

PhD NEWSLETTER

YES, YOU SHOULD BE THINKING ABOUT YOUR LIFE AFTER THE PHD

by Francesca Saracino (Head of the Career Service)

Did you know that *alternative* careers for PhD candidates are not *alternative* anymore? A close look at the recent employment statistics available helps us understand this. At the end of April we published the new <u>PhD Employment Data Book</u> where it is clear that PhD graduates are divided almost equally between those who pursue a career in universities and research institutes (52%) and those who end up working in the private sector (43%). The remaining 5% work for the public administration.

So working in private companies is more often a choice today, than it was years ago. This also tells us that companies are working to integrate diverse skills in their workforce and gradually understanding the value of hiring a PhD. The value they see does not lie only within the field of expertise developed by the scholar, but also in the soft skills that a sought-after PhD title entails (autonomy, flexibility, creativity, openness to other cultures, just to name a few).

This is why I strongly suggest current PhD candidates to approach the Career Service early enough. Keep your options open!

The <u>Career Service (for PhD)</u> is the office of the Politecnico made to help students go through the transition from university life to the job market. We offer you the opportunity to: connect directly with employers and create a business network; see job market trends through available data; apply directly to job offers online and do job interviews on campus; train yourself and develop additional skills through practical experiences and online resources.

The less you know the market, the harder it is to choose a path, especially if you spend eight years in academia and know little or nothing about how private employers hire, what an HR interview is and how companies may value PhD holders and their skills. So do not miss our special program called **Career Guidance for PhDs and Temporary Researchers**. It is an individual program for those who are interested in entering the private job market. It consists of three meetings with a Career Advisor and company experts, including PhD Alumni, through which you will reflect on your path, learn how to valorize your profile and present yourself on the job market.

Additionally, The Career Service organizes a PhD Job Mentoring Day once a year in November and we collaborate yearly with the PhD School in the planning and carrying out the "Industrial Skills" course.

In the end, it is all about making a decision based on valuable data. You choose, it's your future!

CALLS AND EVENTS

SWITCH2PRODUCT-INNOVATION CHALLENGE



Are you looking for a way to make an impact with your research project, or the opportunity to develop your own business idea?

Take part in the Switch2Product-Innovation Challenge: the contest that selects and promotes innovative solutions, new technologies and business ideas from students, researchers, alumni and Professors.

Switch2Product, in its 12th edition, is organised by Politecnico di Milano, Deloitte and PoliHub.

The call for applications is open today and you can submit your idea till June, the 30th 2020.

This year the total prize pool available by the Politecnico di Milano is 210,000 euro (S2P Prize Grant), with a prize of 60,000 euro for a project dedicated to fighting the emergency and impact of Covid-19. Services provided through acceleration paths at PoliHub are also available. This year the potential value of the total prize fund is around 1 million euros, enriched by the Special Grant and additional services (Special Program) made available by the initiative's partners.

In particular, ENI makes available the Special Program JOULE ENERGIZER and a Special Grant of 30,000 euros assigned to a maximum of 5 projects.

Giordano Dell'Amore Social Venture Foundation provides the Special Program GET IT! TWICE which is a 30,000 euro Special Grant awarded to a maximum of 5 projects.

During S2P, additional rewards made available by partners affiliated with the Initiative may be reported through the communication channels.

For more information on the program, please visit the www.s2p.it website.

One of the winning projects of the last editions is PhonicVibes. The idea at the base of the project came from a doctoral thesis of a Department of Civil and Environmental Engineering student, who developed an innovative technology capable of isolating environments from mechanical or acoustic vibrations.

Thanks to the Switch2Product Grant and the acceleration program that enabled various collaborations with industrial partners PhonoicVibes is now a successful start-up with 12 employees, several patents and important customers.

You could become the next winner!

Deadline: 30th June 2020



IDEA LEAGUE SUMMER SCHOOLS / CALL FOR PARTICIPATION



IDEA League offers you the wonderful opportunity to participate in four high-level summer schools. Unfortunately, due to the coronavirus pandemics, this summer the Schools will take place only online, but they will offer you unique networking opportunities with colleagues and faculty members from some of the best European technical institutions.

For all details about the Schools and to apply please visit https://ide-aleague.org/students/summerschools/

(To apply please select the School(s) you are interested in)
The application deadline for most schools is either June 8th or June 22nd 2020, depending on the School (please check the website for the deadlines).

For Politecnico di Milano PhD candidates there are no registration fees.

IDEA League is a focused network of leading European universities of science and technology. Its members are Chalmers University, ETH Zürich, TU Delft and RWTH Aachen and Politecnico di Milano.

The IDEA League Summer Schools offered in 2020 are:

- Science, Technology, Society and Wikipedia (13 17 July 2020) Wikipedia is now the primary source of scientific and technical information for the general public. The School aims to introduce the participants to its rules and, above all, to involve them in the production of new material for it.
- Computational Design for Additive Manufacturing (1-11 September 2020) Radical advancements in additive manufacturing call for a new mindset in doing design. This summer school focuses on computational design which is essential for effectively exploring the large design space and thus to reach the full potential of additive manufacturing.
- Urban Mobility Concepts (15-17 September 2020) Urbanization, digitalization and general environmental changes are leading to a rethinking in society regarding mobility. This year's Summer School is therefore intended to serve as a platform to learn how mobility will change.
- Analysis and modelling road user behaviour (21-25) September 2020) The course aims to provide with the human factors theoretical foundations for the analysis and modelling of road-user behaviour, within the context of road safety and development of driving automation systems.

The first School (Science, Technology, Society and Wikipedia) provides 5 PhD School course credits.

