#### **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 1<sup>st</sup> and 2<sup>nd</sup> level Specialising Masters, Post Graduate Courses and Continuing Education of Politecnico di Milano issued with Rector's Decree no. 0227162 of 04.10.2022; HAVING ACQUIRED the favourable opinion of the Academic Senate during the meeting on 19.06.2023, on the establishment and activation of proposals for Specialising Masters, including the first level Specialising Master in "BIM MANAGEMENT IN CONSTRUCTION WORKS"

#### DECREES

that the first level Specialising Master in "BIM MANAGEMENT IN CONSTRUCTION WORKS" is established and activated for the years 2024/2025.

#### ART. 1 Master's features

The first level Specialising Master in "BIM MANAGEMENT IN CONSTRUCTION WORKS" has been set up and activated at the Architecture, Built Environment and Construction Engineering Department.

The Master is provided by Consorzio CIS-E - Politecnico di Milano. The reference school is the School of Architecture Urban Planning and Construction Engineering.

The Specialising Master's Director is Professor Pietro Giuseppe Crespi. The Vice Director is Professor Claudio Mirarchi.

The Scientific Committee of the Specialising Master programme is composed by: Pietro Giuseppe Crespi, Claudio Mirarchi, Alberto Franchi, Paola Ronca and Roberto Cigolini; by eng. Alessandro Zichi; and by Mario Caputi from IN2IT.

#### ART. 2

#### Educational objective and employment opportunities

The course is focused on the development of BIM managers and professionals in integrated projects. Based on as defined by the European Parliament procurement (European Union Public Procurement Directive, EUPPD) and the use of BIM in the design activities in the construction sector for the public works carried out with funds from the European Union as of 2016, there will be an excursus on the law, data processing, responsibilities followed by basic training on the use of some applications. Some theoretical fundamentals and practical applications, will allow students to manage files and projects drafted in the field of integrated design. We will discuss some widely used software and functionality as well as the fields of application. The basic training will provide a clear idea of the possible prospects for improvement in the management of procurement, design validation and interference control, as well as work progress. Particular importance is given to project work and homework on case studies. The course is focused on issues related to BIM integrated design tools. The architectural, plant, energy, structural design, management of the sites and management of the buildings are supported by software tools compatible with each other, in BIM logic. With BIM software, it is also possible to manage practices related to the environmental aspects of the construction of buildings and infrastructure, to a

choice of technologies and solutions both in new buildings and infrastructure, and in the recovery of existing construction and infrastructure.

Expected occupations and opportunities: Engineering and Architectural design Firms, Enginnering Departments and Public Bodies, Construction Firms, Research and Experimental Laboratories, and Environmental and Civil Protection Agencies.

## The Programme will be delivered in English and can also be followed online.

#### ART. 3 Teaching content and organisation

The Specialising Master's will start in March 2024 and will end in March 2025.

The Master is essentially divided into two semesters: the first involves lectures, seminars, practical exercises; the second is dedicated to the completion of the internship and thesis. The Master will held in the classroom and online by Politecnico di Milano's professor and experts in BIM application. The students enrolled on the Online Master will be able to attend lessons in synchronous or asynchronous mode overall the Academic Year. All students will have access to material and video recorded lessons that will be uploaded on the online platform and will remain available to students until the date of graduation. With a small additional contribution, students may also benefit from other short courses offered by the School, to complete their education. Most of the lectures will have materials in Italian and/or English.

The master's is a 61 ECTS programme and teaching will be organised as follows:

Didactic activity	MANDATORY courses	
Courses	SSD	ECTS
Introduction: Digital revolution and its impact on the national and international arena	ICAR/13	1
BIM Regulations and standards	ICAR/14	2
Becoming a certified BIM manager	ICAR/14	1
Project management for BIM	ING-IND/35	2
Data as asset: PIM (Product Information Modeling) and AIM (Asset Information Modeling)	ICAR/12	2
BIM for architectural authoring	ICAR/09	2,5
BIM for structures	ICAR/09	2,5
BIM to MEP and BIM to BEM (Building Energy Modeling)	ICAR/09	2,5
BIM for infrastructural authoring	ICAR/09	2,5
Coordination, review and validation	ICAR/12	2,5
Schedule and computing (4D and 5D)	ICAR/12	1
BIM for industrialization in construction and BIM to Field	ICAR/12	1
Building management and maintenance (6D and 7D)	ICAR/12	1
Data analisys (Business Intelligence e Big Data) and CDE on documents, models and data	ICAR/12	2

Common data environment and other tools for the digital future of the construction field	ICAR/09	2,5
Oracle Primavera P6	ICAR/09	3
Legal BIM	ICAR/12	1

Other activities	MANDATORY Courses		
Insegnamento	SSD	ECTS	
Internship	n.a.	22	
Thesis preparation, discussion and final exam	n.a.	7	

## ART. 4 Admission requirements

The admission is open to applicants with a Bachelor/Master of Science in Engineering or Architecture. The admission is also open to Italian and foreign citizens holding equivalent foreign degrees in their respective University Systems.

