



POLITECNICO
MILANO 1863



Dipartimento di Elettronica,
Informazione e Bioingegneria

The PhD Program in Information Technology at DEIB

Welcome for new PhD Candidates

Prof. **Barbara Pernici**

Chair of the PhD Program in Information Technology

November 3rd, 2021, 3pm

INTRODUCTION

Reference persons

IT PhD Coordinator, Prof. Barbara Pernici, professor of Computer Engineering
barbara.pernici@polimi.it

IT PhD candidates representatives

Andrea Pimpinella, Telecommunications, andrea.pimpinella@polimi.it

Fabio Garzetti, Electronics, fabio.garzetti@polimi.it

IT PhD Secretariat

Francesca Clemenza PHD-INF@polimi.it or francesca.clemenza@polimi.it

IT PhD support for administrative issues at DEIB

Mauro Bandini ITPHD-support@polimi.it or mauro.bandini@polimi.it

Welcome office for foreign PhDs

welcome-deib@polimi.it – tel. 3427



Board of professors 1/2

Area 1: Computer Science and Engineering

Cristina Silvano - *Vice Chair Computer Science and Engineering* -
cristina.silvano@polimi.it

Cesare Alippi

Francesco Amigoni

Luciano Baresi

Cinzia Cappiello

Nicola Gatti

Maristella Matera

Raffaella Mirandola

Barbara Pernici

Letizia Tanca

Area 2: Electronics

Angelo Geraci - *Vice Chair Electronics* - angelo.geraci@polimi.it

Giuseppe Bertuccio

Giorgio Ferrari

Ivan Rech

Alessandro Sottocornola Spinelli



Board of professors (= possible tutors) 2/2

Area 3: Systems and Control

Luigi Piroddi - *Vice Chair Systems and Control* - luigi.piroddi@polimi.it

Luca Bascetta

Andrea Castelletti

Fabio Dercole

Lorenzo Fagiano

Simone Garatti

Area 4: Telecommunications

Carlo Riva - *Vice Chair Telecommunications* - carlo.riva@polimi.it

Matteo Cesana

Paolo Martelli

Andrea Monti Guarnieri

Massimo Tornatore

Representative from the Bioengineering Area

Giancarlo Ferrigno



About you

64 new PhD candidates (+ 5 with agreements)

Computer Science and Engineering	28
Electronics	11
Systems and Control	13
Telecommunications	12



Agenda of the meeting

1. The IT PhD at DEIB
2. Information for PhD candidates entering their PhD program now
 - Research activity
 - Courses and study plan
 - Evaluations
 - Some practical issues
3. PhD candidates representatives
4. Questions & Answers



