



**POLITECNICO
MILANO 1863**

INAUGURAL ADDRESS OF THE 162ND ACADEMIC YEAR

TECHNOLOGY FOR HUMANITY

Rector's Speech

Donatella Sciuto



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Inaugural Address of the 162nd Academic Year

Rector's Speech,
Donatella Sciuto

Minister,

President of the Lombardy Regional Government,

Mayor,

Civil, Military and Religious Authorities,

Dear Rectors,

Dear Professors,

Technical and Administrative Staff,

Students,

and everyone here present,

It is a great pleasure to welcome you to Politecnico di Milano for the Opening Ceremony of the 162nd Academic Year. An event that brings our community together. A moment to take stock and set new goals; to measure our successes and aim for even greater achievements.

*“Success is not final, failure is not fatal:
what counts is the courage to continue.”*

With the words of one of history's greatest tennis players and activists, Billie Jean King, I begin this story. A tale of firsts and remarkable achievements.

According to the latest **QS ranking**, Politecnico di Milano has further strengthened its international reputation, and is now ranked 111th in the world in absolute terms, and first in Italy. We are 7th in architecture and design, and 23rd in engineering.

We are part of four major **international** networks: Idea League, Enhance, Alliance 4 Tech and Time, alongside the most prestigious technical universities in Europe. Since 2019, we have had a campus in Xi'an, China. Student mobility is structured around approximately 800 international agreements, with 2,400 incoming students and an equal number of outgoing students.

In terms of **teaching**, in the 2023/24 academic year, we welcomed 8,500 new students to bachelor's programs and around 6,700 to master's programs. Meanwhile, 13,000 students celebrated their graduation.

97% of our master's graduates are employed within a year of graduation, with one in three securing a job even before finishing their degree. A new record!

Our **research** is of the highest international calibre, with 302 Horizon EU projects to our name, worth €151 million, a success rate of 20%, and overall self-financing of over €200 million in 2023.

Our strong ties with **industry** are reflected in 53 Joint Research Platforms, strategic medium- and long-term collaborations focusing on shared research, innovation and development topics. The connection between our university and the industrial sector is central to initiatives that foster the conditions necessary for generating and strengthening system dynamics.

At the core of this is our university's ability to "**do business**". Since 2000, we have launched 118 spin-offs, 135 start-ups, and registered over 3,400 patents.

Among our achievements, we lead Italy in the number of patent applications, according to the European Patent Office, which surveyed 79 Italian universities and 1,200 universities across Europe.

Echoing the Draghi Plan on European Competitiveness, I firmly believe that **closing the innovation gap** is a priority for Europe and for our university.

We cannot afford to remain tied to "intermediate" technologies and industries. Instead, we must develop new knowledge and, from that, create highly innovative companies.

This is why we are committed to establishing a major innovation hub and technology park to create the ideal conditions for this.

Together with Università Bocconi, with the support of Fondazione ION and FSI, and with the Chamber of Commerce as the primary promoter, we are investing resources and energy into the **Tech Europe Foundation**, which will soon be based at the new Bovisa Campus.

These successes are the result of the hard work of our entire community. They are the product of skilled teamwork and testify to the dedication and capability of the many individuals who work every day for and on behalf of Politecnico di Milano.

I'm referring to our nearly 49,000 **students** (with a special mention for the 17,000 female students and over 8,000 international students from more than 100 countries, who have chosen our university); to all our **professors and researchers** (with particular recognition for the 300 new researchers who joined us last year); and to our **technical and administrative staff**, who make us a model of efficient public administration.

Talent is essential in life, but it is not enough on its own. Collaboration with fellow students, understanding with professors and support from staff all contribute to creating an environment of collective growth.

This is the strength of in-person university education! Where unforgettable moments are not only about firsts and records, exams and tests, but about stories of humanity, shared experiences, resilience and social transformation.

