



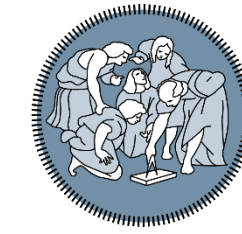
POLITECNICO
MILANO 1863

SCHOOL OF
INDUSTRIAL AND INFORMATION ENGINEERING

Engineering Physics

www.ccs-fisica.polimi.it

Politecnico di Milano: organization



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The logo originates from the cartoon by Raffaello “The School of Athens” (Ambrosiana Art Gallery, Milan)



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

Over **42.000**
students



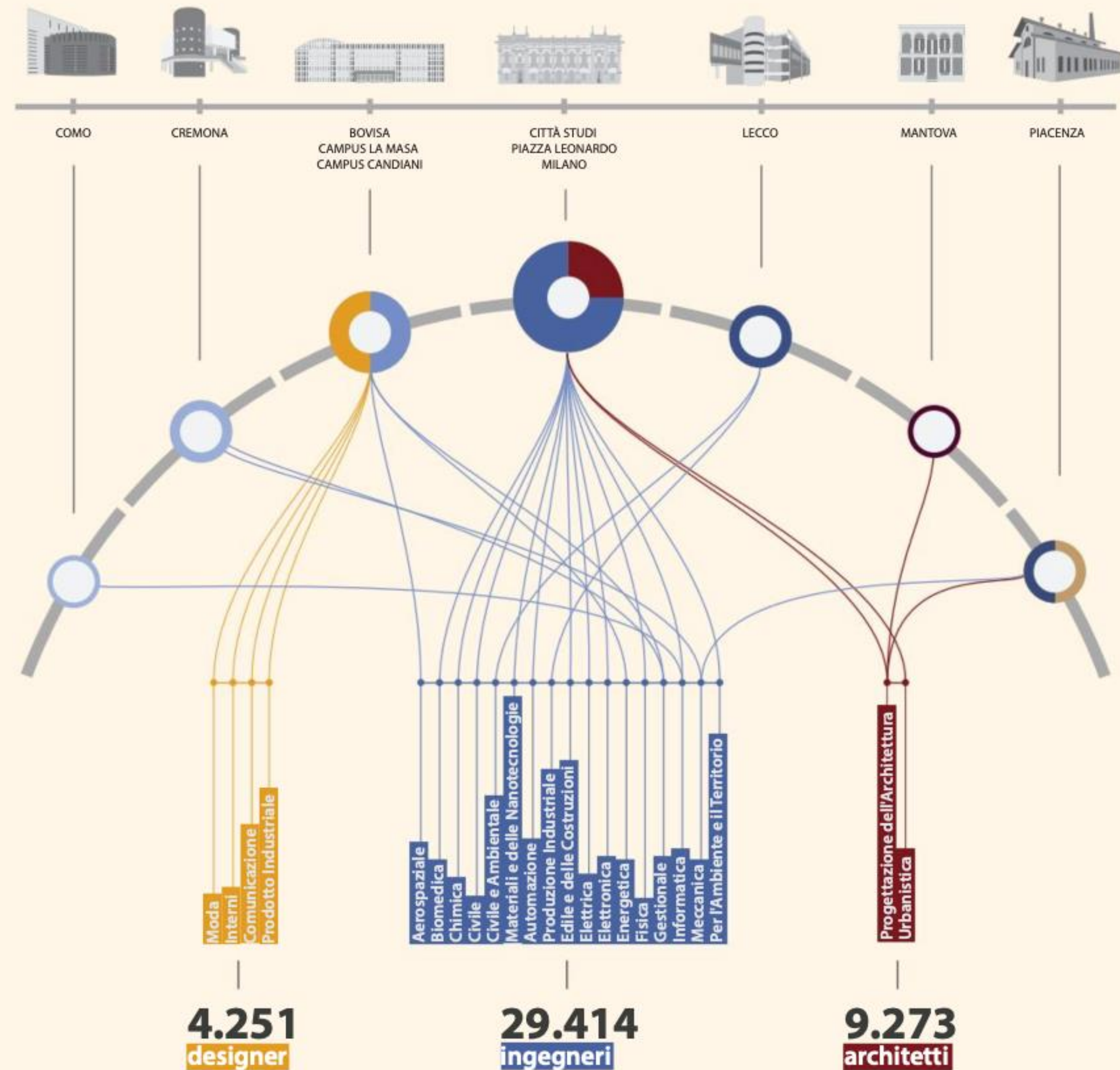
4 Schools
**Industrial
Engineering,
Civil Engineering,
Architecture,
Design**

