The Rector

HAVING REGARD TO Politecnico di Milano's Articles of Association;
HAVING REGARD TO Ministerial Decree 3.11.1999, no. 509;
HAVING REGARD TO Ministerial Decree 22.10.2004, no. 270;
HAVING REGARD TO the University's Educational Rules - Regulations;
HAVING REGARD TO the Regulation for 1st and 2nd level Specialising Masters, Post Graduate Courses and Continuing Education of Politecnico di Milano issued with Rector's Decree no. 6485 of 30.05.2024;
HAVING ACQUIRED the favourable opinion of the Academic Senate during the meeting on 16.02.2026, on the establishment and activation of proposals for Specialising Masters, including the second level Specialising Master in "TEXTILE ARCHITECTURE AND TENSILE STRUCTURES DESIGN. ART, TECHNIQUES AND MATERIALS FOR LIGHTWEIGHT AND TENSILE STRUCTURAL SYSTEMS"

HEREBY DECREES

that the second level Specialising Master in "TEXTILE ARCHITECTURE AND TENSILE STRUCTURES DESIGN. ART, TECHNIQUES AND MATERIALS FOR LIGHTWEIGHT AND TENSILE STRUCTURAL SYSTEMS" is established and activated for the years 2026/2027.

ART. 1
Master's features

The second level Specialising Master in "TEXTILE ARCHITECTURE AND TENSILE STRUCTURES DESIGN. ART, TECHNIQUES AND MATERIALS FOR LIGHTWEIGHT AND TENSILE STRUCTURAL SYSTEMS" has been set up and activated at the Department of Architecture, Built Environment and Construction Engineering.

The Master is provided by CONSORZIO CIS-E - POLITECNICO DI MILANO. The reference schools are the School of Architecture, Urban Planning and Construction Engineering; the School of Design and the School of Civil, Environmental and Land Management Engineering.

The Specialising Master's Director is Professor Alessandra Zanelli. The Vice-Director is Professor Robert Roithmayr.
The Scientific Committee of the Specialising Master's programme is composed by Professors from Politecnico di Milano:

- Prof. ALESSANDRA ZANELLI - POLITECNICO DI MILANO
- Prof. CAROL MONTICELLI - POLITECNICO DI MILANO
- Prof. GIORGIO NOVATI - POLITECNICO DI MILANO
- Prof. CLAUDIA MARANO - POLITECNICO DI MILANO
- Prof. ADRIANA ANGELOTTI - POLITECNICO DI MILANO
- Prof. GIOVANNI MARIA CONTI - POLITECNICO DI MILANO
- Prof. PETER GOSLING - UNIVERSITÀ DI NEWCASTLE
- Prof. MARTIN TAMKE - ROYAL DANISH ACADEMY
- Prof. MONIKA RYCHTARIKOVA - UNIVERSITÀ KU LEUVEN
- Prof. AMEDEO MANUELLO BERTETTO - POLITECNICO DI TORINO
- Prof. ROBERT ROITHMAYR - TECHNISCHE UNIVERSITÄT WIEN
- Prof. INGRID MARIA PAOLETTI - POLITECNICO DI MILANO
- Prof. SALVATORE VISCUSO - POLITECNICO DI MILANO

- Prof.TIZIANA POLI - POLITECNICO DI MILANO
- Prof. STEFANO CAPOLONGO - POLITECNICO DI MILANO
- Prof. MARCO IMPERADORI - POLITECNICO DI MILANO
- Prof. ANDREA GIOVANNI MAININI - POLITECNICO DI MILANO
- Prof. LUISA FERRO - POLITECNICO DI MILANO
- Prof. MARIANA-ADRIANA POPESCU - TU DELFT
- Prof. NIELS J. E. DE TEMMERMAN - UNIVERSITÀ VUB DI BRUXELLES
- Prof. MARIJKE MOLLAERT - UNIVERSITÀ VUB DI BRUXELLES
- Prof. CECILIA MARIA BOLOGNESI - POLITECNICO DI MILANO
- Prof. VALTER CARVELLI - POLITECNICO DI MILANO
- Prof. ELISABETTA ROSINA - POLITECNICO DI MILANO

