

# Making Innovation a Common Good.

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POLITECNICO MILANO 1863 SCHOOL OF MANAGEMENT

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Research, education and open innovation in Management, Economics and Industrial Engineering.

> Established in 2003 to bring together all research, technology transfer and education activities in the field of management within **Politecnico di Milano**, our School of Management offers a comprehensive portfolio of programmes, from Bachelor and Master of Science Courses for University Students to post-graduate and executive education for professionals and companies. We have two main constituents: the **Department of Management, Economics and Industrial Engineering** (DIG – Dipartimento di Ingegneria Gestionale), established in 1990 and devoted to research, open innovation and undergraduate education, and **MIP**, **the Graduate School of Business** of Politecnico di Milano, founded in 1979, devoted to postgraduate and executive education.



We are proudly part of Politecnico di Milano—a world-class technical university—and we apply our intimate nature of engineers to managerial issues.

Drawing from a wide range of backgrounds and practice, **the problem solving mind-set** remains a distinctive feature of our School: addressing the complex management, technological and social challenges of the world requires creative and innovative approaches, as well as **rigorous methodology**, **passion for numbers and quantitative approaches**.

Thanks to the multiple expertise domains of our University, we foster **inter and multidisciplinary approaches** both in education and in research: energy, transport, planning, design, mathematics and natural and applied sciences, ICT, built environment, cultural heritage are just a few of the domains we constantly collaborate with, working side by side with our colleagues from other Departments and labs.

At Politecnico di Milano teaching and research are entwined. Through corporate connections and institutional partnerships we can exchange knowledge effectively with practitioners, policy-makers and society at large, making an impact on reality.

We are focused on **global scale issues**: our M.Sc. programmes and Ph.D., as well as most of our MBAs and specialising masters are taught in English and attract an ever-increasing number of talented international students, creating an exciting multicultural community coming from some 50 countries around the world.

### POLITECNICO DI MILANO FOUNDED IN 1863

#### ENGINEERING, ARCHITECTURE, DESIGN

> Ranked 20th in the World

- > 7th in Europe
- $\rightarrow$  1st in Italy

(QS World University Ranking by Subject 2021 – Engineering & Technology)

