## The Rector



HAVING REGARD TO the Statute of the Politecnico di Milano; HAVING REGARD TO M.D. no.509 of 3.11.1999;

HAVING REGARD TO M.D. no. 270 of 22.10.2004;

HAVING REGARD TO the University's General Regulations;

HAVING REGARD TO the Politecnico di Milano Master regulations, issued with R.D. no. 2235 of 05.08.2013;

HAVING OBTAINED the favorable opinion of the Academic Senate at its meeting of 21.01.2022, regarding the establishment and activation of Master proposals, including the 1<sup>st</sup> level Specializing master "PROJECT AND CONTRACT MANAGEMENT IN CONSTRUCTION WORKS";

#### HEREBY DECREES

The 1<sup>st</sup> level Specializing Master "PROJECT AND CONTRACT MANAGEMENT IN CONSTRUCTION WORKS" has been established and activated for the years 2023/2024.

### ART.1

#### **Features of the Master course**

The 1<sup>st</sup> level Specializing Master "PROJECT AND CONTRACT MANAGEMENT IN CONSTRUCTION WORKS" has been established and activated at the Department of Architecture, Built Environment and Construction Engineering.

The administrative office of the Master is located at the Politecnico di Milano - CISE Consortium. The School of reference is the School of Architecture, Urban Planning and Construction Engineering.

The Master Director is Professor Gianandrea Ciaramella. The Deputy Director is professor Pietro Giuseppe Crespi.

The Master Commission is made up of professors of the Politecnico di Milano: Gianandrea Ciaramella, Pietro Giuseppe Crespi, Alberto Franchi, Paola Ronca, Angelo Lucchini and by Engineer Giovanni Franchi from Consorzio CIS-E.

#### **ART. 2**

## Training objective and employment opportunities

This specializing master course aims to give the main tools of project management to both engineers and architects. Nowadays it is getting more and more important to know how any project should be managed from its inception to its end, in order to optimize costs and to get forward according to a predefined schedule. During this specializing master the students will be introduced to the theory of project management, of investment valuation, and financial accounting. They will receive all the information needed to obtain the PMI (Project Management Institute) certifications and the IPMA (International Project Management Association) certifications. They will receive all the information needed to become a Lean Green Belt Project Leader, and all the information needed to become an accredited project manager in Italy with Accredia. Specific knowledge about digitization of the construction industry and about data analysis will be provided, and the students will learn how to use a powerful tool like Matlab for data management. The construction industry generates a huge

amount of data which until now have been mostly wasted. The ability to collect those data, to store them, to interpret and to use them efficiently will lead in the future to major competitive advantages.

A whole unit is about soft skills, those interpersonal attitudes and capabilities that make the difference between a good project manager and a mediocre one. In a world where automation is becoming the norm, the abilities to deal with people, to manage relationships, to communicate well and to lead are becoming more and more relevant, abilities that by their very nature won't be replicated by machines for still a very long time to come. Besides all these PM tools, specific knowledge about contract, claim and delay management will be provided to the students. The need for technicians (engineers and/or architects) who become skilled in managing contracts and claims, and who can perform a delay analysis in accordance with established international standards is ever more urgent among the most important general contractors in Italy and abroad

The job opportunities opened by the skills acquired following the lessons of this specializing master are varied and plentiful: construction firms, engineering companies, real-estate developers, general contractors, government agencies, etc., all of them need and look for project managers who know how deal and effectively manage contracts, claim, and delays. Many large general contractors, engineering firms, and producers have already confirmed to us to be extremely interested in employing technicians equipped with the set of skills the Master will provide.

## The Master will be delivered in English and in on-line mode.

### ART. 3 Teaching content and organization

The Specializing Master will begin in October 2023 and will end in October 2024.

This specializing master is made of 552 hours of lectures split between 402 hours of various project management subjects and 150 hours of contract management. No intermediate exams during lesson are expected, whereas students will be dedicated to the writing of a master thesis that will be reviewed and judged by the academic committee. The subject of the thesis must be the description of a project, or eventually more projects, in which each student is involved while following the master, or has been involved in the past. And the ultimate goal of the thesis is to show how each student has learnt to use in her/his profession some of the tools provided by the master. Each student will be able to write her/his dissertation autonomously.