ART. 2
Educational objective and employment opportunities

The Master aims to train highly qualified professionals in the field of textile architecture and lightweight tensile structures, capable of integrating design, engineering and cultural competences within a rigorous and interdisciplinary framework. The programme is structured through lectures, specialist seminars, individual study activities and an internship in professional offices or companies, guiding students through all phases that lead from the initial concept to the construction of the work. A central component of the curriculum is devoted to the legacy of the early pioneers who, through research on form, the behaviour of flexible materials and the principles of tension, established the theoretical and technical foundations of contemporary lightweight architecture. This historical perspective is intended to foster a solid understanding of the origins, transformations and construction logics of membrane systems. Building on this heritage, students will engage with internationally recognised experts and practitioners who will present current best practices in design, production and technological innovation, offering an updated overview of emerging dynamics in the sector. The programme is further enriched by modules dedicated to industrial processes, fabrication techniques and opportunities for innovation within current construction systems, together with advanced software training for modelling, structural analysis, detailing and digital project management. A specific component is dedicated to environmental impact assessment through LCA, enabling students to understand how the lifespan of buildings and lightweight materials represents a decisive variable in the overall sustainability of a project, particularly during the early design stages. Field visits to construction sites, production facilities and relevant international events complete the educational experience with direct and applied exposure to the profession.
Graduates of the Master in Textile Architecture and Tensile Structures Design can enter a wide range of professional contexts involved in the design, production and management of lightweight and tensile structural systems. Relevant sectors include architectural and engineering firms specialising in innovative envelopes, membrane roofs, textile façades, temporary pavilions, as well as large-scale reticular or pneumatic structures, where advanced skills in concept design, parametric modelling, structural analysis and knowledge of flexible materials are essential. Graduates may take on roles such as designer, technical consultant, BIM specialist, expert in advanced textile materials, production or process manager, installation technician, or project manager for lightweight constructions and membrane systems. Additional opportunities are available within companies producing membranes, pretension components, fastening systems and fabrication technologies, as well as in installation firms and contractors operating on complex construction sites. Career paths are also possible in applied research, within universities, material innovation centres and laboratories dedicated to lightweight architecture, contributing to the development of experimental solutions, prototypes, performance testing and new construction methods. The competencies acquired further enable graduates to operate in sectors related to urban regeneration, events, sports facilities, mobility and exhibition design, where tensile structures offer a unique balance of sustainability, performance and expressive potential.

The Master's will be delivered in English language.

ART. 3
Teaching content and organisation

The Specialising Master's will start in **November 2026** and will end in **November 2027**.

The ecological transition calls for a new design gesture: not to add material, but to remove it. To reduce the weight of constructions, lighten building envelopes, and learn from nature the value of tension, balance and minimal forms. In this perspective, tensile systems and textile architectures are not merely technologies but a cultural frontier: an invitation to imagine buildings that are more adaptive, more reversible, and more capable of responding to climate change. This is why the Master is named Ottavia, after the suspended city described in Invisible Cities: a web that holds space with the minimum amount of matter, a structure made of filaments, equilibrium and lightness. It is a powerful metaphor for our time and the direction in which we aim to guide a new generation of designers. The Master embraces an intrinsically multidisciplinary and multi-scalar approach, since the value of this new way of conceiving systems and structures emerges at different dimensions of the project and requires the coordinated input of architects, engineers, designers and material specialists. Alongside these professional domains, the programme actively involves membrane manufacturers, companies working with the most advanced industrial fabrication techniques, and the new forms of craftsmanship arising from circular economy principles and industrial symbiosis within the technical textile sector. Only through this convergence can meaningful innovation in lightweight architecture truly take shape.