As sports teach us, both in the university setting and in athletics, there aren't just moments of glory. There's also hard work, sacrifice, and a great deal of motivation...

In sport, as in life, for every success there are hundreds of setbacks. There are limitations, unexpected events and obstacles... the challenges of a state university bogged down by bureaucracy (compounded by recent government policies that have further reduced our ordinary funding). There are the worries of a researcher whose article is rejected, an application turned down, a project left unfunded, or a student who fails an exam...

But on the other hand there is the desire not to give up, to get back on track and keep on trying...

*"I've failed over and over and over again in my life
and that is why I succeed."*

These are the words of the great Michael Jordan. One of sport's most powerful messages is that failure does not define us. Every moment of difficulty is an opportunity to grow closer to the best version of ourselves.

That's why, in this year of the Olympic Games, and inspired by the success of some of our students, who have faced tremendous challenges in their lives and careers, we have chosen to dedicate the opening ceremony of this academic year to the theme of sport.

Sport is, let me tell you, at a time when global tensions and conflicts weigh heavily on the world, remains one of the most powerful symbols of peace, unity, and dialogue between nations, cultures and traditions – between people.

Sport is technology for humanity. It's the engineering of advanced materials, of wearable technologies, of biomechanics, of data and of prosthetics... It's the ability of architects to design new infrastructures to meet the evolving needs of society. Sport unites aesthetics, functionality and innovation: it represents the evolution driven by design.

At Politecnico di Milano, sport is **RESEARCH**, starting with our laboratories. In Lecco, a centre of excellence:

The **Human Performance Lab** stands as a flagship, with activities ranging from the evaluation of sports performance and the ergonomics of prostheses and aids in both sporting and everyday contexts, to biomechanics and rehabilitation. Active since 2022, the laboratory has hosted eight national-level athletes, including a world champion and two Olympians.

In addition to this we have the **e4Sport Lab**, established in 2015, which houses a range of tools and machines for analysing athletes, testing and developing materials and designing new prototypes. It brings together the expertise of several departments:

- the Department of Mechanical Engineering, evaluating performance through sensorisation;



- the Department of Electronics, Information and Bioengineering, specialising in motion analysis and the evaluation of motor gestures;
- the Department of Design, contributing with its TEDH Laboratory on health and wellness;
- the Department of Chemistry, studying the properties of materials for developing new devices and optimising existing ones;
- the Department of Civil and Environmental Engineering, assessing the in-service conditions of sports facilities and their interaction with the environment and people;
- finally, the Department of Management, Economics and Industrial Engineering, supporting the sports industry by rethinking business models.

The CryoLab, which focuses on winter sports, will soon be operational. It is a unique facility in Italy designed to study the interaction between sports equipment, snow and ice (which might be especially relevant with the Milan-Cortina 2026 Winter Olympics in mind).

There are also many projects developed by the MOX Laboratory for Modelling and Scientific Computing in which **maths** plays a central role: from optimising the shape of an America's Cup hull, to studying the hydrodynamic resistance of a competitive swimsuit, to analysing athletic movements in volleyball or rugby... For years, sports and data have come together in various contexts, now enhanced by artificial intelligence techniques.

Within and in addition to the laboratories (which I will not dwell on, as naming them all would be impossible), there are numerous research projects focused on sport.

One notable example: you will all remember the distinctive purple colour of the **athletics track at the Paris Olympics**. This track was created by the Italian company Mondo, in

collaboration with Politecnico di Milano. Through studies conducted in partnership with the Polymer Engineering Laboratory, the track was designed to be not only softer but also more efficient in returning energy, featuring a higher net impulse value than previous models.

A number of testimonies have been collected at the **Wind Tunnel**. Since the first trial for Luna Rossa in 2001, we have tested various sports, from cycling to motorcycling, ice-skating, sledging, skiing and more. We have had the honour and pleasure of shaking hands with exceptional professionals such as Filippo Ganna, our guest today, Francesco Bagnaia, Tina Maze, Alex Zanardi, Dominik Paris...

