Automation and Control Engineering MSc Programme

Maria Prandini
Chair of the Automation and Control Engineering Program

October 8, 2019

POLIMI organization

The Politecnico di Milano

POLITECNICO
MILANO 1863

The logo originates from the design by Raphael “The School of Athens” kept in the Ambrosiana Art Gallery, Milan

Over **1.300** lecturers and **1.200** members of the administrative technical staff

4 Schools

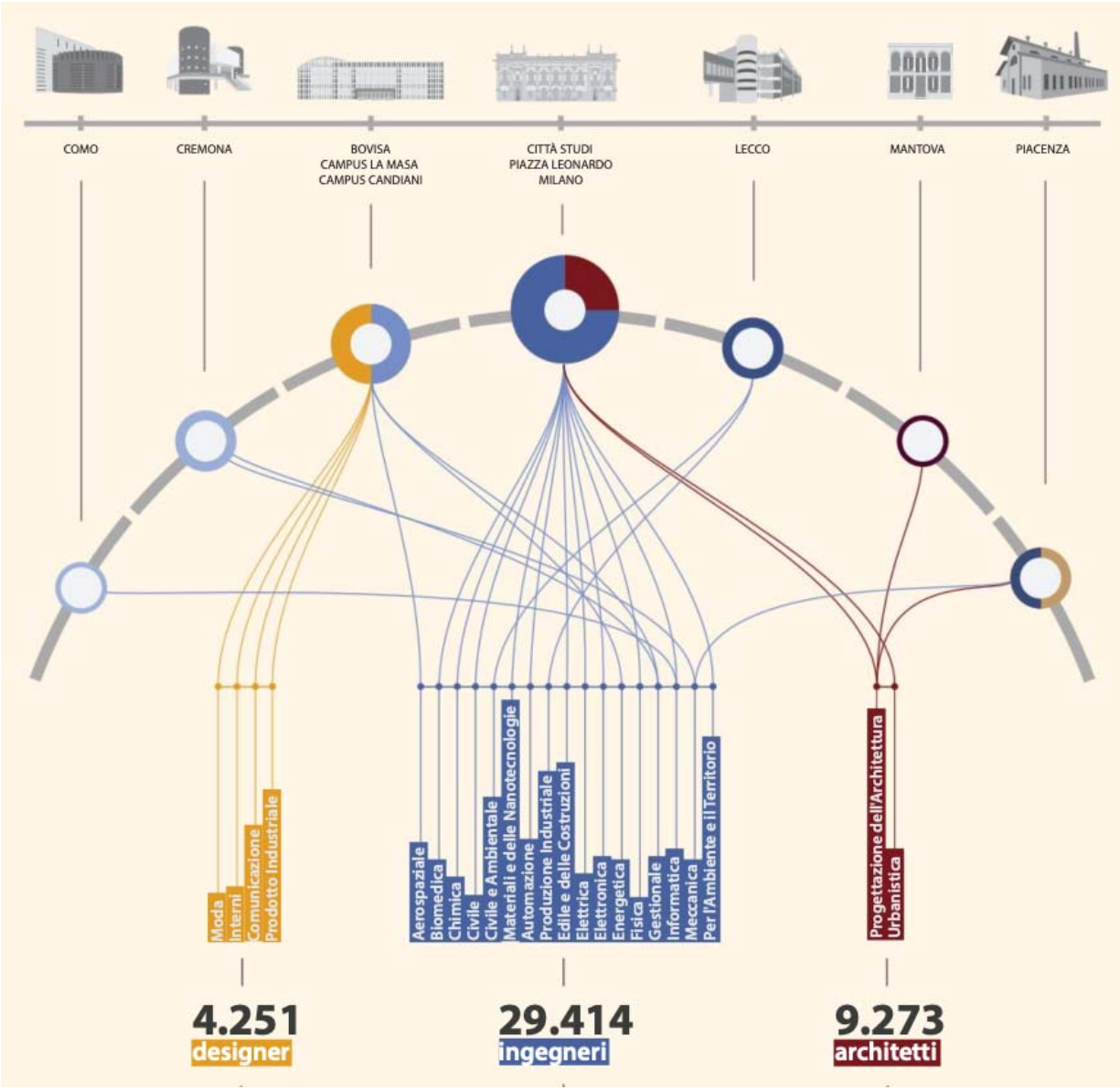
Over **42.000** students

12 Departments

Ranked **no.1** in Italy,
no. 6 in Europe, **no. 16** in the world in the category «Engineering & Technology»
QS World University Ranking 2019

Politecnico di Milano Campuses

- Milano Leonardo
- Milano Bovisa
- Como
- Cremona
- Lecco
- Mantova
- Piacenza



Schools and Study Programmes

Each **Study Programme** (Bachelor and Master) is **associated to one of the 4 Schools**:

- Architecture Urban Planning Construction Engineering
- Design
- Civil, Environmental and Land Management Engineering
- Industrial and Information Engineering

The **Dean** is the head of the School and guides the teaching activities of all Study Programmes through the Council, Programme Boards, Student-Professor Joint Committee.

The **Student-Professor Joint Committee** monitors the Study Programmes performance and makes proposals for their improvement to the Dean and the Evaluation Unit.

Each Study Programme is led by a **Coordinator**, chairing the **Programme Board,** which plans and heads the teaching activities of the Study Programme.

Automation and Control Engineering Study Program

The Master Programme in Automation and Control Engineering is within the Study Programme **in Automation and Control Engineering** of the **Industrial and Information Engineering (3I) School.**

Prof. Maria Prandini

Coordinator of the Study Programme in Automation and Control Engineering

Prof. Antonio Capone

Dean of the 3I School

The **Board of the Programme** is chaired by the coordinator and is composed of

- **professors** in charge of courses or teaching modules delivered as part of the Programme
- 7 elected **student representatives**

Student Representatives – Automation and Control Engineering

Stefano Aversente

Brigida Brunacci

Daniele Di Francesco

Gloria Lopiano

Isabella Luppi

Lorenzo Petulicchio

Guido Sassaroli

Student-Professor Joint Committee – 3I School

The Student-Professor Joint Committee is composed of 5 Professors and **5 Students**, who are the Student Representatives in the Council of the 3I School

Beatrice Bartolozzi 

Giacomo Buratti 

Antonella Polimeno Camastra 

Laurens Lanzillo 

Pietro Rossetti 

The role of the students

The role of Students and their Representatives

- Students have the right to **participate in the life and governance of the University** through their Representatives. They are asked directly to express their opinion on the University.

- The **commitment of the Student Representatives** has allowed to achieve several positive results such as:
  - The reorganization of educational activities
  - Benefits of the «Right to Education» (including scholarships for low income students)
  - Exemptions to tuition fees for top students

- **Student Representatives** are **elected directly by you** every 2 years

You do have the opportunity to influence with your ideas the University decision processes:

- **Get in contact with Student Representatives and tell them your suggestions**

Student Representatives in the Central Bodies

ACADEMIC SENATE

23 MEMBERS

- RECTOR;
- 12 DEPARTMENT REPRESENTATIVES;
- 4 PROFESSOR REPRESENTATIVES;
- 2 TECHNICAL-ADMINISTRATIVE STAFF REPRESENTATIVES;
- **4 STUDENT REPRESENTATIVES**

ROLE:

THE SENATE ADDRESSES AND PLANS THE DEVELOPMENT OF THE UNIVERSITY, WITH PARTICULAR ATTENTION TO EDUCATION AND RESEARCH, AND MONITORS THE WHOLE OPERATION OF THE INSTITUTION

THE ACADEMIC SENATE MEETS ONCE A MONTH

BOARD OF GOVERNORS

11 MEMBERS

- RECTOR;
- 4 PROFESSOR REPRESENTATIVES;
- 1 TECHNICAL AMINISTRATIVE STAFF REPRESENTATIVE;
- 3 EXTERNAL MEMBERS;
- **2 STUDENT REPRESENTATIVES**

ROLE:

THE BOARD OF GOVERNORS DEFINES THE LONG-TERM ECONOMIC PROGRAMME ON THE BASIS OF THE PROPOSALS AND OPINIONS OF THE ACADEMIC SENATE