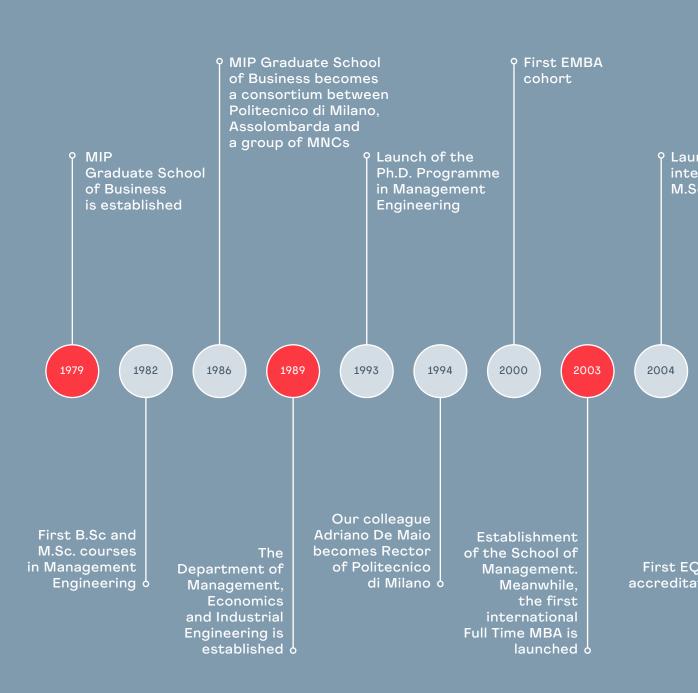
> 70 Study Programs

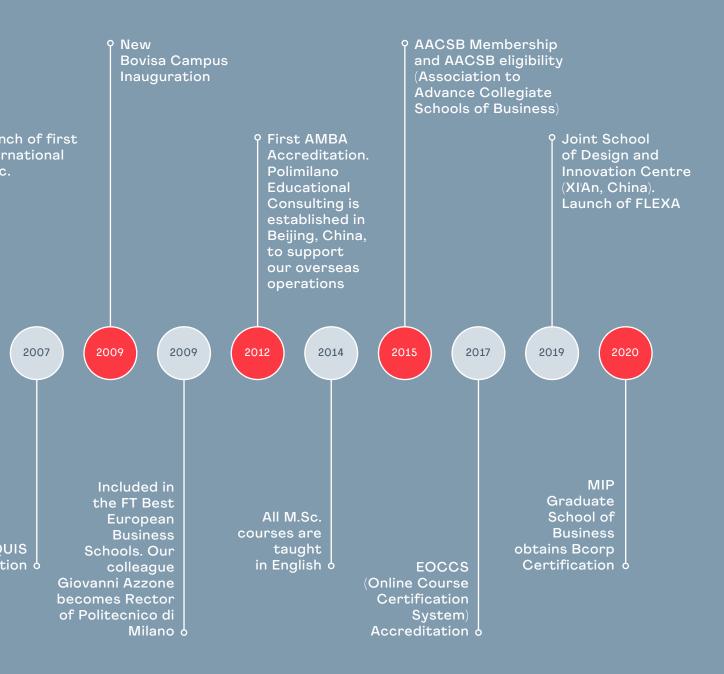
- > 12 Departments
- > 46.000 Students
- > More than 250 Laboratories

> Projects financed within H2020 (2014-2020): over 400

- > Technology Transfer
- > Spin-offs: 85 companies
- > Patents: 2084
- > Inventions: 791

### Where we come from...





08 FIGURES

### ...and where we are now

STAFF

Core Faculty Members Core Extended 75 Faculty Adjunct Research 25 Professors Assistants **EDUCATION** Degree 180 **Executive** 5 Programmes **Courses and** <u>Seminars</u>

STUDENTS

**6,000** 

Students on Degree Programmes **INTERNATIONALIZATION** 

25% International Students



REVENUES



RESEARCH

**1**5000 Scientific Contribution in the last five years

CAMPUS

12,000

sq.m. in the Bovisa Campus

10

## Working with the community to serve the community.

We want our strategy to be framed in the society: for this reason we design our future in collaboration with our stakeholders.

Our School is run by a School Director and a School Board made of 13 full professors, who are responsible for setting and implementing the overall School strategy.

The strategy is defined in accordance with the general objectives set by the University and a constant confrontation with the global contexts of education, business, employment: the International Advisory Board and MIP Shareholders Assembly are key bodies which support us in building a vision for the future.

### International Advisory Board

We set up an **International Advisory Board**, made of 18 members from 10 different countries. Experienced managers from large companies all over the world and academics meet annually to identify **new trends and challenges** and encourage constructive dialogue and exchange of knowledge, experience and knowhow, allowing the school **to anticipate changes in the global competitive environment** and address companies' demand for increasingly multi-disciplinary skills.

### **MIP Shareholders Assembly**

MIP Graduate School of Business today is a non-for-profit Consortium Limited Company. For this reason, MIP is able to integrate distinctive academic know-how with practical professional experience derived from the world of business and consultancy. By working directly with companies, we can truly understand and work within the real world, developing educational programmes and services in line with corporate needs. The School of Management of Politecnico di Milano holds the "Triple crown", i.e. the three most authoritative accreditations for Business Schools: EQUIS-EFMD Quality Improvement System (since 2007), AMBA-The Association of MBAs (since 2012) and AACSB-Advance Collegiate Schools of Business (since 2021).



VISION

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# WE ENVISION A WORL LEADERS DRIVE AND I AND TECHNOLOGY TO WELLBEING.

We work to foster innovation that builds a more meaningful, sustainable and fair society.

