Ethics and integrity in doctoral education and research training

This has been the topic of the thematic workshop organized by the EUA-CDE (European University Association, Council for Doctoral Education) and held on 18-19 Jan 2017 at the Universidade NOVA de Lisboa.

During the two days, representatives from 86 European universities from 25 countries met and exchanged ideas in different sessions about “Research integrity”, which relates to the performance of research to the highest standards of professionalism and rigour, and to the accuracy and truth of the research record in its outcomes. This concept applies to all the different phases of the research: when defining its aims and goals, during its conduct, and when producing its results.

Ethics in research or research integrity involve topics and concepts like:
- good practices, codes of conduct, regulatory principles, university guidelines;
- responsibility, social impact and challenges of research, relationship between researchers and society, cultural issues;
- publication ethics, plagiarism, copyright, conflict of interest;
- data management and protection, sensible information in the digital world, confidentiality in personal and private information, disclosures;
- scientific misconduct;
- international conventions and declarations, ethical committees and institutions, ethical issue in funding agencies.

There is more and more consensus about the idea that research integrity and ethics in research should be considered not just an important, but rather a fundamental “soft skill” in doctoral education, to be properly developed during a PhD programme. While supervisors play a key role to train young researchers in good research conduct, there is a clear need for a more structured approach to implement initiatives for research ethics and integrity in doctoral education.

At the Politecnico di Milano, on 2016 the PhD School started to offer the course ‘Ethics in research’ to PhD candidates. This February, during the 20-24th week, the second edition of the Course will be held. The general aim will be to make aware the students about the important role that ethics plays in research and offering some tools for dealing with ethical dilemmas in research practices. During one week of lectures, case studies and group discussions, the participants will be helped to a) be fully aware on how scientific and technological research have ethical implications; b) to identify ethical issues in specific research cases and procedures; c) to understand how the adherence to ethics standards is essential not only for respecting ethical values and fundamental rights, but also to increase quality and likely impact of research.
Calls and events

Startup day
Politecnico di Milano and Polihub organize the Startup day, a 1-day workshop organised at Polihub, the Startup District & Incubator of Politecnico di Milano (Campus Bovisa, via Durando 39)

In the morning (9-13), interested PhD candidates and post-doc researchers are invited to attend the Startup4Dummies module, in which they shall receive training on how to recognize potentially exploitable ideas, and how to construct a business model around them.

For more information on the morning program, please click here

During the afternoon (14.30-17) a round-table will gather the Rector of Politecnico di Milano, and CEO representatives from leading industries (Enel, IBM Italia, Wind, Publitalia), to discuss about Startups for Innovation, a perspective on innovative opportunities for young entrepreneurs in Italy.

Last but not least, the BEST scholarships for young Italian entrepreneurs (a fully-paid six-months stage at the Santa Clara University and the Silicon Valley) will be presented by the Chairman of the program.

For more information on the afternoon program, please click here

To attend one or both parts of the 1-day workshop please register by filling in and submitting the form https://goo.gl/forms/QKModPfc3fKAYuL72

February 21st, 2017 - Campus Bovisa, via Durando 39

Erasmus Mundus SUSTAIN-T call for mobility
Scholarships are granted by EU Commission through the Erasmus Mundus SUSTAIN-T (Technologies for Sustainable Development) Partnership, coordinated by Politecnico di Milano.

The program supports visiting costs to and from the Project Partners, Latin American Institutions, for collaborations on innovative technologies for sustainable development. All PhD candidates, post-doc researchers, and faculty members may apply for funds.

Deadline for applications: February 23rd, 2017

European PhD School: "Power Electronics, Electrical Machines, Energy Control and Power Systems"
The 18th edition of the European PhD School will be held in the ancient Angevin Castle of the seaside town of Gaeta, Italy, from May 22-26, 2017.