THE CDA MEETS ONCE A MONTH

Student Representatives in the School Bodies

JOINT COMMITEE

10 MEMBERS

- 5 PROFESSORS APPOINTED BY THE DEAN OF THE SCHOOL;
- **5 STUDENT REPRESENTATIVES:**

ROLE:

MONITORS THE PROVISION OF TRAINING, THE QUALITY OF TEACHING AND SERVICES OFFERED TO STUDENTS;

SCHOOL BOARD

MEMBERS

- DEAN OF THE SCHOOL;
- N. OF DIRECTORS OF CONNECTED DEPARTMENTS;
- N. PRESIDENTS OF THE CCS;
- **2/5 REPRESENTATIVES OF STUDENTS** APPOINTED IN THE JOINT COMMITTEE

THE TOTAL NUMBER OF MEMBERS VARY FROM SCHOOL TO SCHOOL

ROLE:

IT COORDINATES THE STUDY PROGRAMMES AND PROVIDES THE MAIN ORIENTATION TO THE SCHOOL

Student Representatives in the Study Programme

STUDY PROGRAMME BOARD – CCS

MEMBERS

- PRESIDENT OF THE CSS;
- N. OF PROFESSORS OF THE CCS;
- **N. OF STUDENT REPRESENTATIVES**

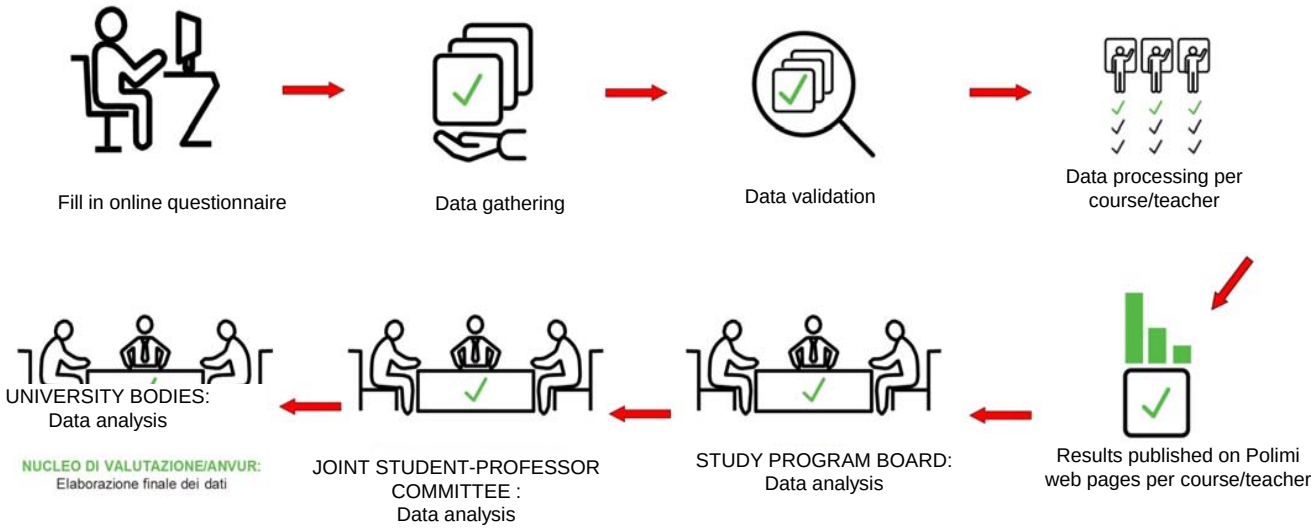
ROLE:

IT DEFINES THE SUBJECTS OF THE STUDY PROGRAMME, THE TEACHING METHODS AND ITS USE, THE ANALYSIS OF THE EFFECTIVENESS OF THE COURSES CARRIED OUT, THE ORGANIZATION OF THE STUDY PLAN, THE ECTS DISTRIBUTION.

THE TOTAL NUMBER OF MEMBERS VARY FROM CCS TO CCS

Opinions of the students on teaching

Filling in an ANONYMOUS online questionnaire for each course is MANDATORY for enrollment in exams



The questions concern:

- teaching
- teachers
- teaching assistant activities
- infrastructures

Since your opinions are highly considered, you are invited to:

- **Pay particular attention to the questionnaire compilation**
- **Give informed and consistent answers to the questions**
- **Provide proactive and constructive comments**

Opinions of students enrolled in the last year

In the last year of the MSc Study Programme, we collect your opinion on:

→ **The whole training path**

Mandatory questionnaire for enrollment in the Final Degree Exam on:

Organization of teaching, specific contents, infrastructures, library, internships, international mobility, final exam.

→ **Student support services**

Anonymous and mandatory questionnaire for registration to the 1st exam of the year on:
Enrollment, Study plans, exam registration, taxes, student offices, ICT services, libraries, PoliPrint, catering, communication, physical environment.

Services and Opportunities

Student support services: whom to contact for …

Questions related to courses

1. Course teacher(s)
2. Study Programme Coordinator
3. Student Representatives
4. Joint Student-Professor Committee
5. Dean of the School
6. Ombudsman

Student Representatives for Automation and Control Engineering

Stefano Aversente
Brigida Brunacci
Daniele Di Francesco
Gloria Lopiano
Isabella Luppi
Lorenzo Petulicchio
Guido Sassaroli

Email: rappresentantistudenti-ccsautomazione@polimi.it

The Student Ombuds Office

Students who wish to complain about behavior that violates the university regulations and the rights and duties of students of POLIMI may contact the Ombudsman.

The Ombudsman acts after a non-anonymous complaint is made, carries out an adequate investigation into the matter and tries to solve it, protects the student against any reprisals, informs the complainant and the student representatives of the outcome of the inquiry.

Email: difensoredeglistudenti@polimi.it

The Ombudsman is currently **Prof. Gerardus Janszen**.

Student support services: whom to contact for …

Administrative matters

- Student Office
  desks, online chat, chatbot, email
  https://www.polimi.it/en/current-students/contacts/

Organizational questions and study plans

- Reference persons of the study programme
- Dean's offices
  desks, chat, email
  https://www.polimi.it/en/current-students/contacts/
- Department student office

Reference Rules

- **Educational rules** of the study program
  https://www.polimi.it/en/programmes/
- **Charter of the rights and duties of students**
  http://www.normativa.polimi.it/?id_sottoc=66
- **School Rules**
  http://www.ingindinf.polimi.it/en/school/school-rules/
- **Academic calendar and deadlines**
  https://www.polimi.it/en/current-students/calendar-and-deadlines/deadlines/

Services and opportunities

CareerService
www.careerservice.polimi.it

POLIHUB
INNOVATION DISTRICT
& STARTUP ACCELERATOR
BY FONDAZIONE POLITECNICO DI MILANO

Career Service – www.careerservice.polimi.it/

the service for connecting the job market and students and for supporting students in their first job search

POLIHUB – www.polihub.it

the startup District & Incubator that gives you opportunities for turning your ideas into a startup company

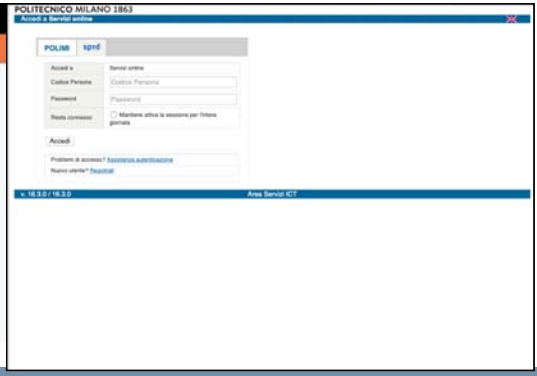
Multi Chance Poli Team – www.polimi.it/en/footer/rights/disabilities-and-spld/
Service for Students with Disability and Learning Disabilities

PoliPsi – www.polimi.it/en/services-and-opportunities/other-services-and-opportunities/support-and-listening-services/
Counselling and Psychological and Psychotherapeutic Support Service for students

Further services & opportunities – www.polimi.it/en/services-and-opportunities/
scholarships, remunerated collaborations, associations and cultural activities, sport activities, libraries, lodging, dining