ACADEMIC ACTIVITIES					
SSD	Course Title	Total hours	ECTS		
ING-IND/35	Fondamenti di Ingegneria Gestionale / Fundamentals of management engineering	264	11,0		
ING-IND/35	An Introduction to Value Averaging	32	1,0		
ING-IND/35	Certificazione Internazionale Project Management IPMA® / IPMA® International Project Management Certification (Level D, Level C, Level B, Level A)	64	2,5		
ING-IND/35	Certificazione Project Management PMI (CAPM - PMP) / PMI Project Management Certification (CAPM® and PMP®)	124	4,5		
ING-IND/28	Lean Six Sigma Green Belt Project Leader	164	6,5		
ICAR/12	Valutazione e valorizzazione immobiliare / Real estate valuation and valorization	82	3,0		
ING-IND/35	Divenire project manager certificato / How to become a certified project manager	56	2,0		
ING-IND/35	Leadership & soft skills + comunicazione e public speaking / Leadership & soft skills + communication and public speaking	75	3,0		
ICAR 13 ICAR 14	La digitalizzazione e i suoi impatti sul project management / Digitization and its impact on project management	57	2,0		
ICAR 12 ICAR 09	Data analyst	64	2,5		
ICAR 12 ICAR 09	Matlab per l'analisi dei dati / Matlab for data analysis	25	1,0		
IUS 10	Construction Contract Civil Law	50	2,0		
ICAR 11	Contracts by international standards (FIDIC, JCT, NEC, AAA)	25	1,0		

ICAR 11	Types of projects and works	25	1,0
ICAR 12	The main stakeholders	50	2,0
ICAR 12	Introduction to Contract Management for FIDIC contracts (Red, Pink, Yellow, and Silver)	75	3,0
ICAR 12 ING IND/26	Introduction to Claim Management for FIDIC contracts (Red, Pink, Yellow, and Silver)	75	3,0
ICAR 12 ICAR 09	Legal BIM	25	1,0
ICAR 12	Introduction to Delay Analysis	75	3,0
	TOTAL academic activities	1407	55

OTHER ACTIVITIES				
Thesis preparation, discussion and final exam	180	7,0		
TOTAL other activities	180	7		
TOTAL	1587	62		

# ART. 4

Admission requirements

The Master is open to candidates who have a Bachelor or a Master of Science in Engineering, Architecture and similar scientific disciplines could be eligible.

For those candidates who graduated abroad equivalent study titles in their countries and educational institutions will be accepted and evaluated

The selection will be made by the Commission.

## ART.5

## Prerequisites

The **admission application** must be presented in one day from the day after the date of this Decree and <u>within</u> <u>October 4, 2023</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 interested in possible recruitment;
- to academic programme backers; Politecnico Treasurer for services related to tuition fees;
- to entities managing unsecured loans, housing, flexible employment contracts, cultural, recreational and/or sports 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 <u>www.polimi.it/privacy</u>

The documentation is available electronically at <u>http://www.masterpesenti.polimi.it</u> or by contacting the secretary of Scuola F.lli Pesenti – Tel. +39 02.2399.4341/4381 e-mail: <u>franchi@cise-polimi.it</u>

The documents must be sent to:

## CONSORZIO CIS-E POLITECNICO DI MILANO

Piazza Leonardo da Vinci 32 20133 MILANO (MI) Phone: +39 02.2399.4341/4381 email: <a href="mailto:franchi@cise-polimi.it">franchi@cise-polimi.it</a>; <a href="mailto:paola.ronca@polimi.it">paola.ronca@polimi.it</a>

## \* 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 gained abroad

- copy of the identity document
- copy of the academic qualification obtained both in original language and translated
- copy of the certificate (both in original language and translated) showing the marks given in the individual exams or Diploma Supplement (<u>during enrolment</u>, the certificate of equivalence issued by the relevant area's Italian Representative abroad or certificate issued by the Enic/Naric Centres must be submitted)

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 by the measure issued based on the untrue declaration.