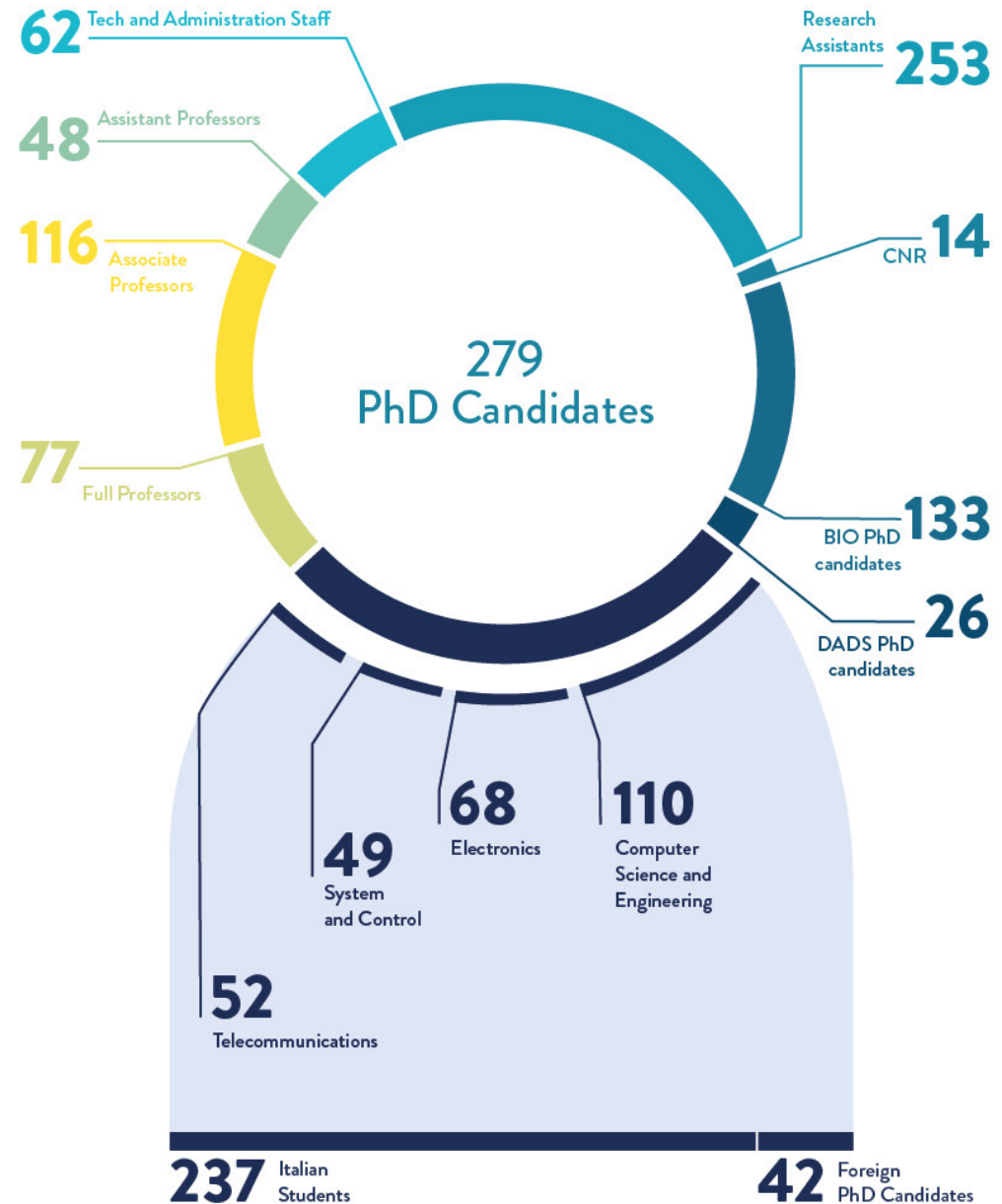
IT PHD AT DEIB

DEIB Department

Three PhD programmes

- Information Technology
- Bioengineering
- Data Analysis and Decision Science (DADS)