More detailed information about the program, enrolment procedures and deadlines are available on the website: www.phd-school.org

Early bird registration deadline: February 28th, 2017
Seminars

THE NEXT INDUSTRIAL REVOLUTION DRIVEN BY TECHNICAL INTELLIGENCE IN MANUFACTURING
Prof. Engelbert Westkämper, University of Stuttgart
This lecture will start with a discussion of the industrial revolutions in the past and the actual megatrends. It is evident, that a new industrial revolution called “Industrie 4.0” will change the structure of manufacturing and offer new potentials for adding value in the system of manufacturing.
February 3rd, 2017

DESIGN RESEARCH LECTURES
ECONOMIES OF DESIGN - Materializing assets and finance
Prof. Guy Julier
The global rise of design is intimately entwined with the spread of neoliberal economics. A key element of neoliberalism has been the consolidation of financialisation as one of its leading features. Here, the movement of money is often represented as something that circulates independently of things. However, artefacts play a key role in anchoring sources of future value. More precisely, how does design function in this system? How are the aesthetics of products, services and spaces shaped to work within financialisation and the creation of assets? This lecture, drawing from Guy Julier’s forthcoming book 'Economies of Design', presents a unique view onto the relationships of design and economics, focusing, in particular, on the roles of retail design and of intellectual property rights.
February 7th, 2017 – h. 11:00 – Polifactory, Candiani Campus, Building B3

LAGRANGIAN APPROACHES TO THE SIMULATION OF LANDSLIDES
Prof. Massimiliano Cremonesi
DICA seminar organized by the Scientific Committee
February 8th, 2017 - h. 12:15 - Aula Beltrami, Building 5

WHY AND HOW RIGID BLOCKS FOR MASONRY
Prof. Maurizio Angelillo; Dott.ssa Fabiana de Serio; Prof.ssa Anna Pandolfi
The general topic of this presentation is the Statics and Kinematics of masonry structures made of monolithic blocks modelled a la Heyman.
February 9th, 2017 – h. 11:30 – 13:00 - Aula Beltrami, Building 5

MECHANICAL SPRINGS, ELECTROSTATIC ANTI-SPRINGS AND MEMS PARAMETRIC REASONATORS
Prof. David Elata
Seminar organized for the PhD Colloquia Doctoralia (III Session 2017).
February 23rd, 2017 – h. 15:00 - Aula Beltrami, Building 5
Starting courses – PhD School

ENVIRONMENTAL RISKS AND SUSTAINABILITY: LINKING ECONOMIC, SOCIAL AND TERRITORIAL EVALUATIONS TO MITIGATION DECISIONS AND OPERATIONAL PRACTICE IN THE FIELD

Prof. Scira Menoni
Many departments at Polimi (virtually all) host internally some experts in risk related domains. The objective of this course is to make those different experts interact among them with PhD candidates regarding a very hot topic nowadays, that is environmental risks, including both natural and man made.
February 1st, 2017

SOFT COMPUTING: THEORY, PRACTICE AND APPLICATIONS

Prof. Andrea Bonarini
Neural Networks, Fuzzy Systems, Genetic Algorithms, Deep Learning principles and applications are introduced and experienced.
February 7th, 2017

ETHICS IN RESEARCH

Prof. Andrea Aliverti
The aim of the course is to make participants a) fully aware on how scientific and technological research have ethical implications; b) to identify ethical issues in specific research cases and procedures; c) to understand how the adherence to ethics standards is essential not only for respecting ethical values and fundamental rights, but also increase quality and likely impact of research.
February 20th, 2017

INTELLIGENT TRANSPORT SYSTEMS

Prof. Gianpiero Mastinu
The course is primarily devoted to the PhDs involved in the MIUR National Project "ITS ITALY "=". The project, coordinated by Politecnico di Milano, with Politecnico di Torino and CNIT, addresses Intelligent Transport System (ITS), from different perspectives, with particular reference to freight transport. We refer to transport and sensors, in nodes and arches.
February 27th, 2017
RESEARCH SKILLS
Organized by the Research Service of Politecnico di Milano
This course deals with the basic skills for a career in research (communication, research management, the preparation of a research proposal, public speaking, ...); it offers a wide range of 1-day workshops focused on a single topic, from January to September 2017. Candidates are requested to attend at least 5 of the offered modules, to gain the course credits. The detailed list of topics will be published here, with the dates of each meeting.