## \* Non-EU citizens who graduated abroad

Non-EU foreign citizens must submit the following 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 for the evaluation of qualifications, to participate in the Politecnico di Milano's Specialising Masters, <u>Masters and Lifelong Learning Service by the closing date of this call for applications</u>, under the MIUR/MAE note "Procedures for entry, stay and enrolment of students applying for visas in higher education programmes in Italy for the 2022/23" academic year.

Following acceptance by the University, and only after confirming to the Managing Authority their participation on the Programme by the set methods, students must register on the Ministerial portal https://www.universitaly.it informing the Managing Authority that the registration has been completed in order for the application to be sent to the Representative responsible for issuing the entry visa.

## **ENROLMENT METHOD:**

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 must then enter their details and create a **person code**, attaching a valid identity document (passport for non-EU citizens), and communicate their person code to the Master's Managing Authority. Students already registered will have to update their personal details, if they are obsolete.

<u>Portal access credentials must be retained as they will be required to access all of Politecnico di Milano's</u> <u>services.</u> Lost access credentials may 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 a **declaration of value** 

(DOV) issued by the Italian Representative abroad (Italian Embassy or Consulate) on letterhead complete 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 and residence permit on their online services personal data record.

#### ART. 6 Certifications and awards

## **CERTIFICATION ISSUED**

Students admitted to the Master's final examination will pay the fee via the online services of Politecnico di Milano in order to be able to take the exam.

At the end of the Programme, upon completion of the course and after passing the final test, the student will be awarded the 1st level Specializing Master "Project and Contract Management in Construction Works" certification will be issued in English.

## STUDENT OBLIGATIONS

Attendance is compulsory for at least 75% of the course activities. Withdrawal from the course must be submitted in writing. The training period cannot be suspended for any reason.

## ASSESSMENT PROCEDURE

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

## ART. 7 Tuition fees and contributions

The total cost of the course is equal to  $\notin$  **3,500.00**. The cost is split into:

- Contribution for enrolment in the Politecnico di Milano € 500.00 for student;
- Master tuition fees € 3,000.00 for student.

Tuition fee and contribution can be paid with the following deadlines:

- I installment: **2,000.00** € within 11/10/2023;
- II installment: **1,500.00** € within 28/02/2024.

## The contribution for enrolment in the Politecnico di Milano will not be returned under any circumstances.

Enrolment tax and fee are payable to account no. IT89N0306909498100000001001 – In the name of CONSORZIO CIS-E – POLITECNICO DI MILANO – At BANCA INTESA – Viale Romagna, 22 – 20133 Milano (MI).

Specifying the Master in ID 2488 MU1 Project & Contract Management as the reason for the bank transfer.

ART. 8 Data Treatment The University, pursuant to EU Regulation n. 2016/679 regarding the protection of personal data, uses the personal data processing for the sole purposes related to the admission, enrolment and management of the master, and in any case, I allow to disclose personal information to third parties and in particular:

- to public and private Bodies for possible recruitments;
- to training programme providers; to the Bank Treasurer of Politecnico for services connected to taxes;
- to bodies managing honor loans, accommodation, flexible employment contracts, cultural, recreational and/or sport activities.
- It also authorizes the use of data for statistical purposes in compliance with the procedures and authorizations required by the aforementioned legislation.

The whole information on data processing and rights of the interested party is available on the web site <u>www.polimi.it\privacy</u>

## ART. 9 Advertisement

This Decree is published on the Politecnico di Milano website at the page <u>https://www.polimi.it/corsi/master-universitari-e-corsi-post-laurea/</u>

## FOR CLARIFICATIONS AND FURTHER INFORMATION, PLEASE CONTACT:

Prof.ssa Paola Ronca Consorzio CISE 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> http://www.masterpesenti.polimi.it

> The Rector (Prof. Ferruccio Resta)

Digitally signed, according to the law.