Useful websites

- **POLIMI** www.polimi.it and, in particular, the section dedicated to students www.polimi.it/en/current-students/ for all information on university
- **School** www.ingindinf.polimi.it for more specific information on school, study programmes, teaching activities, graduation, special initiatives, etc.
- **Automation and Control Engineering** www.ccsatm.polimi.it for specific information on the programme and the members of the committees
- **Online POLIMI services** www.polimi.it/servizionline your portal to all POLIMI administrative online tools



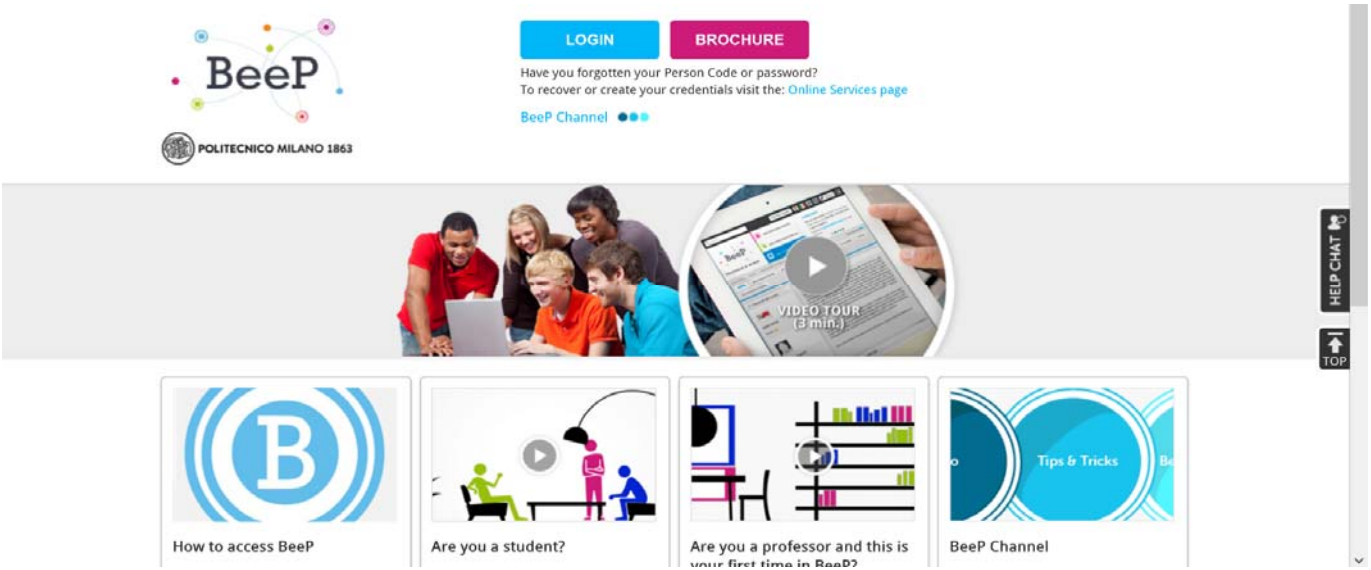
Study Programme Committees @ http://www.ccsatm.polimi.it

Apps, Newsletter, Social nets

- **APP DISCOVER POLIMI**: the mobile app for freshmen to discover all POLIMI services
- **APP POLIMI**: the mobile app for all students devoted to access to lecture timetables, manage study plan, request support to student office, etc.
- The biweekly newsletter **Politamtam** http://www.politamtam.polimi.it/ for information on events, activities of student organizations, opportunities for students, and more
- Institutional **social channels**: www.facebook.com/polimi www.youtube.com/polimi www.instagram.com/polimi www.twitter.com/polimi www.linkedin.com/school/polimi www.polimi.it/itunes

SOCIAL

Beep: a channel to support teaching and info exchange



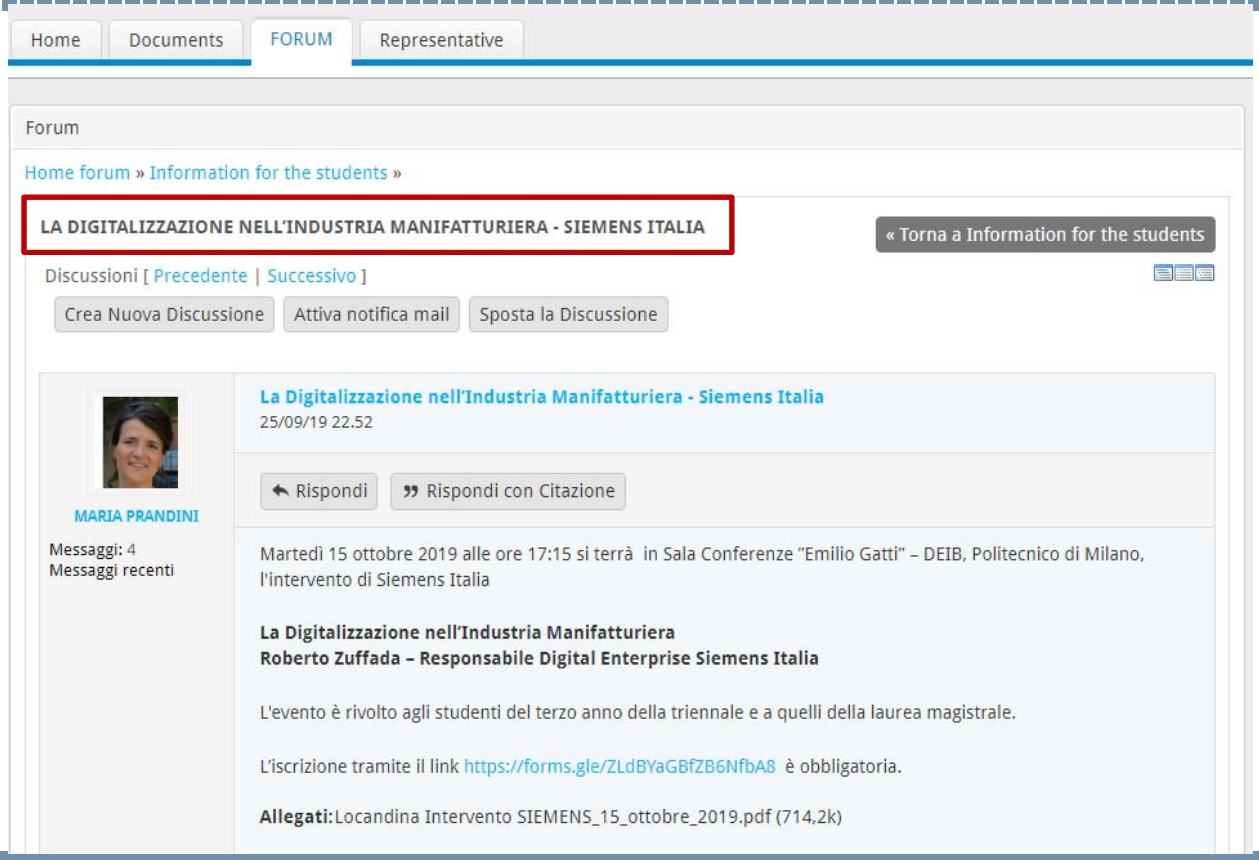
https://beep.metid.polimi.it/

Beep channel for a course
Teaching material and notes, student-teacher communications

Beep channel of the Study Programme
Communications between study programme students, Student Representatives, and Coordinator

Beep channel for International Mobility
Exchange of info on experiences of students within the International Mobility Program

Announcement posted on the Beep Channel



Extra-training activities and Tutoring

Training beyond the MSc study programme

Massive Online Open Courses (MOOCs) – www.pok.polimi.it

POLIMI portal of free online courses to support students in their academic and professional career

A **certificate of attendance** is provided if the final test is passed

Passion in action – www.polimi.it/corsi/passion-in-action/

open participation teaching activities that the Politecnico offers to its students to **support the development of transversal, soft and social skills**

Acquired skills will be accredited on the **Diploma Supplement**

Some examples of interest for you:

Matlab/Simulink per l'analisi e il progetto di sistemi di controllo; Hands-on Automatic Control and Robotics Laboratory; UAV Lab

Tutoring services offered by your School

The tutoring services of the School support students during their studies with **student-tutors** and **teachers**.