The master's is a **60 ECTS** programme and teaching will be organised as follows:

Didactic Activities	**MANDATORY Courses**		
Courses	**SSD**	**Total Hours**	**ECTS**
REPRESENTATION AND SURVEYING	ICAR/06	101	**4**
COMPUTATIONAL MECHANICS OF MATERIALS	ICAR/08	101	**4**
STRUCTURAL ANALYSIS AND DESIGN	ICAR/09	126	**5**
TECHNOLGICAL AND ENVIRONMENTAL DESIGN OF ARCHITECTURE	ICAR/12	63	**2,5**
DESIGN OF ULTRALIGHTWEIGHT BUILDING SYSTEM	ICAR/12	63	**2,5**
REGENERATIVE TEXTILE ARCHITECTURE	ICAR/12	112	**4,5**
DESIGN AND HISTORY OF TEXTILES	ICAR/12	51	**2**
DESIGN AND TECHNOLOGICAL INNOVATION	ICAR/12	37	**1,5**
SUSTAINABLE TECHNOLOGY	ICAR/12	37	**1,5**
ARCHITECTURAL DESIGN	ICAR/14	37	**1,5**
LANDSCAPE DESIGN AND LANDSCAPE HERITAGE	ICAR/15	37	**1,5**
BIM/CIM TECHNOLOGY	ICAR/17	87	**3,5**
ARCHITECTURAL RESTORATION	ICAR/19	37	**1,5**
URBAN AND SPATIAL PLANNING	ICAR/20	37	**1,5**
SUSTAINABLE MATERIALS FOR ARCHITECTURE	ING-IND/22	37	**1,5**
CONSTRUCTION AND ENVIRONMENTAL HYGIENE	MED/42	37	**1,5**
GREEN BUILDING ENERGY SYSTEMS	ING-IND/11	100	**4**

Didactic Activities	**MANDATORY Courses**		
Courses	**SSD**	**Total Hours**	**ECTS**
Internship	n.a.	300	**12**
Final Project Work	n.a.	100	**4**

ART. 4
Admission requirements

The admission is open to applicants holding Master of Science or equivalent degrees. The admission is also open to Italian and foreign citizens with foreign degrees as far as equivalent in their respective university systems.
The maximum number of admitted students is 30. The selection process is carried out by the Scientific Committee.

ART. 5
Formal requirements

The **admission application** must be submitted starting from the day after the date of this Decree and **no later than one month BEFORE the start of the program.**

The extended information on data processing and data subject rights is available on the website www.polimi.it\privacy.

The managing authority delivering the program must provide students with all the necessary set of forms and information on how to correctly apply to the Master's.

Once the validity of the qualification has been verified, the Managing Body will advise the student on the documentation needed to prove the authenticity of their qualification, in accordance with the MIUR/MAE's note "Procedures for entry, residency and enrolment of international students and the respective recognition of qualifications, for higher education courses in Italy for the academic year 2025/2026".

In particular, the Managing Body can request the following documents:

*** Italian/foreign citizens having graduated in Italy**

- copy of the identity document
- copy of the Diploma Supplement or copy of the degree diploma or self-certification through the appropriate form provided by the Master's Managing Authorithy.

*** Italian/EU citizens with qualification obtained abroad**

- copy of the identity document
- **copy of the academic qualification** in original language and its translation into Italian/English/French or Spanish
- copy of transcripts with the list of exams in the original language and their translation into Italian/English/French or Spanish or Diploma Supplement in English language (**when enrolling, the students have to submit:**
    - **the Declaration of Value issued by the relevant area's Italian Representative abroad** or
    - the **Diploma Supplement with digital signature or electronic time stamp** or, in case of absence of digital signature/electronic time stamp, **the Diploma supplement with apostille** or
    - **a certificate issued by the Enic/Naric Centres** or
    - **a certificate issued by the World Education Services - WES).**

Under Art. 75 of Italian Presidential Decree 445/2000, if the Administration, after carrying out suitable checks, finds that the content of the declarations made by the applicant is untrue, the declarant forfeits any benefits obtained through the untrue declaration.