But sport is not just research; it is practice. Sport is played on the field. That's why well-equipped facilities are so important. We are, in fact, one of the few universities to have our own **INFRASTRUCTURE**, which we design ourselves and continually reinvest in: from the Giuriati Sports Centre, which we manage, to the fitness centres in Milan and Lecco, from the Bovisa Sports Arena to the various playgrounds.

We are also working on the second 1,500 square metre fitness centre at the Giuriati Sports Centre, the gym at the new Cremona Campus and at the Bovisa Durando Campus and, last but not least in terms of importance and investment, the Gasometro dello Sport.

The project to restore one of the two gasometers in Bovisa is an iconic initiative, open to the city of Milan. It will be developed across several levels, covering an area of 13,000 square metres. The facility will feature a swimming pool, a multi-sports field and a fitness area. Additionally, a large public park designed for outdoor activities will be created next to the campus.

The **Gasometro dello Sport**, which is already under construction and due for completion in 2026, is part of a wider project to develop a true innovation district. This initiative

involves a wide range of stakeholders, including businesses and institutions. Among them, the Ministries of Infrastructure and Transport, and of Education, Universities and Research, the Milan City Council, and the Lombardy Regional Government.

It is clear, therefore, that the link with institutions is a fundamental aspect of fostering growth and promoting a broad sports culture within our community as well.

In addition to the aforementioned entities, we mustn't forget the Cariplo Foundation, a prime example of philanthropy, CONI, the individual federations with which we have signed framework agreements, and Istituto del Credito Sportivo.

I would like to highlight the important contribution made by Politecnico di Milano to the Federazione Italiana Giuoco Calcio in the **preparation of the bid for UEFA EURO 2032**, which was successful.

Institutions are key partners in strengthening our role and presence in the **LOCAL AREA**. Talking about the local area means fostering a unifying role and involving local communities, starting with our campuses and sites. This is illustrated by events such as the **Polimirun**, which winds through the streets of Milan and Lecco and that, in the last edition attracted over 14,000 participants, making it the largest university run in Europe.

This is echoed by the **Polimiride**, a non-competitive cycling event linking our campuses. Cremona, Mantova and Piacenza were the first stages of a tour that attracted over 3,500 participants.

Initiatives such as these demonstrate how sport is synonymous with unity: from events organised within and for the benefit of our own community, such as the Off Work Tournament for employees and the 6 Campus Tournament, to international student trophies.

Allow me, therefore, to make a brief aside: the **9th World InterUniversities Championships** (WIUC) have just ended in Rome. More than 70 universities from 30 countries took part, with over 3,500 participants. For the first time, Politecnico di Milano participated with a team of around 100 students. A fantastic example of sports diplomacy!

So, sport is **TRAINING**, not only in the classroom but in building relationships with others. Among the courses offered by Politecnico, it's worth mentioning our **Master's in Sports Engineering**, designed specifically for mechanical engineers. We also offer several specialised **Master's programmes**, including Sport Design and Management and Design Construction and Management of Sports Infrastructures.

And while sport is undoubtedly an educational and life experience, at the highest level it can also be a challenge: too many hours on the court or in the gym make it difficult to focus on education. I would like to share with you the words of a champion that I came across this summer in one of the many posts circulating online:

"I wasn't doing well at school and the teachers criticised me. They said that with the grades I had, I should have stopped playing sport and concentrated more on my studies. In other countries, such as France or the United States, children who play professional sports have dedicated schooling that helps them to develop their talent and get the right education at the same time. We don't have that. And for me, becoming a professional cyclist has been the biggest victory. If I've come this far, it's only because my parents supported me when the teachers advised against it."

I'd like to assure Filippo Ganna that our commitment at Politecnico di Milano is unwavering and our focus on supporting athletes is stronger than ever. The University has doubled the value of **scholarships** awarded for sporting merit and increased the

number available, from 20 to 30 out of 60 applications, for those who excel in top-level competitions recognised by CONI and the IOC.