12
Departments

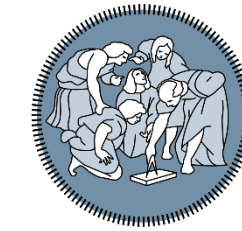
Ranked **no.1** in Italy,
no. 7 in Europe, **no. 13** in the world in
the category «Engineering & Technology»
QS World University Ranking 2022

Politecnico di Milano Campuses

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



Schools and Study Programs



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Study Programs (Bachelor and Master) are associated to Schools:

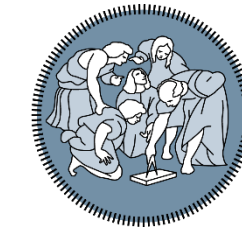
- Architecture Urban Planning Construction Engineering,
- Design,
- Civil, Environmental and Land Management Engineering,
- **Industrial and Information Engineering.**

The **Dean (Preside)** is the head of the School and through specific groups (Board and Council) guides the teaching activities of all study programs.

Each study program is led by a **Coordinator**, a reference point for all students.



Reference persons for your Study Program



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You are enrolled in the Study Program of Engineering Physics which is part of the **School of Industrial and Information Engineering**

Dean of the School: prof. **Antonio Capone**

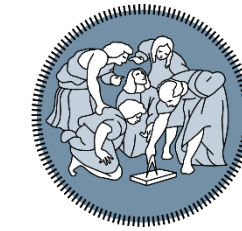
Coordinator of your study program: prof. **Mauro Nisoli**

Admission Committee: prof. **Giacomo Ghiringhelli**, prof. **Paolo Laporta**

Programme Board (for individual study plan preparation): prof. **Giacomo Ghiringhelli**,
prof. **Paolo Laporta**

Student mobility: prof. **Andrea Bassi**, prof. **Claudia Dallera**

Rappresentanti degli Studenti



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Rappresentanti degli Studenti in
Ingegneria Fisica

Alessandro Baserga: alessandro.baserga@mail.polimi.it

Giorgio Calandra: giorgio.calandra@mail.polimi.it

Pierluigi Dei Rocini: pierluigi.deirocini@mail.polimi.it

Lorenzo Fantauzzi: lorenzo.fantauzzi@mail.polimi.it

Pietro Milanese: pietro1.milanese@mail.polimi.it

Alice Oppizzii: alice.oppizzii@mail.polimi.it

Gabriele Rolleri: gabriele.rolleri@mail.polimi.it

Giovanni Zhang: giovanni.zhang@mail.polimi.it

The role of Students and their Representatives



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CENTRAL BODIES

ACADEMIC SENATE

23 MEMBERS

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



THE ACADEMIC SENATE MEETS ONCE A MONTH

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

BOARD OF GOVERNORS

11 MEMBERS

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



THE CDA MEETS ONCE A MONTH

ROLE:

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

4 SCHOOLS

ARCHITECTURE URBAN PLANNING CONSTRUCTION ENGINEERING | DESIGN | CIVIL, ENVIRONMENTAL AND LAND MANAGEMENT ENGINEERING | INDUSTRIAL AND INFORMATION ENGINEERING

JOINT COMMITTEE

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

STUDY PROGRAMME BOARD – CCS

MEMBERS

- PRESIDENT OF THE CCS;
- 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

THE CCS MEETS EVERY 3-4 MONTHS. THE ATTENDANCE VARIES ACCORDING TO EACH STUDY PROGRAMME.

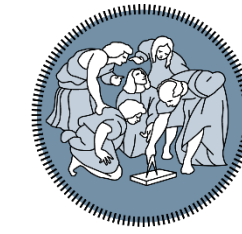
Students have the right to participate in the life and governance of the University through their Representatives. They are asked to express their opinion on the University management bodies.