To frame innovation in responsible development, we apply a holistic approach that mixes engineering, management and economics to get a rich, critical understanding of the opportunities offered by technology.

We study business problems and major economic issues with a strict approach linked to our polytechnic culture, to manage innovation and innovate management.

We feel the responsibility to train liable and aware leaders: they will be capable of critical thinking and of making strategic decisions and entrepreneurial initiatives to contribute to society's innovation, economic development and collective wellbeing.

We constantly work together with private companies and public institutions to collaborate in the dissemination of good policy and business practice.



# D WHERE MANAGE INNOVATION PURSUE GENERAL

Our mission is

MAKING INNOVATION A COMMON GOOD.

## Being outstanding to lead the change.

### We are among the top 100 universities in the world for employer reputation and the top 10 in Europe for Employability.

It is because of the excellence of our students, but also because we feel the responsibility to support outstanding talents in the accomplishment of outstanding objectives, providing world with responsible future leaders.

This is the challenge of our teaching, that we continuously renew and enrich through:

- > A hands-on and rigorous method, to give our graduates a competitive advantage when approaching job opportunities
- > A focus on entrepreneurship, where students, graduates and researchers are motivated to become entrepreneurs within new business ventures
- > Continuous collaboration with institutions and society to create a "culturally open", creative, innovation oriented and responsible environment.

Consistently to our mission, we want to be a global leader in learning model innovation, combining technology, innovation and management with experiential and one-to-one teaching methods.

### PLACEMENT AFTER GRADUATION

B.SC. AND M.SC. GRADUATES IN MANAGEMENT ENGINEERING One year after graduation:

> 98% are employed

### QS GRADUATE EMPLOYABILITY RANKINGS 2020

- $>9^{\circ}$  in Europe
- $>41^\circ$  in the world

### ALUMNI COMMUNITY

A successful professional career has its origins in a superb set of skills and outstanding expertise, backed up by continuing professional development and, importantly, a valuable network of high quality contacts.

Our Alumni Community attains its strength from each of the more than 35,000 graduates of our School.

Together, we direct our focus on innovation, continuous improvement, sustainability and social impact, and on our Community's leadership and empowerment.

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Research is our job, the passion of our faculty and the way through which we search for an impact, and have something meaningful and insightful to teach to our students.

Our faculty is made of research leaders in the domains of Management, Applied Economics and Industrial Engineering. Our research strategy develops around "Research Lines", multidisciplinary research activities that integrate the competencies of the three domains to address emerging and relevant challenges at the intersection between business, economics, technology and innovation, with clear and immediate impacts on practitioners and society.

### Our lines:

→ Manufacturing of the Future: Industry 4.0
→ Challenges in Supply Chain Management
→ Sustainability and Social Challenges → Digital Innovation and Transformation → Energy Management, Policy and Economics → Innovating Public Services and Cultural Institutions
→ Health and Social Care Management
→ Innovation and Design Leadership in the Age of Distributed Knowledge → Entrepreneurship, Finance and Venture Growth → New Dynamics and Impact of Globalization → Market Driven Business Model Design and Innovation.

#### Three characteristics permeate our research:

- > multi-disciplinarity: as a School of Management in a Technical University we exploit the integration with the diverse domains of expertise of the other Politecnico di Milano Departments.
- > multi-method approach: as a consequence of our multi-disciplinary approach we combine and apply diverse methods ranging from econometrics to quantitative, experimental and qualitative approaches. Our mindset and DNA is naturally data-powered; we manage data, we analyze them and we extract information from it.
- > applied and applicable: the School levers on its extensive and growing network of collaborations with companies, agencies, public authorities and bodies, leading research institutions worldwide to run its research and continuously interchanges information with them to make it a real common good.