Data as of October 2021



OCTOBER 2021 - MILAN

COLLOQUIA DOCTORALIA

PROF. BARBARA PERNICI



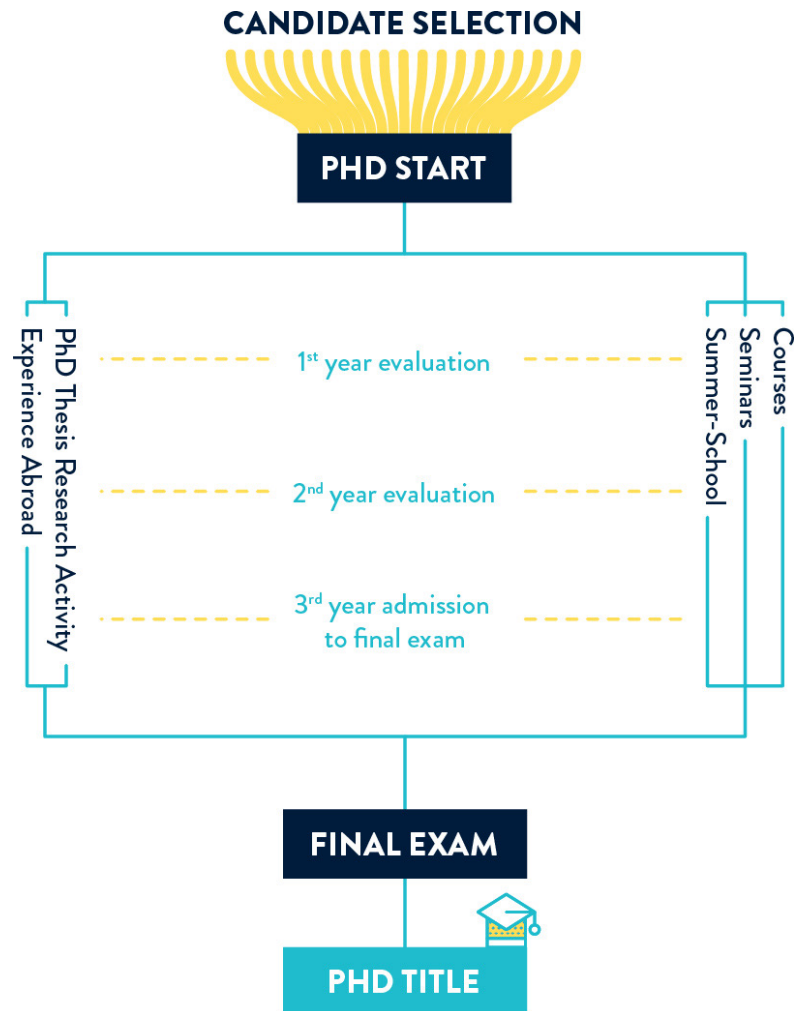
PhD in Information Technology at Polimi

- PhD programmes started in Italy in 1985
- 2 Nov. 2021: start of XXXVII (37) cycle
- PhD School of Politecnico di Milano
 - 19 PhD Programs in Engineering, Architecture, and Design
 - Central coordination and rules
 - Common teaching (transversal skills)
- PhD in IT
 - approx 19% of the enrollments in the School



RESEARCH ACTIVITIES

PhD path



See details in the PhD Programme regulations

http://www.dottorato.polimi.it/fileadmin/user_upload/schede_corsi/INGINF/PF-37-INF.pdf



PhD in Information Technology at Polimi

Goals:

- PhD thesis: an original research contribution
- Advanced education: advanced courses, seminars
- Opportunity to develop original research in a rich, international, multidisciplinary environment
- Make your work known and participate in the international research community: participation in conferences, publication on international journals
- Opportunity of experience abroad

PhD Candidate status:

- A student (earns a degree)
- An early stage researcher



PhD Candidates activities

- **Research**

- Within Department research areas -> if you do not have an advisor yet contact me or your area responsible
- Involvement in research projects (basic and applied research)
- Develop new research ideas -> publish papers, conferences and journals – aiming at excellent research results
- Write your thesis (normally a monograph)

- **Courses**

- All DEIB teaching activities in English
- 25 credits (CFU) – in the first and second year
- Other courses are available (e.g., language courses, as extracurricular activities)



PhD Candidates activities - Research

Main roles following your research

- **Advisor:** research direction
- **Tutor:** advice and study plan approval
(member of Board of Professors, in Italian «Collegio dei Docenti»)

Suggested MOOC to start:

Being a researcher (in Information Science and Technology), Prof. Carlo Ghezzi ([link](#)) – the course is available at all times

Book «Being a Researcher» (Springer) available at <https://link.springer.com/content/pdf/10.1007%2F978-3-030-45157-8.pdf>



Research ethics and code of conducts

Research work must be original and proper citations given to previous work

Responsible conduct in the working environment is expected

Theses will be checked with antiplagiarism software (self check, approved by advisor)

Links to regulations can be found in PhD School web site



Resources – Digital library

It is important to read the related work in your area.

You can access the **Polimi digital library**

<https://www.biblio.polimi.it/servizi/come-fare-per/accedere-ad-una-risorsa-elettronica>

You can also access directly single papers. You have free access to most papers in our areas.

If you are requested authentication choose the organizational authentication with one of these two organizations

- Politecnico di Milano
- IDEM

(IDEM is the national universities network)

For some accesses you can use the proxy (see the web site for info)



COURSES AND STUDY PLAN

Study plan

PhD level courses

- 10 credits from PhD school courses
- 10 credits from IT PhD (IINFO)
- 5 credits free (doctoral level, internal or external courses, on IT themes)

Select IT PhD courses (in the OnLine Services, filling in your study plan) as soon as possible

Proposed courses change every year. Approx. 20 offered each year. Some in alternate years.

PhD School course participation must be approved by the PhD School (phdschool@polimi.it)

Currently the courses are blocked in your study plan, you will receive an email for choosing courses



Study plan approval

- Choose a tutor (within the Board of Professors)
- Email the study plan to your tutor (or tutor-to-be) asking for approval
- The approval must be sent to the area coordinator to approve the study plan

It is suggested to enter 15-25 credits in the first year.

You can complete the study plan next year.