Student Representatives are elected directly by you.

The **elections** are held every 2 years and are an important opportunity to make students voices heard

Student Representatives are the simplest and most effective way of conveying students' **proposals and requests** on basic subjects, such as teaching and services for students, to the appropriate management bodies.

Student opinion on teaching



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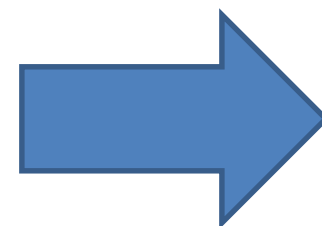
The survey of student's opinions is one of the main tools for monitoring the quality of teaching:

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

By completing the questionnaire, students actively participate in the process of quality improvement.

The questions concern:

- teaching
- teachers
- teaching assistant activities
- infrastructures



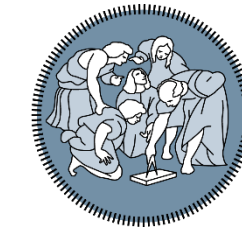
Since your opinions are highly considered, you are invited to:

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

Servizi e Opportunità



Servizi di supporto agli studenti: a chi rivolgersi per ...



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Questioni inerenti la didattica

- Docente dell'insegnamento
- Coordinatore del Corso
- Rappresentanti degli Studenti
- Commissione Paritetica Docenti - Studenti
- Preside della Scuola
- Difensore degli studenti

Questioni amministrative

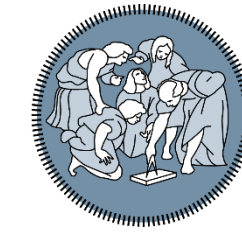
- Segreteria Studenti (sportelli, appuntamento, chat, chatbot, e-mail
www.polimi.it/studenti-iscritti/contatti)

Questioni organizzative e piani di studio

- Referenti del Corso di Studi
- Uffici di Presidenza della Scuola (sportelli, appuntamento, chat e mail
www.polimi.it/studenti-iscritti/contatti)
- Segreterie studenti di Dipartimento



Normativa di riferimento



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- **Regolamento didattico**
disponibile sulle pagine web di Scuola: <http://www.ingindinf.polimi.it>
e di Ateneo: <https://www.polimi.it/corsi/>
- **Carta dei Diritti e dei Doveri degli Studenti**
http://www.normativa.polimi.it/?id_sottoc=66
- **Regolamenti di Scuola**
<https://www.ingindinf.polimi.it/it/scuola/informazioni-e-documenti/documenti-e-regole>
- **Scadenze amministrative**
<https://www.polimi.it/studenti-iscritti/calendario-e-scadenze>