Even more significant is the **Dual Career** programme, a concrete commitment by our University to support student athletes. This initiative allows them to balance their academic studies with their athletic commitments by providing the flexibility to manage their schedule without being limited by the rigidity of the academic calendar. In fact, we believe that this is not only an opportunity, but also a virtuous practice. It is an act of fairness that values talent and ensures that it does not result in deprivation or, worse, discrimination.

On this subject, we have gathered the testimony of an exceptional individual: Giovanni Malagò, President of CONI. Although he is currently on the other side of the world due to work commitments, he wanted to share his thoughts with us. Let's listen to his message together...

In this "framework", as Malagò calls it, there is a missing piece that is central to the balance of all the others. A piece that is essential for the whole to make sense. I'd like to conclude with one last definition. At Politecnico di Milano, sport is **RESPONSIBILITY AND INCLUSION**.

I'm very proud of our university's commitment to working with the most disadvantaged, from the **Sport@OffCampus** event to the work we have been doing in prisons for a number of years.

The project **A Chance Through Sport**, financed by tax donations, deserves special mention. It was run at the Bollate prison with the support of various companies, demonstrating the active participation and interest of civil society.

The difficult living conditions in Italian prisons, as we know, are one of the greatest challenges facing our country. Much of this is due to the lack of adequate spaces and opportunities for social interaction. In this context, playing sport is a valuable resource that must be integrated into a cultural project capable of transforming it into a tool for rehabilitation and reintegration into society.

I'd like to share with you a letter we received from an inmate at San Vittore prison. She writes:

"I'd like to start by thanking all the girls from Politecnico di Milano, first and foremost for coming 'amongst us'... I know there can be apprehension, even fear... We really enjoyed playing with them. For about an hour we felt like we were 'outside', taking part in a tournament with 'friends'. The emotion I felt and saw in the eyes of the other girls when they gave us the T-shirts... You might think, 'is it really such a big deal?' But it is. For us it is. For us, even the smallest gestures, the smallest things, become huge here. Every word, every gesture, every gift amplifies our emotions 1,000 times."

These are reflections that deserve our full attention, understanding and empathy. They reward the effort and commitment of our professors and students, more than any medal!

There are other inclusion initiatives that we could add to this list. So I don't want to miss out **Accept**, the interactive sensory climbing wall for children with cerebral palsy, and the **ActivE3** project, where technology plays a key role in breaking down not only physical, but also psychological and social barriers and promoting a healthy lifestyle for everyone, from primary school children to the elderly.

It is in this context that the inextricable and powerful link between sport and disability can be found.

Last October, we organised the “**Polimi Parasports For All**” event, a day dedicated to parasports where participants could try out sixteen different disciplines and experience first-hand the sporting experience of people with disabilities. An experience we should all have at least once in our lives, because sport is first and foremost a mental challenge.

I actually believe that what defines a human being, above all else, is the ability to understand and, most importantly, to **make decisions**.

I believe that there is no **destiny** to be resigned to, only the will to shape it, with effort, day after day, drawing from within the strength, motivation and courage to overcome one's limitations.

I believe that what sport teaches us is not to win, “but to **have a winning spirit**”, paraphrasing Jacopo Massari, a former rugby player, European champion with the Italian national team and one of our graduates, who has joined us today.

I am also convinced that my speech deserves a conclusion far removed from any form of rhetoric. Instead, it needs authentic words, dictated by the head and heart of someone who knows these feelings intimately.

I'm honoured to have with me some of the athletes who, at the last Paralympic Games in Paris, carried the Italian flag and the name of Politecnico di Milano high on the world stage: **Alberto Amodeo, Federico Andreoli, Giulia Ghiretti, and Simone Barlaam**. I'd like all the applause to go to them!

Thank you.