Deadline: 8th / 22nd June 2020





ERASMUS+ FOR TRAINEESHIP: GRANTS FOR VISITING PERIODS ABROAD

The 2020-2021 Erasmus+ for Traineeship call has been issued. The deadline of the call is Thursday June 11th 2020 at noon. You may apply through the online services by selecting "International Mobility for traineeship".

The call is a unique opportunity for obtaining a grant to support short visits (from 2 to 12 months) to European academic or industrial institutions. The grant can be added on top of the standard increment of the PhD grant applicable for visit periods abroad.

For further information, including the call, please visit this <u>webpage</u>
For any further clarification you may contact our Career Service by email (<u>career-service.international@polimi.it</u>) or by phone (02 2399 2535, code 1).

Deadline: 11th June 2020 (noon)





TRAINING THE MINDSET - ETHICS & LEADERSHIP / 15 - 19 JUNE 2020

Politecnico di Milano, in collaboration with TU Berlin, NTNU (Trondheim) and Warsaw UoT organizes a series of 1-week training sessions to enhance your soft and transferable skills, and to reinforce your international network. Each training session includes two modules. Participating candidates will earn 5 PhD School course credits (in the "Complementary Doctoral Skills" course) after successful completion of the assessing procedure.

The third training session will be organized by Politecnico di Milano, will be **held online** on 15-19 June 2020, and includes the following two courses:

- Research Ethics and good scientific practice

- Leadership & Management

Four PhD candidates from Politecnico di Milano will be selected to participate in the course. The selected participants will receive a fee waiver of the registration cost for the courses.

To participate to this selection candidates must fill in and submit form at the following <u>link</u> with **deadline Sunday**, **7 June 2020**.

For more information click here (pdf)

Deadline: 7 June 2020





SPECIAL ISSUE "INDOOR AIR QUALITY IN HEALTHCARE FACILITIES AND HEALING ENVIRONMENTS"

A special issue of Atmosphere - MDPI. We expect scientific papers related to indoor air quality in healthcare facilities (monitoring activities, data analysis, material emissions, indoor pollution, etc.).

30th November 2020





SPECIAL ISSUE "RETHINKING THE POWER OF ARCHITECTURES FOR PANDEMICS THAT PROMOTE HEALING"

A special issue of International Journal of Environmental Research and Public Health. We expect scientific papers related to the healing architectures and COVID pandemic.

31st December 2020





SPECIAL ISSUE SUSTAINABILITY "ADAPTIVE REUSE PROCESSES: BRIDGING THE GAP BETWEEN MEMORY AND NEW VALUES"

Special Issue on the exploration of new values generated by buildings and urban adaptive reuse.

Deadline: 30th November 2020



STARTING COURSES - PHD SCHOOL

EPISTEMOLOGY OF SCIENTIFIC AND TECHNOLOGICAL RESEARCH

Prof. Chiodo Simona, Campioli Andrea, Zanelli Alessandra

Providing PoliMi PhD students with essential epistemological tools, which are given by philosophy, to promisingly deepen the understanding and the critical managing of causes, methods, processes and effects of scientific and technological researches and practices

From 5th June 2020



SCIENCE, TECHNOLOGY, SOCIETY AND WIKIPEDIA

Prof. Raos Guido, Castiglioni Chiara, Mabbett Andrew John

The course aims to provide some hand-on training in technical writing and, at the same time, to contribute to the general diffusion of scientific and technical knowledge. These will be achieved by engaging Politecnico's PhD students in the production of new material(or revision of existing one) for Wikipedia.

From 22nd June 2020



STARTING COURSES - DOCTORAL PROGRAMMES

PHD IN INFORMATION TECHNOLOGY

BIOLOGICAL COMMUNICATION SYSTEM DESIGN AND MODELLING

Prof. Maurizio Magarini

This course starts with a brief overview of the field of nanoscale communications. Then it delves into more challenging yet exciting concepts. Focus will be on modelling and designing of biological circuits using tools available from synthetic biology. This course will give a chance to be initiated to a very exciting cutting-edge research field, which will soon influence many diverse research fields, such as engineering, chemistry, biology, and medicine.

From 3rd June 2020, Via Teams



COMPUTER ARCHITECTURES FOR DEEP NEURAL NETWORKS

Prof. Cristina Silvano

Recent trends in Deep Neural Networks imposed hardware accelerators as the most viable solution for several classes of applications such as image classification for self-driving cars, computer vision and speech recognition. The goal of the course is to present the main optimization methodologies used in computer architectures to accelerate DNNs showing also commercial and research solutions.

From 15th June 2020, Via Teams



MACHINE LEARNING FOR NON-MATRIX DATA

Prof. Giacomo Boracchi

This course aims at presenting data-driven methods for handling non-matrix data, i.e., data that are not represented as arrays. The course will give an overview of machine learning and deep learning models for handling graphs, point clouds, texts and data in bioinformatics. Moreover, most relevant approaches in reinforcement learning and self-supervised learning will be presented.

From 22nd June 2020, via Teams



PARALLEL COMPUTING ON TRADITIONAL (CORE-BASED) AND EMERGING GPU-BASED) ARCHITECTURES THROUGH OPENMP AND OPENACC / OPENCL

Prof. Luca Breveglieri

The course is dedicated to the techniques for high performance computing. It is aimed at experienced programmers, who wish to be introduced to the problems and solutions of parallel programming, or wish to optimize their applications on a parallel system.

From 8th June 2020, via Teams

SIGNAL INTEGRITY IN VERY-HIGH SPEED DIGITAL CIRCUITS

Prof. Angelo Geraci

Aim of the course is to provide students with enabling basic technologies for implementing digital processing architecture, giving a) awareness of methodologies for hardware-oriented design of digital electronic systems; b) knowledge of main criteria for realizing and dimensioning digital circuits; c) interaction with state-of-the-art portfolio of electronic components.

From 22nd June 2020, via Teams