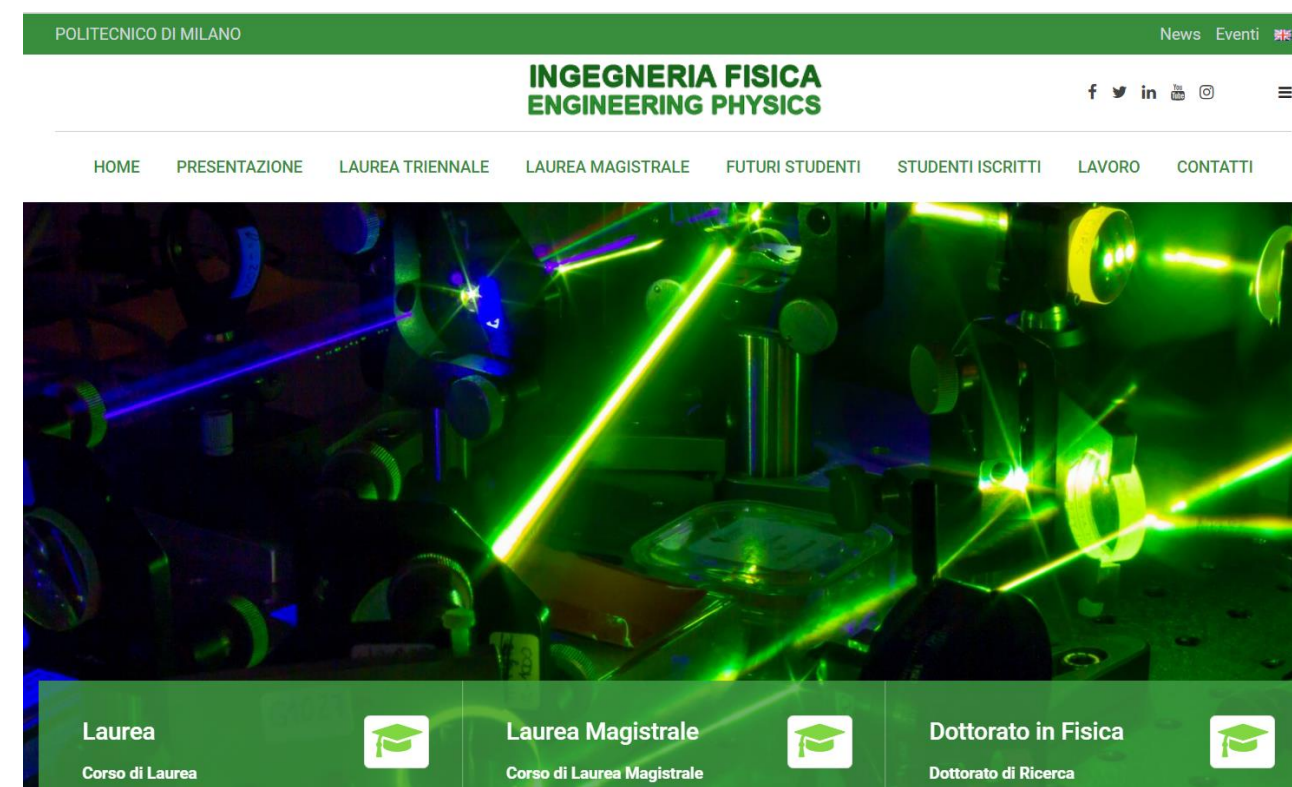


Comunicazione e strumenti



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- Il **sito del Politecnico** www.polimi.it e, in particolare, la sezione dedicata agli studenti (www.polimi.it/studenti) per tutte le informazioni sull'ateneo e la tua carriera.
- Il **sito della Scuola** <http://www.ingindinf.polimi.it> per ulteriori informazioni specifiche sulla tua carriera (ammissioni, piani di studio, lauree).
- Il **sito di Ingegneria Fisica** <https://www.ccs-fisica.polimi.it> per ulteriori informazioni specifiche sul corso di studi in Ingegneria Fisica.
- **Servizi online** www.polimi.it/servizionline la tua interfaccia informatica per gestire la tua carriera universitaria



Comunicazione e strumenti

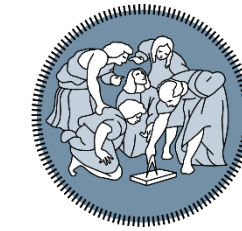


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- **POLIMIAPP** : la app dedicata a tutti gli studenti per consultare l'orario delle lezioni, gestire il piano degli studi, prenotare gli appuntamenti in segreteria
 - gestisci la tua carriera didattica da un unico punto di accesso, tenendo sempre sotto controllo piani di studi, lezioni, esami e tasse grazie ad un'agenda proattiva e personale
 - ricevi news personalizzate in base ai tuoi interessi
 - ricevi notifiche personalizzate e rimani al corrente delle scadenze rilevanti per te
 - ricerca aule e aule libere all'interno dei campus
 - contatta il servizio di supporto più adatto
- **canali social** istituzionali: 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



WeBeep



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Italiano (it) ▾



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WeBeep

Login staff

Polimi login

Ti serve aiuto per accedere?

