGA devices.

Aim of the course is to provide students with: a) awareness of methodologies for hardware-oriented design of digital electronic architectures; b) knowledge of main criteria for realizing and dimensioning the correspondent digital circuits; c) interaction with common commercial CAD platforms for prototyping circuits

Jun 19th-23th Jun, 2023



#### HIGH RESOLUTION ELECTRONIC MEASUREMENTS IN NANO-BIO SCIENCE

**Prof. Sampietro Marco**

The course aims to cover the important aspects of electronic measurements of micro- and nano-devices, starting from the techniques used to access the electrical properties of the nanoscopic systems and ending to the specific electronic circuits that help sensing the tiny electric signals with the best possible resolution.

Jun 5th-9th Jun, 2023





## LARGE SCALE OPTIMIZATION

**Prof. Fagiano Lorenzo Mario**

Optimization problems are ubiquitous in many engineering and science disciplines, such as machine learning, signal processing, data science, communications, control and robotics. Optimization methods have to cope well with the demanding requirements of modern applications. These include handling large numbers of variables and constraints, being amenable to distributed or even parallel implementation or being simple enough to be embedded into hardware devices with limited storing and computational capabilities.

Jun 19th-23th Jun, 2023



## MICROCONTROLLERS FOR INDUSTRIAL ELECTRONIC APPLICATIONS

**Prof. Lusardi Nicola**

The mission of the course is the interdisciplinary knowledge of fundamental topics of design of complex digital systems, in order to enable the development and deployment of electronic processors and boards employing Microcontrollers.

Jun 12th-15th Jun, 2023



## THERMAL MODELING AND MANAGEMENT OF MPSOCS

**Prof. Terraneo Federico**

The following topics will be covered in the course:

- Introduction to the thermal problem in modern digital integrated circuits: power/thermal wall, the dark silicon issue and its impact on the performance and reliability of computer architectures.
- Current state-of-the-art and future directions in heat dissipation solutions and thermal control policies.
- Thermal modeling of integrated circuits: heat transfer equation, finite volume spatial discretization, electrical equivalents, experimental data collection for model parameter fitting.
- Brief overview of computer architecture simulation and MPSoC power consumption estimation.

Jun 12th-16th Jun, 2023