You can change your study plan at any time, and request for approval again to your tutor



External courses and Summer Schools (max 5 credits)

For any type of external course (including summer schools)
select: EXTERNAL COURSES WITH EVALUATION

- Please note that formal approval of the course by the tutor is needed (the course should have at least 25 hours)
- All courses should have an evaluation, otherwise a public seminar on the course must be given by the candidate and an evaluation by the advisor or another DEIB professor is required
- To get a grade send the program, a certificate of attendance, and the proof of evaluation to phd-inf@polimi.it



YEARLY EVALUATIONS

Yearly evaluations

First and second year: Admission to the following year

- A summary report of your activities must be submitted via OnLine Services (by September 7th)
- A short presentation (10 minutes + questions) is given to a Committee formed by PhD Board professors (between mid September and mid October)

Third year: Admission to the final exam (or 4° year to complete the thesis)

- A final report of your activities is submitted
- A Committee of the PhD Board evaluates the admission to the final exam. An interview may be requested for clarifications.

Final exam

- The thesis is sent to two external reviewers (Oct. 15, 2024, after admission to final exam)
- Formal final examination session (with a Committee with at least two external examiners): January-March 2025, earlier defense possible on request



Evaluations and grades

Courses:

- IT PhD courses are pass/fail
- PhD School courses have a A/B/C/D evaluation
- Master courses have regular exams (exam registration requested) and grades 18-30 (but do not count towards the 25 credits)

Annual yearly evaluation grades: A/B/C/D

- Meaning of grades:
 - A: in line with expectation for 1° and 2° year; Excellent for the third year
 - B: needs some attention
 - D: some critical issues, contact area responsible

Final exam: Diploma / Diploma Cum Laude



How to get an A? What is expected? MINIMUM requirements

First year:

- 10 CFU of courses completed
- at least one paper published or submitted at a conference or workshop on your PhD research theme

Second year:

- all courses completed
- 1 paper published at a conference or submitted to journal on your PhD research theme

Third year:

- at least one top level publication on your PhD research theme



PRACTICAL INFORMATION

Where to find information

Information about general rules and administrative procedures can be found in these slides and details in:

- The IT PhD web site
- The IT PhD Forum
- PhD School web site

See links at the end



How to access services

After your registration procedure is completed you can access all Polimi services available with your PhD candidate profile.

You can access services:

- In the Online Services portal
- Using your Polimi certificate to authenticate yourself
To download the certificate see
<https://www.connectandgo.polimi.it/en/politecnico-user/>
And follow «how to activate your permanent connection»



Further grants

- Each year you can obtain further funds if you publish on a top level journal (Q1 in <https://www.scimagojr.com/>) – up to a total of 1500 euros
- Special requests can be presented for additional funds (e.g. long stay abroad, attendance to Summer Schools) writing to phd-inf@polimi.it



Where are we?

<https://maps.polimi.it/maps/>



Services

Many services available:

- You can find info in the web site <http://dottoratoit.deib.polimi.it>
 - Tools & Information for your PhD
 - Courses
- You will receive emails about specific services
- You have a personal endowment of € 5068 (of which € 2000 reserved for travel and publications)



Useful links

- <https://dottoratoit.deib.polimi.it/> (IT PhD web site)
- <http://www.polimi.it/dottorato> (PhD School)
- <http://www.deib.polimi.it>

- For general questions use the chat of the [IT PhD Forum](#)

- Mail for enquiries and requests about PhD career: phd-inf@polimi.it

- For information about services in the administration: ITPHD-support@polimi.it



Links to services

- Available software:

<https://www.software.polimi.it/en/software-download/index.html>

- ICT services and request for ICT assistance at DEIB

<https://www.deib.polimi.it/eng/computingandnetworkservices>



TO Dos (all deadlines listed also in IT PHD web site)

1. If not yet done: follow the instructions to **enter DEIB** in <https://dottoratoit.deib.polimi.it/>
in the Section Tools & Infor for your enrolment ->
Enrolment ->
Starting at DEIB
2. By Nov. 15: **business card** request
<https://forms.gle/yAifjDDjQMZ2SfFX8>
3. As soon as possible:
 - choose your courses and get your **study plan** approved (deadline Dec 31, 2021)
 - Enter info and a picture in the DEIB web site, writing to redazione-DEIB@polimi.it
4. By Dec. 31: send an email to PHD-INF@polimi.it indicating your choices for **advisor and tutor**
5. By end of April: fill in your **thesis description** (online services) and send your picture for the DEIB web site





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WELCOME !

QUESTIONS?