 Beep (versione precedente di WeBeep)

WeBeep L'ambiente online per la didattica del Politecnico di
Milano

Canali WeBeep
Insegnamenti Materiale
didattico dei corsi e canale
di comunicazione con i
docenti

Canale WeBeep Corso di
Studi Canale di
comunicazione e
discussione con
coordinatore e
rappresentanti degli studenti

I servizi e le opportunità



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PoliPsi

servizio di **Counseling e di Sostegno Psicologico e Psicoterapeutico**
(responsabile scientifico: **Prof. Licia Sbattella**)

- Il servizio si avvale di **psicologi e di psicoterapeuti** esperti di dinamiche relazionali e di processi di apprendimento
- Il servizio offre un luogo in cui confrontarsi e ricevere sostegno competente nei momenti di disagio, di incertezza e di difficoltà legate allo studio o a eventi personali
- <https://www.polimi.it/servizi-e-opportunita/altri-servizi-e-opportunita/servizi-di-supporto-e-ascolto/polipsi/>

Biblioteche

All'interno dei campus del Politecnico sono presenti numerose biblioteche: 4 a Milano, 5 nei Poli territoriali

Career Service

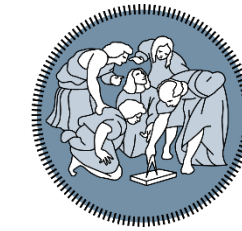
<http://www.careerservice.polimi.it/> il servizio per prepararsi per il mondo del lavoro e trovare il primo impiego



 **CareerService**
www.careerservice.polimi.it



POKI MI
Open Knowledge



Tutorato peer-to-peer: Studenti-tutor più esperti forniscono aiuto, singolarmente o in piccoli gruppi da 3-4 persone

Tutorato di base: è possibile frequentare i tutorati tenuti da dottorandi o da docenti esperti previsti per gli **insegnamenti di base** dei corsi di laurea triennali. Tali tutorati non sono legati a specifici sezioni o scaglioni alfabetici: gli studenti possono accedere indistintamente secondo la calendarizzazione più favorevole. Il calendario sarà pubblicato non appena disponibile sulla pagina web del tutorato nel sito della scuola.

International mobility

<https://www4.ceda.polimi.it/manifesti/manifesti/controller/extra/ScambiInternazionaliPublic.do>



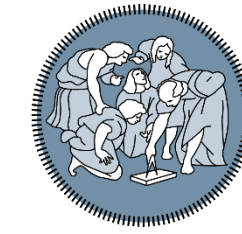
Short term mobility (6 months):

- **87 partner Universities**
- **30 countries**

Long term mobility (double degree):