Tutors have the task of:

- Be a reference point for problems related to teaching activities
- Helping students that have issues with specific courses with **clarifications on unclear concepts and exercises**

The School offers different tutoring opportunities to its BSc and MSc students.
The approach includes some peer-to-peer tutoring, provided on-demand, and more traditional tutoring services, provided on established schedule.

www.ingindinf.polimi.it/en/students/tutoring/

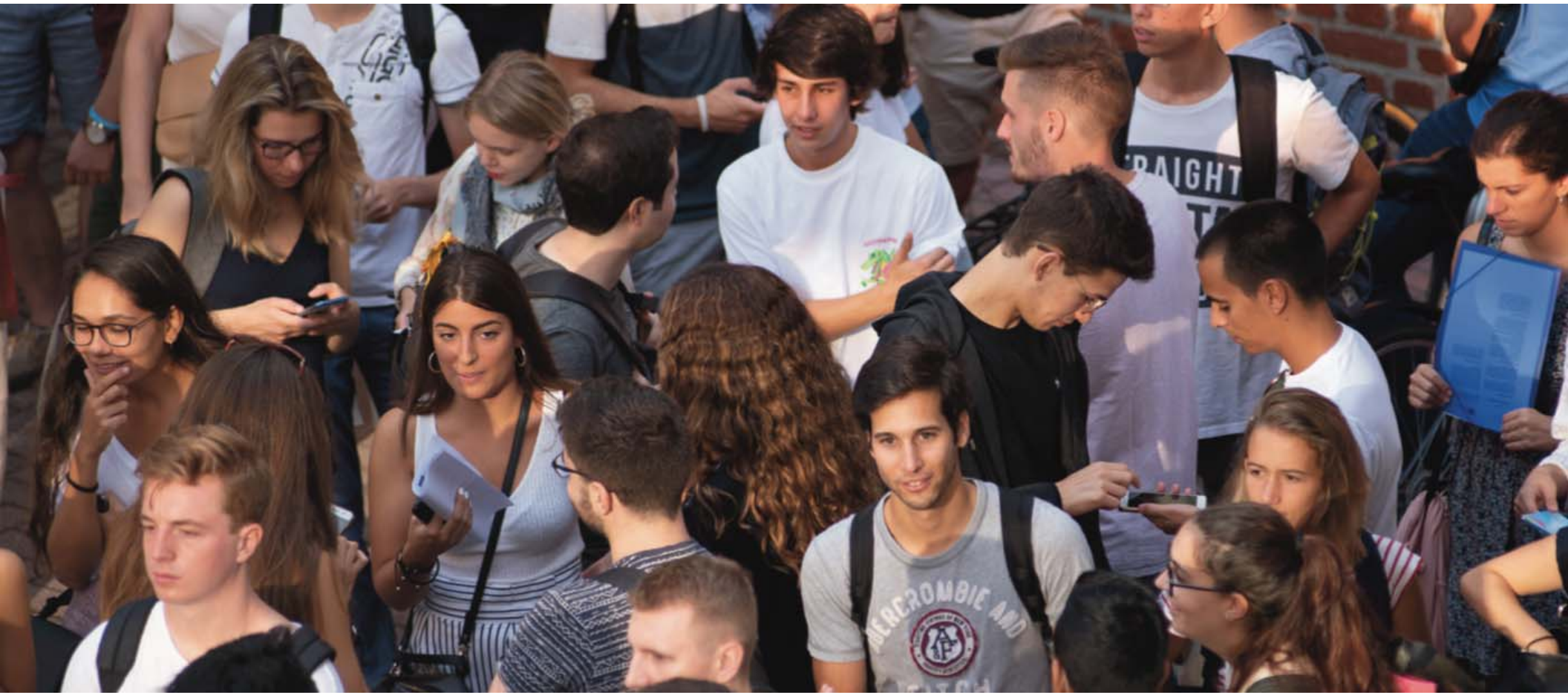
Tutoring for MSc students

Equalization tutoring peer-to-peer

the service is dedicated mainly to international students. More experienced student-tutors provide help, individually or in small groups of 3-4 people, on the basic courses of the MSc programme.
It is possible to request tutoring both during the semester of course delivery, and at other times of the year by emailing tutorato-ingegneria@polimi.it

You can be involved as a tutor!

International exchange programs



Experience abroad

POLIMI offers to its students many opportunities for gaining experience abroad:

- **study mobility**
  get credits attending courses and activities at partner universities (prepare a thesis)
- **double degree**
  get two degrees, one in POLIMI and one in the partner university

Every year POLIMI issues a call for international student mobility to which you have to apply for accessing mobility opportunities

www.polimi.it/en/services-and-opportunities/experience-abroad/

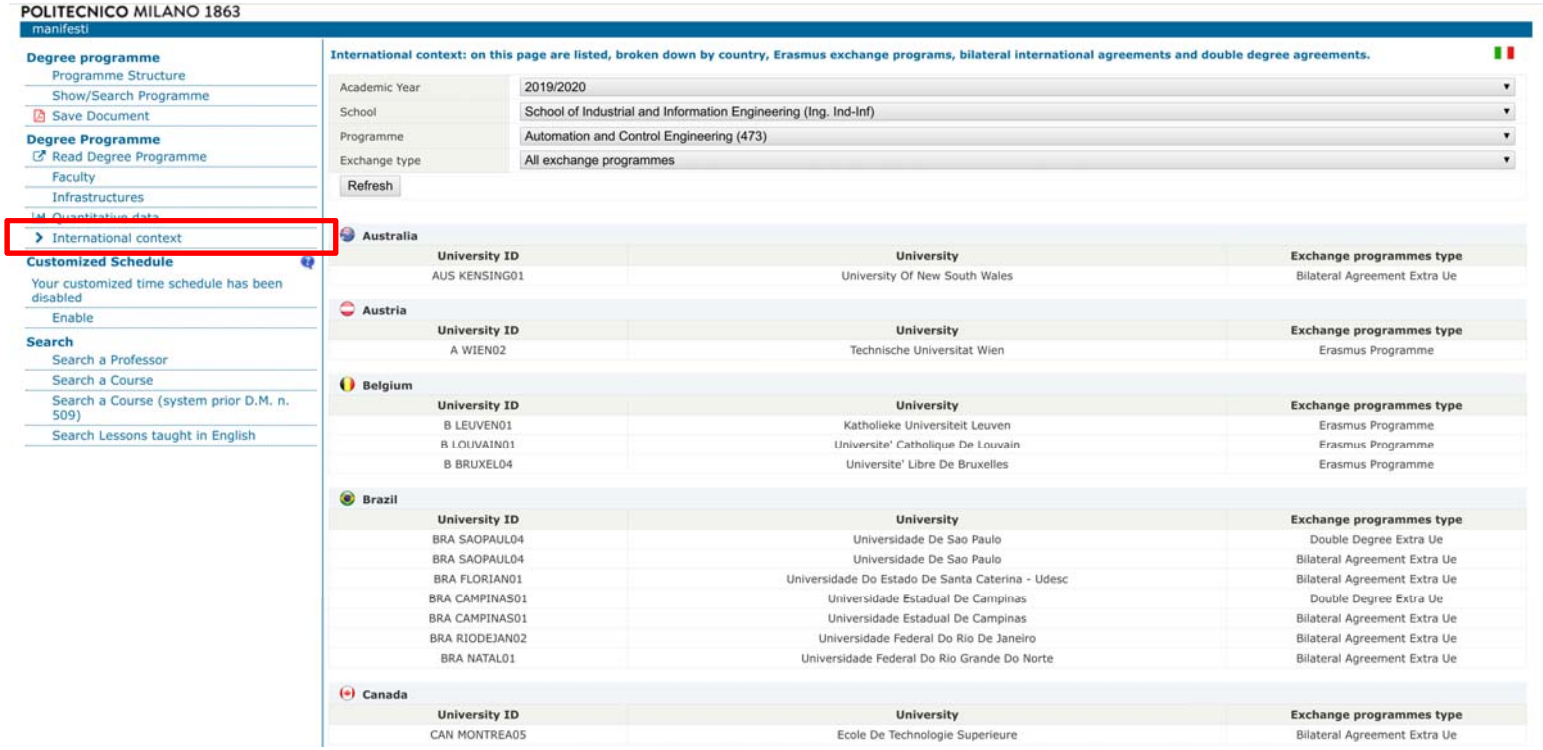
International mobility committee of your Study Programme