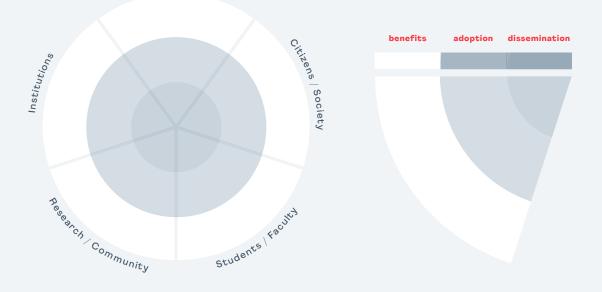
#### Seeking to impact

Our research effort is aimed at having an impact. That's why we have introduced a pervasive Research Impact Assessment and continuous Improvement culture in this regards over the years.

Our research assessment model identifies 5 domains of impact: Institutions, Enterprises, Students & Faculty, Citizens and Academic Community.

We classify our research according to the level of maturity accomplished in the impact: Dissemination by researchers, Adoption by practitioners, Benefits for the collectivity.

Further, we collect information about the impact on the 17 Sustainable UN Development Goals, in order to connect our research impact with the goal to contribute to collective good.



Enterprises

### Outstanding research is also the basis for establishing effective relationships with companies and institutions.

We continuously commit in applied research, technology and open innovation to further strengthen our connection with society, also thanks to our Labs and Observatories. Our School, besides collaborating with the other Politecnico di Milano's, leads 3 Laboratories and runs more than 30 Observatories.

Our Laboratories are research centers on multidisciplinary topics at the core of the scientific debate:

- > Industry 4.0, in which a fully automated assembly and manufacturing line able to test and replicate virtually any variety of manufacturing and assembly system for discrete manufacturing
- > IoT Lab Internet of Things, studying and designing open and flexible hardware and software platforms for the implementation of IoT complex systems in different scenarios
- > Pheel Physiology, Emotion, Experience Lab, applying neurosciences in the study of individuals' behavior and their decision-making and purchase processes

**Observatories** are practice-oriented research projects studying and describing important phenomena in the business scenario designed and conducted with partner organizations in the business and policy-making communities.

Observatories refer to three main areas:

- Digital Innovation, analyzing how digital technologies innovate businesses and public administrations (e.g., eCommerce, cloud computing, eGovernment and eHealth, logistics, cryptocurrencies, cybersecurity)
- > Energy & Strategy, studying energy-related strategies at a company, industry and policy-making level (e.g., smart mobility, renewable energy generation)
- > Entrepreneurship & Finance, investigating top-notch, innovative trends in these areas (e.g., equity crowdfunding, minibond)

We developed a comprehensive set of performance indicators to properly map our research activities according to their domain and maturity.

### MADE COMPETENCE CENTER

MADE is part of the Industry 4.0 Italian eco-system created by the Competence Centers and the Digital Innovation Hubs and Politecnico di Milano is one of the founders.

Located at the Bovisa Campus, MADE is the technical partner for businesses willing to manage innovation activities, technological transfer, applied research, and direct assistance on the implementation of 4.0 tools. It also helps them to reshape their organizational, business, and strategical models to keep a high competitiveness level.

### WORLD MANUFACTURING FOUNDATION AND FORUM

Politecnico di Milano is one of the founding partners of The World Manufacturing Foundation which strives to enhance the manufacturing's role as a dynamic and positive driver to build economic equity and sustainable development.

By acting as an open platform to spread industrial culture worldwide, the WMF fosters innovation and development in the manufacturing sector.

The fundamental goal of the Foundation is to improve societal well-being and competitiveness in all nations by facilitating and promoting dialogue and cooperation among the manufacturing sector's key players.

## Respect + integrity + expe

«In carrying out their work, the Engin to the dignity of the Engineering pro from scientific knowledge and their to interests, impositions, or influenc

This is the last sentence of our official proclamation formula in graduations. Because **being management engineers is not only an accomplishment or a starting point for a bright career, but a responsibility towards society**: we have passion for technology and innovation, and we express this passion through integrity, purpose and expertise.

We envision an inclusive world where diversity does not need to be encouraged. We can create **sustainable development** only when different cultures, beliefs, personalities, political ideas, backgrounds and experiences work in harmony.