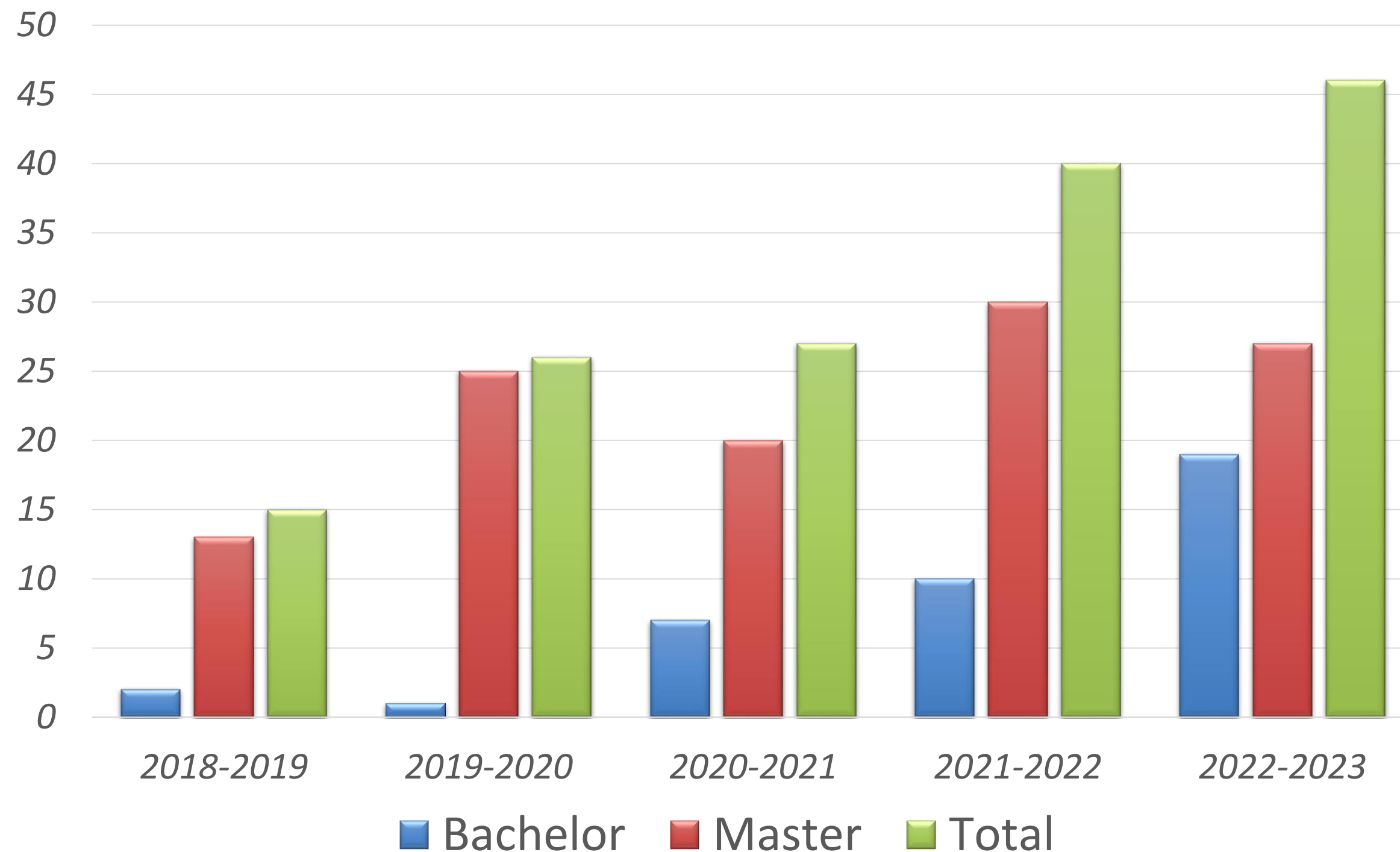
- **14 partner Universities**
- **EU:** Belgium, Denmark, Finland, France, Greece, Portugal, Spain, Sweden
- **extra EU:** Brazil, Canada, Japan

International mobility



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Outgoing students (Erasmus, Double Degree, extra-EU)



Theses abroad

~20 students/year (outgoing)

~10 students/year (incoming)

Incoming students

(Erasmus and double degree):