Prof. Luca Bascetta
DEIB, building 20
tel: 02 2399 3440
e-mail: luca.bascetta@polimi.it

Prof. Matteo Corno
DEIB, building 20
tel: 02 2399 4037
e-mail: matteo.corno@polimi.it

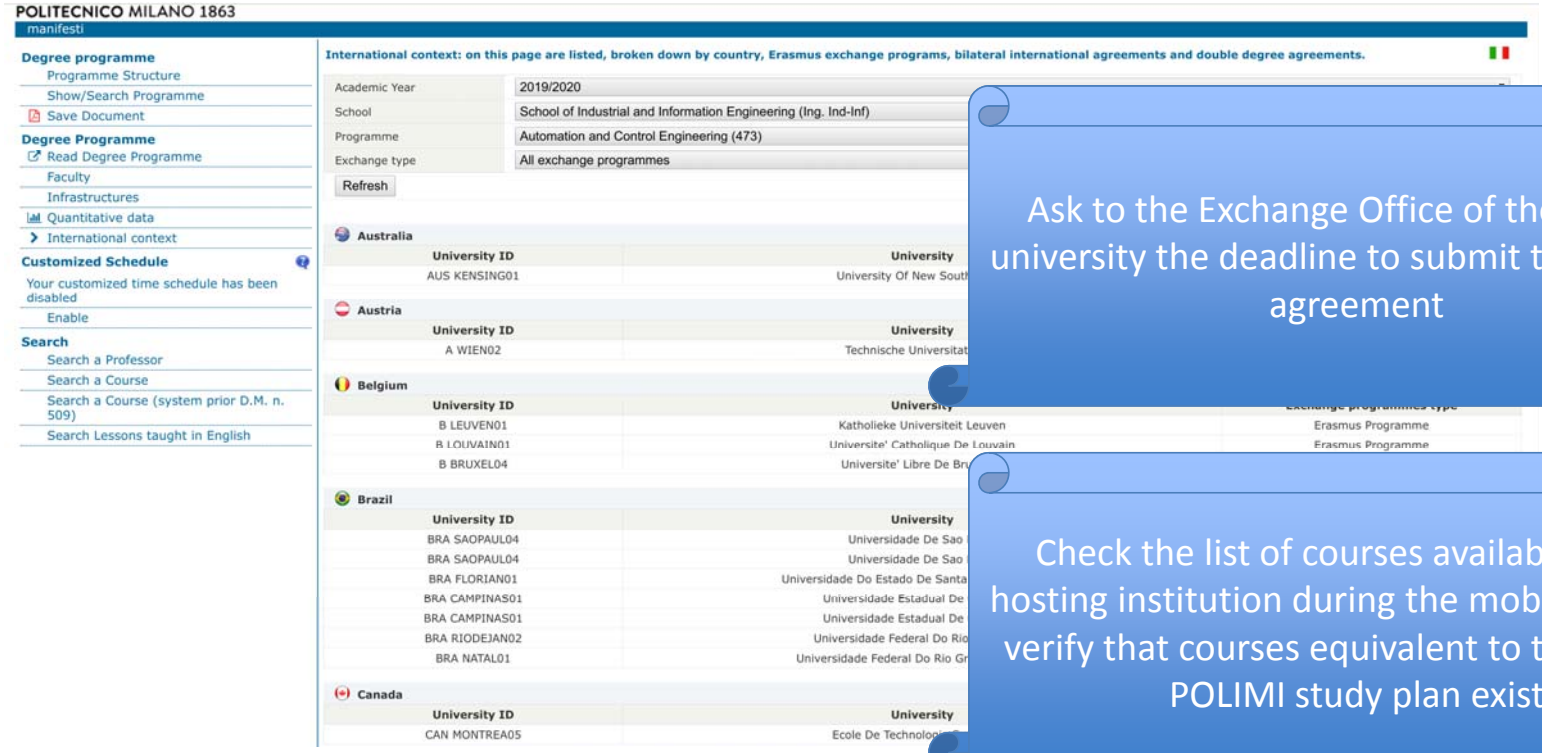
www.ccsatm.polimi.it/studenti/mobilita-internazionale/?lang=en

Selecting a hosting university



www4.ceda.polimi.it/manifesti/manifesti/controller/extra/ScambiInternazionaliPublic.do

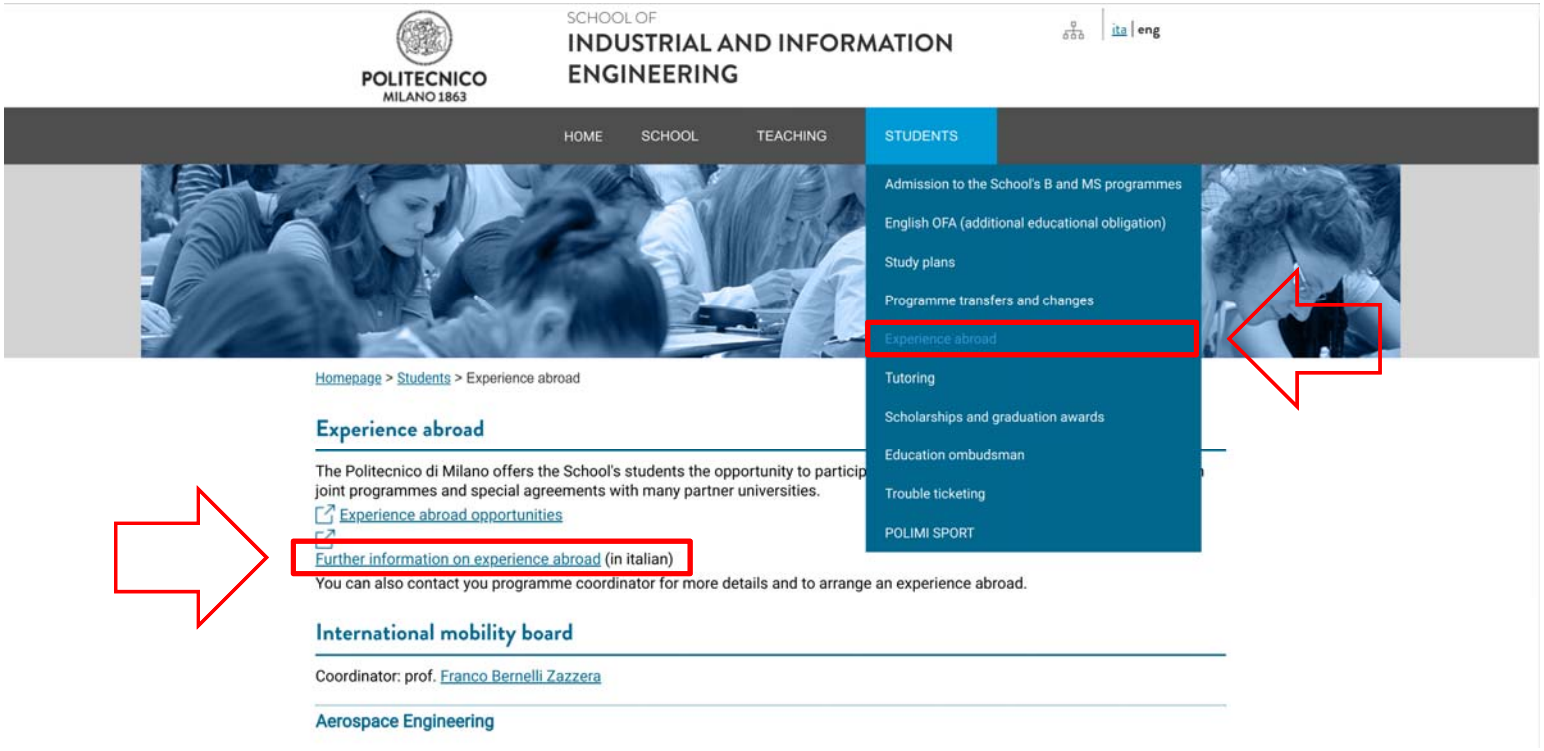
Selecting a hosting university



Ask to the Exchange Office of the hosting university the deadline to submit the learning agreement