A real, long-lasting improvement in the economic conditions of firms and countries can be achieved if and only if people and their dignity are respected and nurtured social welfare is enhanced natural resources are managed efficiently.

## ertise = sustainability.

### neering Graduates will conform ofession, constantly seeking inspiration conscience, without bending es of any nature».

### Teaching for SDGs

As sustainability has become more and more cross-disciplinary: in 2020 the School has started a project for measuring sustainability contents in its programmes, starting from an SDGbased analysis. The project aims at improving internal communication and awareness regarding how active the School is on the education for sustainable development.

### Sustainability Major - Master of Science in Management Engineering

- > Circular Economy
- > Energy Management
- > Sustainability & Social Impact

#### Sustainability Masters

- > International Master in Environmental Sustainability & Circular Economy
- > International Master in Sustainable Industrial Management
- > International Master in Social Innovation and Entrepreneurship
- > International Master in Sustainability Management and Corporate Social Responsibility
- > International Master in Sustainable Finances

### MOOCs on Polimi Open Knowledge Portal:

- > Entrepreneurship without borders (with UNDCTAD)
- > Share food, cut waste (with Banco Alimentare)

SOM for SDGs: prize for theses and project works with impacts for the Sustainable Development Goals.

### Our endeavor for sustainable developmer all our research and teaching activities.

## Responsible business as a positive agent of change

Corporations may create a truly sustainable value by maximizing economic growth while promoting social cohesion and environment conservation. Operating at the intersection between engineering, management and economics, we dive into solutions for sustainability at **all levels of management**: corporate processes, supply chains, operations and technologies.

### Making sustainability a business

We aim at strengthening the capacity of individuals and organizations to embrace global and innovative solutions to complex societal problems through research, education, advisory and experiential learning,

We consider **social business and inclusive economy** the powering engine working across sectors, institutions, and disciplines to build new social infrastructure and economic growth.

### Serving causes: SOM for no profit

Social and non-profit organizations are central players in society and the economy that present specific needs and challenges. The **SOM for non-profit programme** is the framework we created for collaborating steadily with them: project works, theses, internships, capacity building, research projects are some of the activities we promote every year. Since 2017 more than 200 students put themselves to the test addressing the challenges posed by 24 non-profit organizations.

### GIANLUCA SPINA ASSOCIATION

The Gianluca Spina Association was born from the idea of a group of colleagues and friends of Gianluca Spina, the President of MIP Graduate School of Business, who died prematurely on February 21, 2015.

### The Association aims to promote training and scientific research initiatives on Management, with specific emphasis on Supply Chain Management, which supports through fund raising involving private companies and individuals.

### Against food waste: Food Sustainability Lab

The issue of food recovery and redistribution is not just a matter of fighting poverty. To make it possible it is necessary to create innovative models of circularity and sustainability in the agri-food systems which involve supply chain management, logistics and operations, industrial economics, innovation and organizational models, materials and packaging. Our Food Sustainability Lab investigates the feasibility of such models and collaborates with the **Municipality of Milan** in managing the Neighborhood Hubs Project Against Food Waste, aimed at developing a system of redistribution of surplus food for people in need in urban areas—together with other public, private, profit and no-profit organizations.

### Climate change: why we cannot afford it

Climate change has an impact also on businesses and financial institutes. Our Climate Finance Observatory aims to become the point of reference for the study of climate finance and the impact of climate risk on companies and financial institutes.

## Sustainability is not "exclusive": working for Sustainable Luxury

Creating timeless products while generating value across complex supply chains is a challenging task. The Sustainable Luxury Academy is committed to transform luxury supply chains by teaching and guiding luxury companies how to work with supply chain actors to create a shared value concept to drive realistic changes.

### Leading the way in new social ecosystems

TIRESIA (Technology, Innovation and Research for Social Impact) is our International Research Center pursuing scientific excellence in the field of Social and Impact Innovation. Social Ventures are the result of complex evolutionary processes, which depart from individuals, for-profit and not-for-profit firms, non-governmental organizations, community organizations and other. TIRESIA core mission is to study and interpret such transformation, delivering new economic, business and policy models.