BETTER BUSINESS WRITING
This module gives you a set of tools to ensure your persuasive message is seen and understood by your audience. It focuses on making your message concise and easy to read, allowing your meaning to shine through. The module will be held by Peter Frederick, Understanding Minds http://www.persuasivewriting.co.uk/
All candidates interested in participant are kindly requested to register by filling in and submitting the form https://goo.gl/forms/cpldIDE01ggZgm1E2
February 13th, 2017 - Campus Leonardo, Building #5, Beltrami Conference Room

PERSUASIVE WRITING
Built on hard science and practical experience, Persuasive Writing gives participants the knowledge and tools to create compelling messages for any audience. They will learn how to apply psychological techniques to ensure their message is heard, understood and agreed with, increasing their chances of getting result they want. Each session can draw up to 20 students.
Facilitator: Peter Frederick
All candidates interested in participant are kindly requested to register by filling in and submitting the form https://goo.gl/forms/qQkA8mQTz6N4PpS03
February 14th, 2017 - Campus Leonardo, Building #5, Beltrami Conference Room

"IP"H.D. - INTELLECTUAL PROPERTY FUNDAMENTALS FOR PH.D. STUDENTS
This module provides a travel through the Intellectual Property (IP) world, including Why protect research results? Which are the IP typologies and strategies? Which are the possible exploitation channels? Then, under the guidance of a tutor, the candidates will evaluate the IP-related opportunities and issues of their own research projects.
The module will be conducted by the Technology Transfer Office of the Politecnico di Milano. All candidates interested in participant are kindly requested to register by filling in and submitting the form https://goo.gl/forms/UJcbOcGK2focFM1B3
February 20th, 2017 - Campus Leonardo, Building #5, Beltrami Conference Room
Starting courses – Doctoral Programmes

PhD in *Structural Seismic and Geotechnical Engineering*

**DAMAGE MECHANICS**

Prof.ssa Claudia Comi


February 1st – 7th – 8th, 2017 - Aula Azzurra, Building 5

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**PhD in Structural Seismic and Geotechnical Engineering**

**NON-LINEAR FINITE ELEMENT METHODS IN SOLID MECHANICS**

Prof. Attilio Frangi

For more information about the course, please click [here](#).


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**PhD in Design**

**RESEARCH METHODOLOGIES IN DESIGN**

Prof. Paolo Volonté

The course will deal with the qualitative approach to research and qualitative methods for the study of innovation processes. Methods mainly drawn from the social sciences, like case studies or ethnographic observation, will be described in detail to teach the students how to gather information for their research projects.

The discussion of methodological, sociological, and epistemological issues will be constantly linked to the teaching of basic rules for a sound arrangement of the PhD research work.

The course is divided in lectures, exercises and discussions.

January 31st – February 17th, 2017

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**PhD in Mathematical Models and Methods in Engineering**

**MODELLI DI TEORIA DEI GIOCHI PER L’INGEGNERIA**

Prof. Roberto Lucchetti

The focus will be mainly on two aspects of game theory: repeated games and games with incomplete information.

February 20th – March 3rd, 2017 – h. 2:30 pm - Aula F. Saleri, Department of Mathematics

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**PhD in Environmental and Infrastructure Engineering**

**STATISTICS APPLIED TO ENVIRONMENTAL ENGINEERING**

Prof. Arianna Azzellino

This course will develop hands-on expertise for analysing and interpreting environmental data based on applications to field-oriented problems.

February 16th, 2017
Colloquia Doctoralia

PhD ISSG – I, II, III Session 2017
PhD candidates of the 29° Cycle: Mr Luca Flessati, Ms Kiana Hashemi, Ms Valentina Zega.
February 20th - 21st - 23rd, 2017 – Aula Beltrami, Building 5 – ground floor

MeccPhD Colloquia Doctoralia 2017
Final Exams of PhD Candidates in Mechanical Engineering
February 7th, February 10th 2017 – Department of Mechanical Engineering