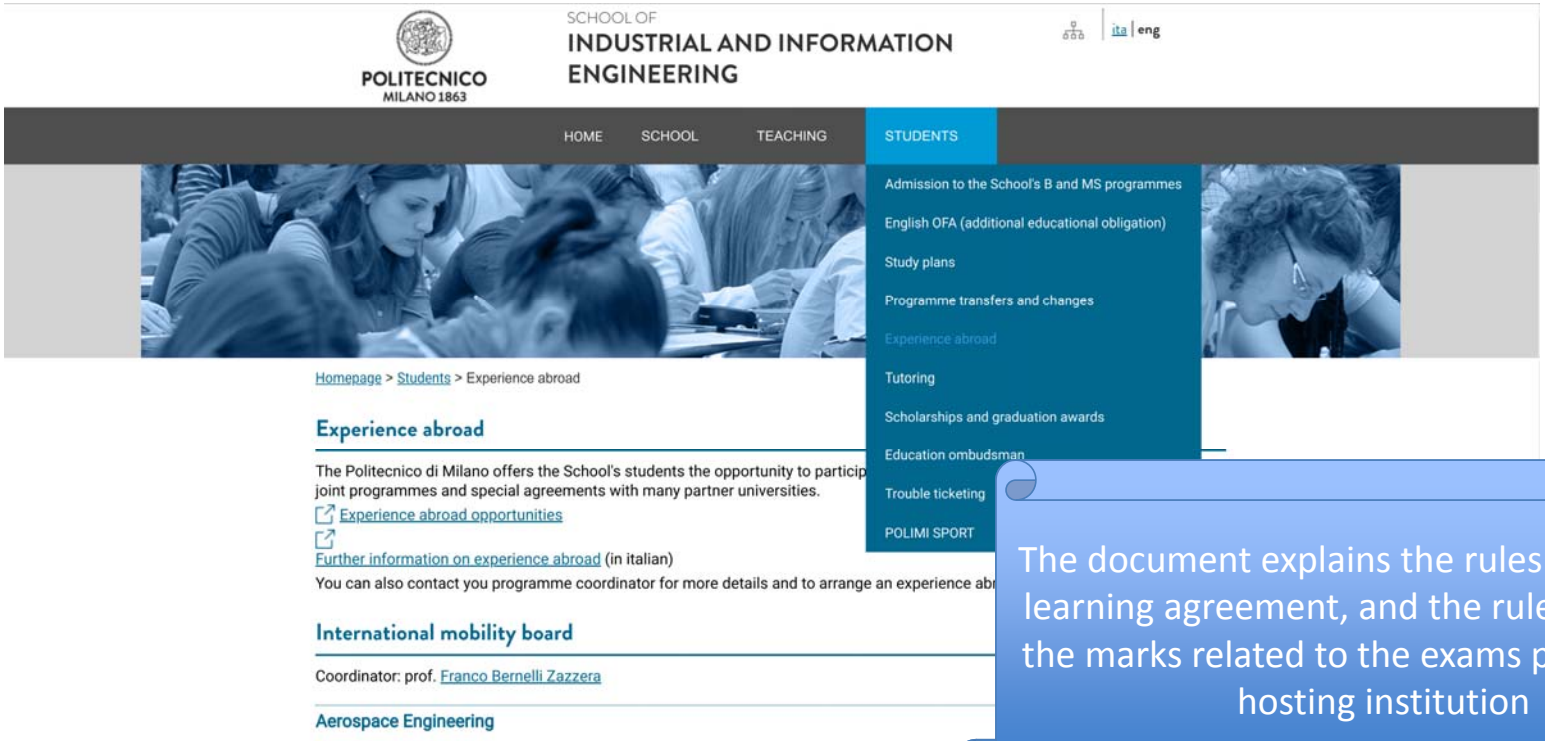
Check the list of courses available at the hosting institution during the mobility period, verify that courses equivalent to the ones in POLIMI study plan exist

Preparing a learning agreement



www.ingindinf.polimi.it/en/students/experience-abroad/

Preparing a learning agreement



The document explains the rules to prepare a learning agreement, and the rules to convert the marks related to the exams passed at the hosting institution

Preparing a learning agreement

The archive of resolutions concerning international exchange programmes can be used to check the equivalence between two courses

www.polimi.it/servizi-online/

A period abroad to prepare a thesis

A thesis (all or part of the work) abroad can be done:

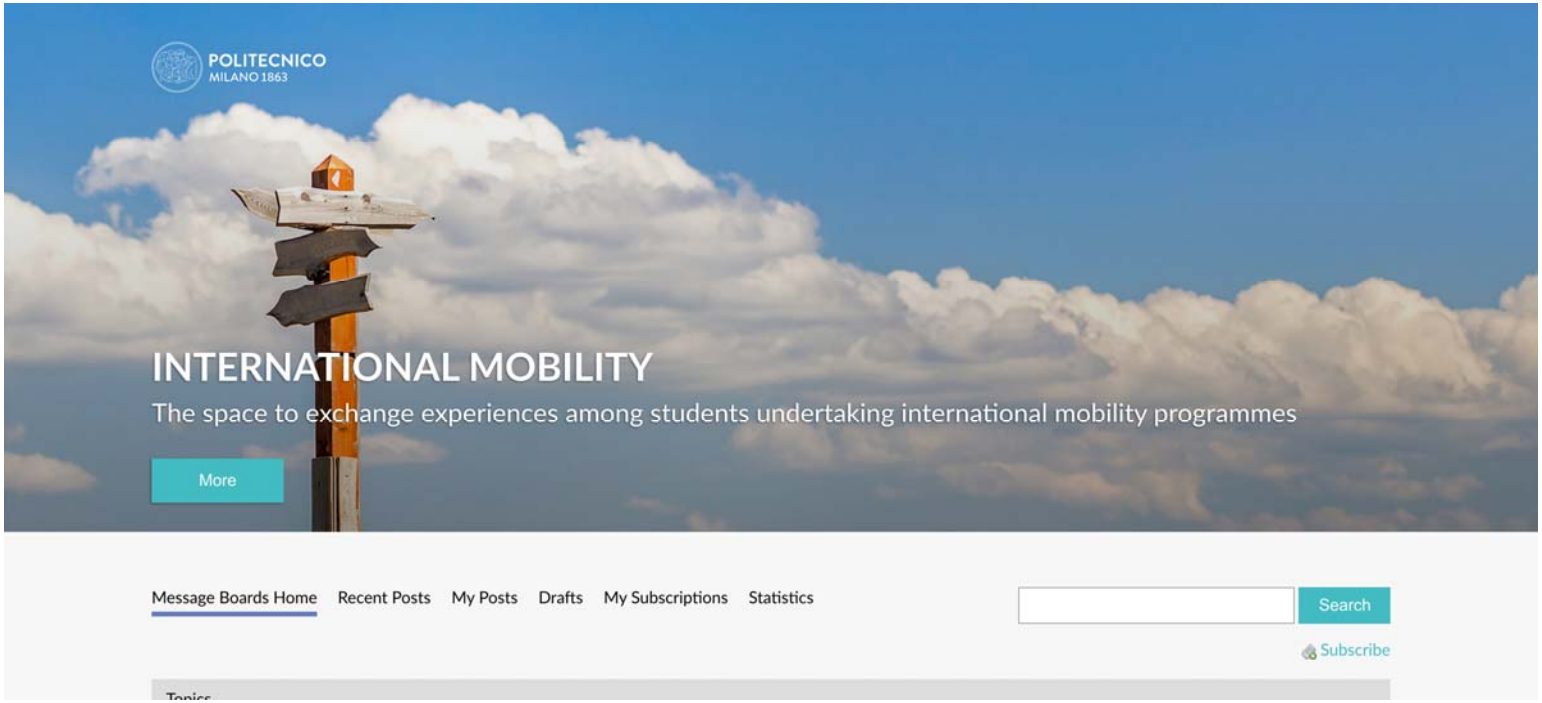
- with the support of a mobility program;
- with the support of the scholarships "Tesi all'estero";
- as a free-mover (pay attention to tuition fees and insurances).