### nt embraces

## THINKING COLLECTIV

We recognize ourselves in an open, international and multiform university, acting in the global system.

We want our students to feel at home in the world and make the most of the opportunities arising from interacting in different contexts.

At the same time, we believe that strengthening common values and a feeling of belonging are the only way to face the great social challenges that cross national borders.

Our university is committed to develop strategies and to perform actions in the framework of international alliances, but being truly international is not just a matter of encouraging international collaborations.

### It means to us being a global campus.

This is why we foster the integration of national and international students, professors, researchers, Alumni, in a continuous and profitable exchange of humanity and knowledge. The following mapping includes, at a glance, the School's partnerships, open to B.Sc., M.Sc., MBA, Executive MBA and Specialising Masters students.

# E, ACTING GLOBALLY.

### China Strategic Partnerships

#### Polimilano - in Beijing

POLIMILANO—a Wholly Foreign Owned Enterprise located in Beijing since 2012—in charge of educational consulting and developing new joint programmes and research initiatives with local partners.

### Joint School of Design and Innovation Centre with Xi'an Jiao Tong University – in Xi'an

The first physical campus of our University located outside Italy—in a building measuring 11,000 sq.m.—designed by a team of architects from Politecnico di Milano.

### China Italy Design Innovation Hub with Tsinghua University - in Milan

Located in Italy inside our Bovisa campus, the Hub is Tsinghua University's first— and only— educational and research base in Europe. A platform for academia, governments, and industries of both China and Italy, promoting collaboration between both countries in education, scientific research, cultural industries and supporting startups.





### At the gates of Milan, in the heart of innovation, entrepreneurship and research.

Since 2009 our School is located in Bovisa—a neighborhood located north of Milan—formerly an important industrial area that after the '80s had been abandoned for many years. Politecnico di Milano, in collaboration with the Municipality of Milan and Lombardy Region, promoted its recovery and transformation in an academic campus, that in the last few years has become a **focal point of cultural life and an important hub of scientific research** for the whole city: Bovisa district is now one of the centers for entrepreneurship in Italy, with Polihub, one of the top 5 university start-up incubator in the world, the **Sino-Italian Innovation Center**, in collaboration with Tsinghua University (China), a world-renowned School of Design and some of Politecnico's most outstanding departments and Schools.

All our teaching, training and research operations are closely integrated with the district, allowing a strong interaction among students, professors and research fellows of our University.



### FROM CENTRALE FS METRO STATION

→M2 green underground (→Assago Milanofiori Forum/Abbiategrasso) |→ Garibaldi Station →| underground urban train (*passante*) S1 line (→ Saronno) or S2 line (→ Meda-Mariano Comense) or S13 line (→ Bovisa) |→ Milano Bovisa Politecnico station. *Estimated journey time: 15 minutes.* 

### FROM CADORNA FNM METRO STATION

→S3 line (→ Saronno) or S4 line (→ Camnago Lentate) or R22 line (→ Varese) |→ Milano Bovisa Politecnico station. Estimated journey time: 8 minutes.

### FROM DUOMO METRO STATION

→M1 red underground (→ Rho Fiera-Bisceglie), → Cadorna station → S3 line (→ Saronno) or S4 line (→ Camnago Lentate) or R22 line (→ Varese) → Milano Bovisa Politecnico station. *Estimated journey time: 15 minutes.* 

### Alternative route

 $\downarrow$ 

→M1 red underground (→ Sesto FS), → Porta Venezia Station, → underground urban train (*passante*) S1 line (→ Saronno) or S2 line (→ Meda-Mariano Comense) or S13 line (→ Bovisa) → Milano Bovisa Politecnico station.

Estimated journey time: 25 minutes.

### POLITECNICO DI MILANO SCHOOL OF MANAGEMENT

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