*** Non-EU citizens having graduated abroad**

Non-EU foreign citizens must submit the following documents to the Managing Authority:

- **copy of the degree** in the original language and its translation into Italian/English/French or Spanish;
- **copy of the transcripts** with the list of exams in the original language and their translation into Italian/English/French or Spanish (**when enrolling, the students have to submit:**
    - **the Declaration of Value issued by the relevant area's Italian Representative abroad** or

- **a certificate issued by the Enic/Naric Centres** or
- **a certificate issued by the World Education Services - WES.**

- **copy of a** valid **passport)**

After the acceptance from the University, and only after confirming to the Managing Authority their participation to the programme in accordance with its procedures, students will have to register on the Ministerial portal https://www.universitaly.it . Once the registration has been completed, the student will have to inform the Managing Authority, so that the application can be sent to the authorities responsible for issuing the entry visa.

It is also specified that:

- the preliminary acceptance of a candidate by the university **does not grant any right to obtain the visa**;
- obtaining a student visa issued by the competent diplomatic-consular representation **does not grant any right to complete the enrollment**.

The managing authority informs Politecnico di Milano Masters and Continuous Educations unit, about the starting date of the course **AT LEAST two months before the starting date.**

ENROLMENT PROCESS:

Students admitted to the Master's Programme must obtain the access credentials to Politecnico di Milano's online services on the website www.polimi.it, enter their personal data and attach valid identity document (passport for non-EU citizens). Students already registered are expected to update their personal details, if these are obsolete.

Portal access credentials must be safely kept since they will be required for the access to all Politecnico di Milano's services. Lost credentials can be autonomously restored or obtained through an OTRS ticket.

In order to proceed with the enrolment, students admitted to the Masters' must pay the enrolment fee as well as the enrolment stamp via Politecnico di Milano's online services.

In addition to the above documentation, **non-EU citizens must upload a copy of a valid entrance document as well as the residence permit, on their online services personal data record**.

In order to be enrolled at Politecnico di Milano, regardless of the Master's delivery mode (in person, online/distance learning), **non-EU citizens must upload a copy of a valid passport on their online services personal data record**.

ART. 6
Degree and award recognitions

ISSUED CERTIFICATION
In order to be able to take the final exam, students admitted to the Master's final examination have to pay the due fee through the online services of Politecnico di Milano.

At the end of the Programme, upon completion of the course and after passing the final test, the student will be awarded the second level specialising Master in "TEXTILE ARCHITECTURE AND TENSILE STRUCTURES DESIGN. ART, TECHNIQUES AND MATERIALS FOR LIGHTWEIGHT AND TENSILE STRUCTURAL SYSTEMS", in English language.

STUDENT OBLIGATIONS
Attendance is compulsory for at least 75 per cent of the programme activities.
Withdrawal from the Programme must be communicated in written form. The training period cannot be suspended for any reasons.

TESTING METHODS
Delivery of thesis, design and proof of concept.

ART. 7
Tuition fees and contributions

The cost of this Specialising Master programme, is **€ 12.500,00** divided as follows:

- Politecnico di Milano enrolment fee is **€ 500,00** per student.
- Participation fee is **€ 12.000,00** per student

Politecnico di Milano enrolment fee will not be refunded under any circumstances.

As far as the Specialising Master participation fee is concerned, it will be the managing authority responsibility to define the procedures.

ART. 8
Personal data processing

Under EU Regulation no. 2016/679 on data protection, the University processes personal data only for purposes related to the master's admission, enrolment and management, and you agree to the disclosure of your personal information to third parties, particularly:

- public and private entities possibly interested in recruitment;
- to academic programme backers; Politecnico Treasurer for services related to tuition fees;
- to Managing Authorities managing loans, housing, flexible employment contracts, cultural, recreational and/or sport activities.
- I authorise the use of the data for statistical purposes in respect of the procedures and authorisations required by the cited regulation.

The extended information on data processing and data subject rights is available on the website www.polimi.it\privacy

ART. 9
Publication

This Decree is made public on Politecnico di Milano's website at https://www.polimi.it/corsi/master-universitari-e-corsi-post-laurea/

FOR CLARIFICATIONS AND FURTHER INFORMATION, PLEASE CONTACT:

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The Rector
(prof. Donatella Sciuto)
Signed Donatella Sciuto

Digitally signed document, under legislation.