Thesis has to be defended at POLIMI and the supervisor has to be a POLIMI professor.

A few suggestions:

- find a supervisor and contact her/him before leaving;
- if you know the thesis topic in advance, select the POLIMI supervisor according to the topic;
- if you have information on the thesis project in advance, discuss with the POLIMI supervisor in order to understand if it can be considered a "thesis with reviewer" or a "thesis without reviewer".

International Mobility Beep channel



beep.metid.polimi.it/web/mobilita-internazionale/

The Automation and Control Engineering MSc Programme

Programme requirements

How is the programme organized?

- the programme is organized in two years, four semesters
- most of the courses are held at Leonardo Campus, a few at Bovisa Campus.

Programme requirements

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- the programme is organized in two years, four semesters
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What are the rules to obtain your MSc degree?

You have to earn 120 credits:

- 60 credits of mandatory courses:
  - 45 on qualifying subjects (systems and control, identification, converters and drives, applied mechanics)
  - 15 credits on subsidiary subjects (computer science, electronics, measurements, industrial production technologies)
- 40 credits of complementary courses
- a final thesis corresponding to 20 credits

Programme requirements

- each student has to present a study plan
- study plans can be pre-approved or autonomous

Study plan

1st year

Course title	Credits (CFU)	Semester
Computer aided manufacturing	10	1
Dynamics of mechanical systems	10	1
Model identification and data analysis	10	1
Advanced and multivariable control	10	2
Dynamics of electrical machines and drives	10	2
Complementary courses	10	2

2nd year

Course title	Credits (CFU)	Semester
Software Engineering (for Automation)	5	2
Automation and Control Laboratory	5	2
Complementary courses	30	1, 2
Thesis	20	1, 2

Study plan

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Dynamics of electrical machines and drives	10	2
Complementary courses	10	2

2nd year

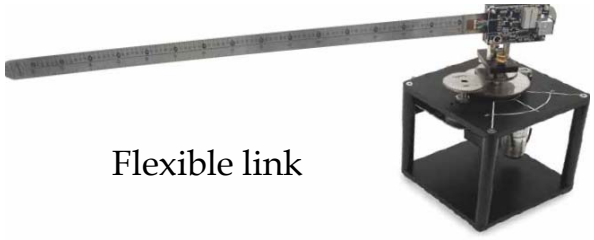
Course title	Credits (CFU)	Semester
Software Engineering (for Automation)	5	2
Automation and Control Laboratory	5	2
Complementary courses	30	1, 2
Thesis	20	1, 2

Automation and Control Laboratory

- Course held in a lab
- Students are divided in groups, working on various experimental set-up
- The course is offered in the second semester of the second year

Automation and Control Laboratory

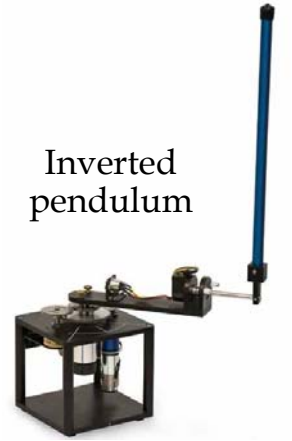
QUBE- Servo 2
(2 unità)



Flexible link

Flexible joint

Ball and beam



Inverted
pendulum

Torsion module

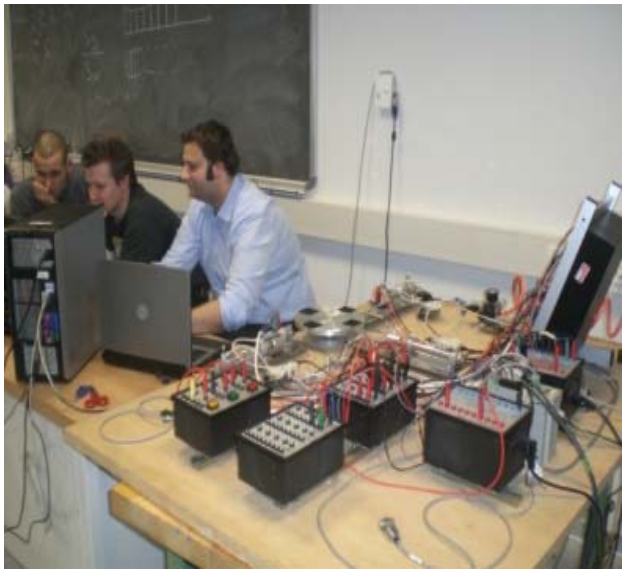
2 DOF ball balancer

2 DOF robot module

Automation and Control Laboratory

- Starting from 2019-20 there are two Automation and Control Laboratory Courses:
  - one located at the Mechanical Engineering Department (Bovisa Campus)
  - a new one located at Building n. 7 (Leonardo Campus)
- Two different codes, same name
- The one at Leonardo Campus has a limited number of seats

Automation and Control Laboratory (Bovisa Campus)



Automation and Control Laboratory (Leonardo Campus)

Study plan

1st year

Course title	Credits (CFU)	Semester
Computer aided manufacturing	10	1
Dynamics of mechanical systems	10	1
Model identification and data analysis	10	1
Advanced and multivariable control	10	2
Dynamics of electrical machines and drives	10	2
Complementary courses	10	2

2nd year

Course title	Credits (CFU)	Semester
Software Engineering (for Automation)	5	2
Automation and Control Laboratory	5	2
Complementary courses	30	1, 2
Thesis	20	1, 2

Study plan – Complementary courses

- Tables of suggested courses:
  - TAB1 (1st semester) and TAB2 (2nd semester)
  - TAB3 (1st semester) and TAB4 (2nd semester)
- schedules of courses in TAB1 and TAB2 will not overlap, the same is not guaranteed for courses in TAB3 and TAB4
- at least 20 credits out of 40 credits must be taken from TAB1 or TAB2 (a larger number of credits is suggested)

Courses in TAB1 and TAB2

Course title	Credits (CFU)
Advanced measurement systems for control applications	*5*
Advanced process control	*5*
Automation and control in vehicles	*5*
Automation of energy systems	*5*
Constrained numerical optimization for estimation and control	*5*
Control of industrial robots	*5*
Control of mobile robots	*5*
Data driven control system design	*5*
High-tech entrepreneurship	*5*
Networked control	*5*
Noise and vibration engineering	*5*
Nonlinear control	*5*
Numerical analysis	*5*
Power electronics and supplies	*5*
Project work	*5*
Production systems control	*5*
Robust control	*5*
Safety in automation systems	*5*
Simulation techniques and tools	*5*
Systems theory	*5*
Further courses	*…*

Courses in TAB1 and TAB2

Course title	Credits (CFU)
Advanced measurement systems for control applications	*5*
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Robust control	*5*
Safety in automation systems	*5*
Simulation techniques and tools	*5*
Systems theory	*5*
Further courses	*…*

Project Works

- Project Works are courses made in collaboration with companies
- Companies propose «open innovation» topics, on design activities in the field of automation and control
- Each project work is run under the supervision of an academic and an industrial tutor
- Students work in small groups during the semester
- Usually a weekly meeting with the industrial tutor is arranged
- At the end of the Project Work students prepare a report and discuss the project in front of the academic and the industrial tutor and the other students

Project Works

When to apply

- Project Works are usually offered in the first semester of the second year
- At the beginning of September, available Project Works are announced to students of the second year of the programme.
- At most 15 students are admitted in each Project Work.
- If further Project Works are proposed at a later stage for the second semester, then, a second announcement is made in February.

Requirements

- Students can apply if they have already earned at least 40 credits.
  The ranking is made based on the average of grades and the preferences expressed by the students.