The maximum number of admitted students is 50. The selection process is carried out by the Scientific Committee.

## ART. 5 Formal requirements

The **admission application** must be submitted to the managing authority starting from the day after the date of this Decree and by <u>March, 13<sup>th</sup> 2024.</u>

The admission application must state the following "I authorise this University, under EU Regulation no. 2016/679 on data protection, to process personal data only for purposes related to the Master's admission, enrolment and management, and agree to the disclosure of my 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 ManagingAuthorities 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

The admission documentation is available from the following website <u>https://www.masterpesenti.polimi.it/modulistica.php</u> or contacting the secretary at the following number and email +39 02.2399.4341, <u>franchi@cise-polimi.it</u>.

The documents listed below must be sent to:

**Consorzio CISE/Scuola Master f.lli Pesenti** P.ZZA LEONARDO DA VINCI, 32 20133 MILANO (MI) Phone: +39 02 2399 4341/4381 Email: <u>franchi@cise-polimi.it</u> ; <u>paola.ronca@polimi.it</u>

## \* Italian/foreign citizens who graduated in Italy

- copy of the identity document
- copy of the Diploma Supplement or photocopy of the degree diploma

# \* 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 (<u>when enrolling</u>, the students have to submit either the Declaration of Value issued by the relevant area's Italian Representative abroad or a certificate issued by the Enic/Naric Centres)

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 who 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 **or Diploma Supplement**
- **copy of a** valid **passport**

at least 30 days before the closing date of the registration period as indicated in this article.

The Managing Authority shall send the documentation listed above to Politecnico di Milano Masters and Continuous Educations unit, for the evaluation of qualifications, **by the closing date of this call for applications**, 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 2023/2024"

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 the Managing Authority, so that the application can be sent to the authorities responsible for issuing the entry visa.

## **ENROLMENT PROCESS:**

Students admitted to the Master's Programme must create access credentials to Politecnico di Milano's online services on the website <u>www.polimi.it</u>. They also must enter their details, attach a valid identity document (passport for non-EU citizens) in order to create a **person code**, and send it to the Master's Managing Authority. Students already registered have to update their personal details, if they are obsolete.

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

Politecnico creates a temporary student identification number to allow the student to pay the enrolment fee via online services.

The achievement of an Italian degree can be self-certified by completing the appropriate form provided by the Managing Authority. A degree obtained abroad must be documented by presenting either a **Declaration of Value** (**DOV**) issued by the Italian Representative abroad (Italian Embassy or Consulate) on letterhead along with its original stamp; or a certificate issued by the Enic/Naric Centres.

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 first level specialising Master "BIM Management in Construction Works", in English language.

## **STUDENT OBLIGATIONS**

Attendance is compulsory for at least 80 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**

The final exam will consist of the discussion of the master's thesis.

#### **ART. 7**

## Tuition fees and contributions

The cost of this Specialising Master programme (In-person participation) is € 6.500,00 divided as follows:

- Politecnico di Milano enrolment fee is € 500,00 per student.
- Participation fee is € 6.000,00 per student

Enrolment and participation fees (In-person participation) may be paid as follows:

- First instalment: € 3.500,00 by 17/03/2024.
- Second instalment: € **3.000,00** by 17/07/2024.

The cost of this Specialising Master programme (on-line participation) is € 3.500,00 divided as follows:

- Politecnico di Milano enrolment fee is € 500,00 per student.
- Participation fee is € 3.000,00 per student

Enrolment and participation fees (on-line participation) may be paid as follows:

- First instalment: € 2.000,00 by 17/03/2024.
- Second instalment: € **1.500,00** by 17/07/2024.

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

Enrolment and participation fees can be paid to the bank account IBAN number: IT89N0306909498100000001001 – Account no. 100000001001 – CAB 09498 – ABI 03069 – CIN EUR 02 – CIN IT L – account holder Consorzio CIS-E - Politecnico di Milano - at Banca Intesa San Paolo – Viale

Romagna, 22, 20133 Milano (MI)

Specifying as the reason for the payment: **ID 2655 MU1 BIM Management.** 

### 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 ManagingAuthorities 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 <u>https://www.polimi.it/corsi/master-universitari-e-corsi-post-laurea/</u>

# FOR CLARIFICATIONS AND FURTHER INFORMATION, PLEASE CONTACT:

Prof. Paola Ronca Consorzio CIS-E - Politecnico di Milano P.zza L. Da Vinci, 32 20133 Milano (MI) Phone: +39 02.2399.4341/4381 Email: <u>franchi@cise-polimi.it</u>; <u>paola.ronca@polimi.it</u> Web site: http://www.masterpesenti.polimi.it/

> The Rector (Prof. Donatella Sciuto) Signed Donatella Sciuto

Digitally signed document, under legislation.