18 students

in academic year 2021/2022

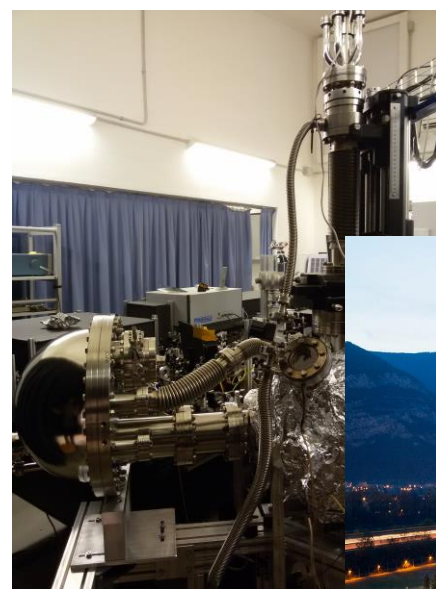
After Master Degree



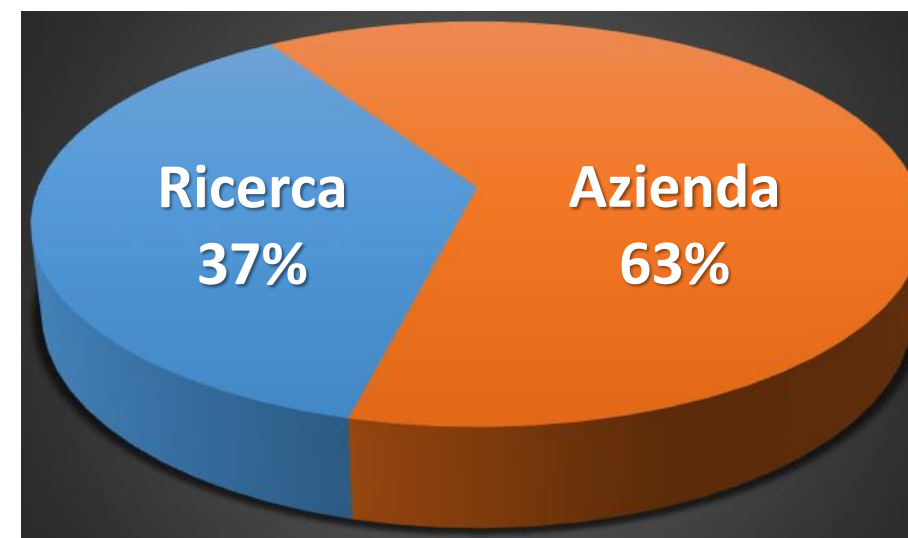
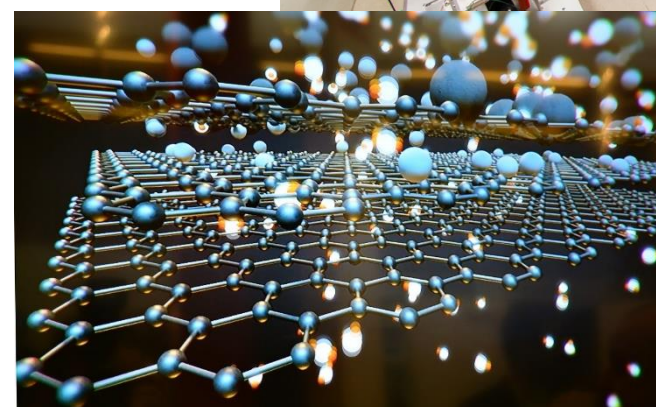
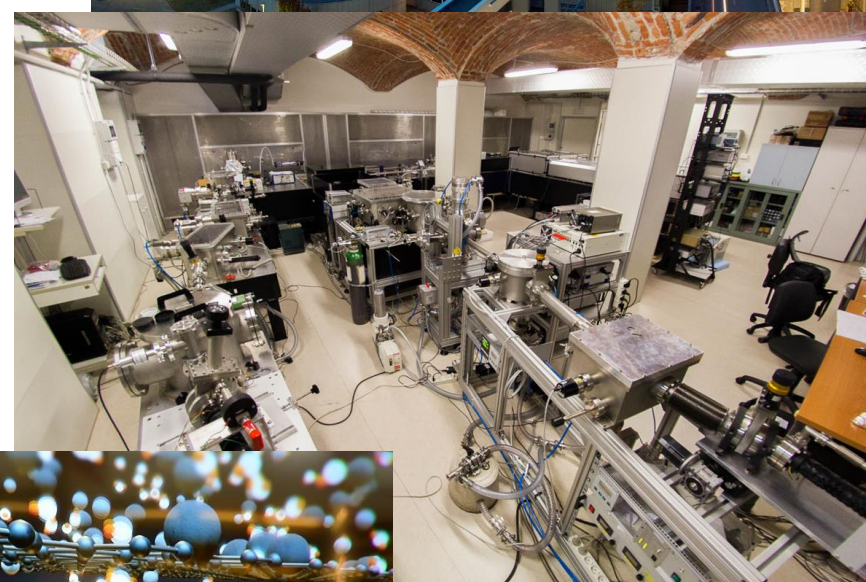
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PhD

Job market



ESRF/P. JAYET



Status occupazionale



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INGEGNERIA FISICA

INDAGINE OCCUPAZIONALE 2020 - LAUREATI MAGISTRALI

Nel 2018 hanno conseguito la laurea magistrale in Ingegneria Fisica 57 studenti di cui 56 italiani e 1 stranieri. Hanno risposto all'indagine in 47 (tasso di risposta 82%).