Project Work Delegate

Prof. Paolo Rocco
DEIB, building 20
tel: 02 2399 3685
e-mail: paolo.rocco@polimi.it

Project Works – 2019/20

- Control system and actuation for an electronically active sole of a shoe - The very first active sole able to adapt its morphology to changes both in the external environment, like terrain, temperature or humidity, and in the dynamic state of the user: design and development of actuation, sensing and control systems
  Academic tutor: Prof. Sergio Matteo Savaresi – Partner company: **e-Novia S.p.A.**

- Control system for an autonomous micro vehicle for urban goods delivery - A fully autonomous micro electric vehicle for urban delivery of goods: design and development of an architecture for electric powertrain, sensing and control systems
  Academic tutor: Prof. Matteo Corno – Partner company: **YAPE S.r.l.**

- Intelligent collaborative robotics - Innovative functionalities for collaborative robots (cobots) based on control, prediction, and optimization technologies
  Academic tutor: Prof. Paolo Rocco – Partner company: **Smart Robots srl**

Courses in TAB1 and TAB2

Course title	Credits (CFU)
Advanced measurement systems for control applications	*5*
Advanced process control	*5*
Automation and control in vehicles	*5*
Automation of energy systems	*5*
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Networked control	*5*
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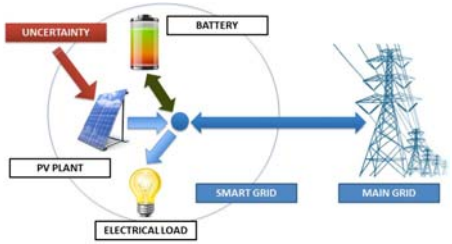
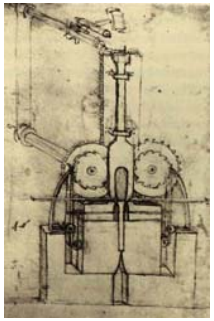
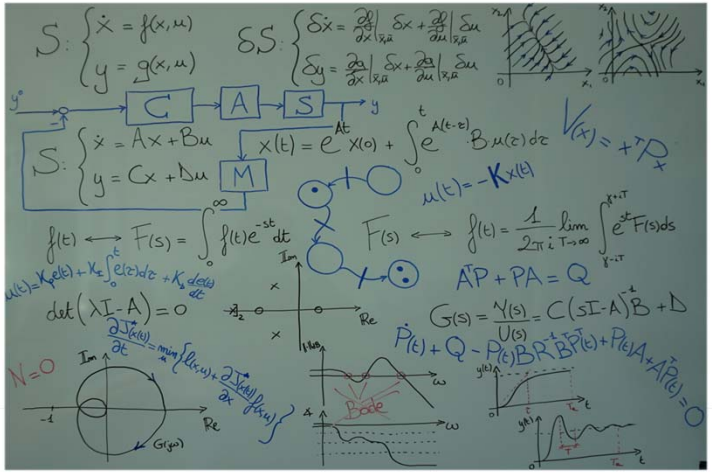
Nonlinear control	*5*
Numerical analysis	*5*
Power electronics and supplies	*5*
Project work	*5*
Production systems control	*5*
Robust control	*5*
Safety in automation systems	*5*
Simulation techniques and tools	*5*
Systems theory	*5*
Further courses	*…*



Courses in TAB1 and TAB2

Course title	Credits (CFU)
Advanced measurement systems for control applications	*5*
Advanced process control	*5*
Automation and control in vehicles	*5*
Automation of energy systems	*5*
Constrained numerical optimization for estimation and control	*5*
Control of industrial robots	*5*
Control of mobile robots	*5*
Data driven control system design	*5*
High-tech entrepreneurship	*5*
Networked control	*5*
Noise and vibration engineering	*5*
Nonlinear control	*5*
Numerical analysis	*5*
Power electronics and supplies	*5*
Project work	*5*
Production systems control	*5*
Robust control	*5*
Safety in automation systems	*5*
Simulation techniques and tools	*5*
Systems theory	*5*
Further courses	*…*





Study plan – Complementary courses

- at least 20 credits out of 40 credits must be taken from TAB1 or TAB2 (a larger number of credits is suggested)
- the residual 20 credits should be chosen from TAB1, TAB2, TAB3 and TAB4
- students can also include a maximum of 10 credits of freely chosen courses

Autonomous study plans

- Each student is expected to present his/her study plan
- If the study plan is compliant with the suggested study plans, it is automatically approved ("pre-approved")
- Otherwise the study plan will be considered "autonomous" and then subjected to approval by a committee
- In particular, if students include freely chosen courses (up to 10 credits max), then the committee will assess the adequacy of such courses with the learning objectives of the programme

Study Plan Committee

Prof. Simone Garatti
DEIB, building 20
tel: 02 2399 3650
e-mail: simone.garatti@polimi.it

Prof. Marcello Farina
DEIB, building 20
tel: 02 2399 3599
e-mail: marcello.farina@polimi.it

It is advisable to contact Prof. Garatti or Prof. Farina before submitting an autonomous study plan

Thesis

	Thesis with reviewer "Tesi"	Thesis without reviewer "Tesina"
Expected outcome	*an innovative project in the field of automation and control*	*a (maybe less) innovative project in the field of automation and control*
Reviewer required	yes	no
Maximum increment for the final grade	7/110	4/110

You can ask to any of your professors for a topic for your thesis.

Degree awards

2 Degree Awards for the Best MSc Thesis in Automation and Control Engineering entitled to

- **Prof. Claudio Maffezzoni**
  for the Best Thesis on the Application of advanced techniques for automation and control in highly technological fields

- **Prof. Nicola Schiavoni**
  for the Best Thesis on the Development of innovative methodologies for automation and control

The call for year 2020 will be published in June 2020. A thesis can be submitted if it was defended in the year starting May 1, 2019 and ending April 30, 2020.

Honours Program ‘Scientific Research in Information Technology’

The Honours Programme is an extracurricular program offered that aims at **training MSc students in conducting scientific research in Information technology.**
Once obtained, the honours program title will officially appear in the student's diploma supplement together with a description of the activities performed.

The programme includes two main elements:

- extra curricular exams
- realization of a thesis with significant results of scientific research in the field of information technology leading to a scientific document

Honours Program ‘Scientific Research in Information Technology’

Courses (soft skills)

- Scientific research
- Scientific communication

Research activities (additional w.r.t. the MSc thesis)

- State of the art and project proposal (report and presentation)
- Research laboratory and manuscript (report/article)
- Reviewing, rebuttal, and presentation (report and presentation)

Research topics in Automation and Control Engineering

Theory and Application of Control and Optimization

Description: The research area includes all the topics related to the theory and application of modeling, control, identification, learning, and optimization methods for dynamic systems. Applications include, but are not limited to, energy systems, smart grids, vehicles.

Proponents: M. Corno, L. Fagiano, M. Prandini, S. Savaresi, R. Scattolini, M. Tanelli

Positions available: 5

Robotics, Mechatronics, and Industrial Automation

Description: The research area includes topics related to modelling and control of robots (industrial, mobile, aerial) and mechatronic systems in general. The broader area of industrial automation is included as well.Experimental facilities to validate the theoretical results will be available.

Proponents: L. Bascetta, L. Ferrarini, G. Gruosso, P. Rocco

Positions available: 3

Honours Program 'Scientific Research in Information Technology'

Application

- First call (March/April)
  students enrolled at the second semester of the first year of the MSc track, with 20 CFUs and 28 GPA
  [from the latest 2019 call]
- Second call (October):
  students enrolled at the first semester of the second year of the MSc track, with 50 CFUs and 28 GPA
  [from the latest 2019 call]

Websites

Deadlines for the applications, rules etc… are posted at www.honours-programme.deib.polimi.it

Details on the latest call published at

https://www.polimi.it/en/programmes/high-level-training-courses/honours-programme-scientific-research-in-information-technology-esr-it/

will be available soon. Deadline for applying: October 25, 2019

Reference person for Automation and Control Engineering

Prof. Patrizio Colaneri
DEIB, building 20
tel: 02 2399 3656
e-mail: patrizio.colaneri@polimi.it

Visit to a SPS Trade Show

“Lezioni in fiera”

a chance for MSc students to visit SPS (Smart Production Solution) Italia leading Trade Show for the Industrial Automation and Digitalisation in Italy, and attend presentations of key industrial players in the field

Where?

Fiere di Parma Fairground

When?

26-28 May 2020

You will be invited to participate to a one-day visit organized typically by Prof. Alberto Leva.