Profilo laureati: il 23% sono donne e il 77% sono uomini, hanno un'età media alla laurea di 25 anni, impiegano per conseguire il titolo di studio 2,4 anni con una media di voto di laurea di 105,8/110. Il 36,8% ha svolto il tirocinio durante gli studi.

TASSO DI OCCUPAZIONE*	OCCUPATI ENTRO 6 MESI*	GUADAGNO MENSILE NETTO
 100%	 93%	 €1.729
<small>* a 1 anno dalla Laurea al netto di chi continua gli studi</small>	<small>* percentuale calcolata su chi è occupato a 1 anno dalla Laurea</small>	

AREE DI COMPETENZA

Ricerca e Sviluppo	64%
Progettazione	32%
Pianificazione	25%
Produzione	14%
Commerciale, Vendite e Acquisti	14%

RAPPORTO DI LAVORO



Dipendenti **96%**
Autonomi **4%**

TIPOLOGIA DI CONTRATTO



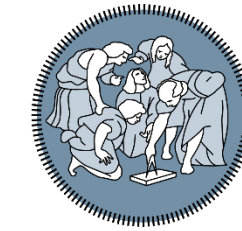
Tempo Indeterminato **67%**
Tempo Determinato **26%**
Apprendistato **7%**

DIMENSIONE AZIENDA



1-250 **57%**
251-1.000 **4%**
+1.000 **39%**

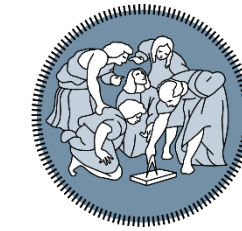
Engineering Physics in the job market



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- ❁ **Wide range of knowledge** in **technology**, both at a **fundamental and application level** (physics of matter, nanoelectronics, photonics, biomedical physics/optics)
- ❁ Ideal candidate for the role of "**System Engineer**" in the development of **complex products / technologies** (laser systems, innovative nano-electronic devices, diagnostic systems based on emerging / frontier technologies)
- ❁ **Wide-ranging training** to “master” complex realities with **high technological content** in industry

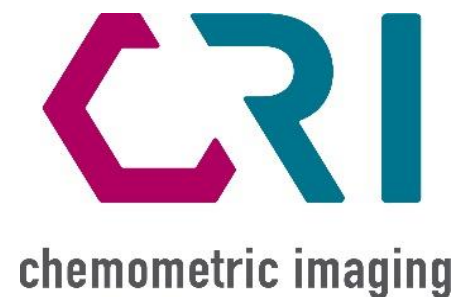
Startup



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Development and marketing of high-tech products in the photonics and spectroscopy sector, for the generation, control, detection and analysis of light.

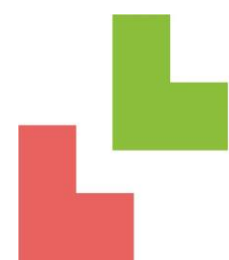


Development and marketing of an innovative platform based on coherent Raman microscopy for the chemometric analysis of live cells and tissues in the medical field, to improve the diagnostics and treatment of tumors, with the help of artificial intelligence.



PHOTONPATH

Design, development, production and marketing of integrated photonic circuits for fiber optic, sensor and IT network applications.



LITHIUM LASERS

Development, production and distribution of ultrafast lasers for scientific and industrial applications.



Development, production and marketing of hardware systems based on near infrared spectroscopy technologies for the non-invasive and continuous characterization and monitoring of tissues and biological materials.



EYE4NIR

Development of hyperspectral cameras capable of operating both in the visible (VIS) and near infrared (NIR).



Development, production and marketing of new generation miniaturized Brillouin spectrometers. This technology allows to optically recover mechanical viscoelastic information of both organic and inorganic materials, without the need for contact.

Engineering Physics @ PoliMi



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Engineering Physics website: **www.ccs-fisica.polimi.it**

Physics Department website: **www.fisi.polimi.it**



www.facebook.com/fisipolimi



twitter.com/fisipolimi



www.linkedin.com/company/fisica-politecnico-di-milano



www.instagram.com/fisipolimi



www.youtube.com/user/fisipolimi

For information write to: **info-dfis@polimi.it**



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