

PoliMI Ambassador in Green Technologies & Smart Infrastructures





# POLIMI AMBASSADOR IN GREEN TECHNOLOGIES E SMART INFRASTRUCTURES

Within the context of the interuniversity framework project "Tecnologie per le Transizioni", Politecnico di Milano wants to activate **high-level training courses** aimed at creating new professional figures, the Polimi Ambassador in *Green Technologies* and *Smart Infrastructures*, which:

- have skills in specific areas consistently with the training project (green/smart)
- acquire digital enabling technologies in line with the profile
- master interdisciplinary tools, methods, and aptitude for a systemic vision
- develop talent to operate in interdisciplinary and multisectoral contexts, acquired through exposure, even in teams, to case studies and challenges

www.polimi.it/en/polimi-ambassador

### **THE PROJECT 2021-2022**

Starting with the 2021-2022 academic year, the training courses *PoliMI Ambassador in Green Technologies* and *PoliMI Ambassador in Smart Infrastructures* will be active as part of some Degree Programmes (DP)

#### **Green Technologies**

INGEGNERIA EDILE – ARCHITETTURA BUILDING AND ARCHITECTURAL ENGINEERING

ENVIRONMENTAL AND LAND PLANNING ENGINEERING

CHEMICAL ENGINEERING ENERGY ENGINEERING MANAGEMENT ENGINEERING MATERIALS ENGINEERING AND NANOTECHNOLOGY NUCLEAR ENGINEERING Smart Infrastructures MANAGEMENT OF BUILT ENVIRONMENT CIVIL ENGINEERING AUTOMATION AND CONTROL ENGINEERING BIOMEDICAL ENGINEERING COMPUTER SCIENCE AND ENGINEERING ELECTRICAL ENGINEERING MECHANICAL ENGINEERING TELECOMMUNICATION ENGINEERING

The *PoliMI Ambassador in Green Technologies* and *PoliMI Ambassador in Smart Infrastructures* certification will be reported in the Student's Diploma Supplement and an electronic badge will be issued by Politecnico di Milano.

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ENVIRONMENTAL AND LAND PLANNING ENGINEERING

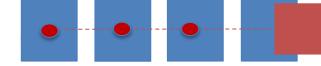
CHEMICAL ENGINEERING ENERGY ENGINEERING MANAGEMENT ENGINEERING MATERIALS ENGINEERING AND NANOTECHNOLOGY NUCLEAR ENGINEERING Smart Infrastructures MANAGEMENT OF BUILT ENVIRONMENT CIVIL ENGINEERING AUTOMATION AND CONTROL ENGINEERING BIOMEDICAL ENGINEERING COMPUTER SCIENCE AND ENGINEERING ELECTRICAL ENGINEERING MECHANICAL ENGINEERING TELECOMMUNICATION ENGINEERING

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# **IMPLEMENTATION (MASTER OF SCIENCE)**

#### 130 ECTS (120 + 10 ECTS)

MSc





**30 ECTS green or smart** 

### 30 ECTS green or smart =

≈10 ECTS *green* or *smart* 

Vertical Courses

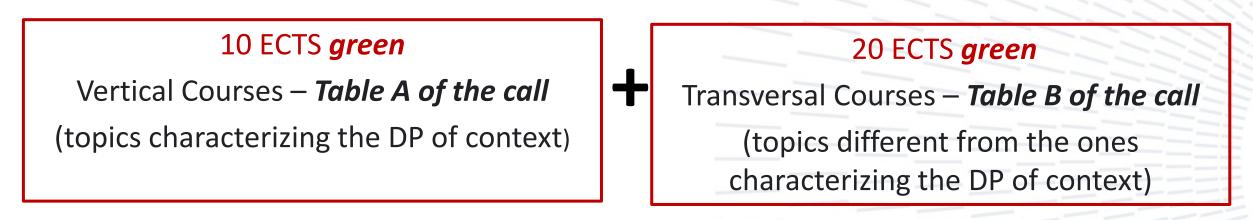
(topics characterizing the DP of context)



Transversal Courses

(topics different from the ones characterizing the DP of context)

30 ECTS green =



"The student must acquire at least 30 CFU in training activities functional to the profile in Green Technologies. These CFUs must be acquired by choosing from 8 to 13 CFUs from Table A and from 18 to 24 CFUs from Table B".

For the Ambassador programme, the selection of 15 ECTS from Table A + 18 ECTS from Table B will not be valid

**POLITECNICO** MILANO 1863

Table A	Та	b	le	Α
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Course	ECTS	Language	Sem.	Campus	Code
AGRI-FOOD SUPPLY CHAIN PERSPECTIVES	5	ENG	1	BV	55771
CIRCULAR ECONOMY BUSINESS MODELS	5	ENG	1	BV	57018
CIRCULAR INDUSTRIAL SYSTEMS	5	ENG	1	BV	57017
COLLABORATIVE INNOVATION FOR SUSTAINABILITY AND IMPACT	5	ENG	1	BV	57026
ESG PRINCIPLES IN THE ENERGY INDUSTRY	5	ENG	1	BV	57330
GREEN LOGISTICS	5	ENG	1	BV	57013
INTERNATIONAL MARKETS AND EUROPEAN INSTITUTIONS	5	ENG	1	BV	97374
MANAGEMENT FOR SUSTAINABILITY AND SOCIAL IMPACT	5	ENG	1	BV	57021
MANAGEMENT OF ENERGY	5	ENG	1	BV	57019
SUSTAINABLE MANUFACTURING	5	ENG	1	BV	54954
DEVELOPMENT ECONOMICS	8	ENG	2	BV	97386
ENERGY AND CLIMATE CHANGE MODELING AND SCENARIOS	8	ENG	2	BV	55635
ENERGY ECONOMICS	8	ENG	2	BV	55634
GLOBAL ENVIRONMENTAL CHALLENGES	5	ENG	2	BV	57020
PRODUCT LIFE CYCLE MANAGEMENT	5	ENG	2	BV	97327

# Table B

Course	ECTS	Language	Sem.	Campus	Code
DE-MANUFACTURING	5	ENG	1	BV	97314
ENGINEERING AND COOPERATION FOR DEVELOPMENT	8	ENG	1	BV	55642
FUNDAMENTALS OF ENERGY TECHNOLOGIES	5	ENG	1	BV	51113
HYBRID AND ELECTRIC VEHICLE	6	ENG	1	BV	54362
INTRODUCTION TO NUCLEAR ENGINEERING A	5	ENG	1	BV	52593
METHODS AND TOOLS FOR SYSTEMATIC INNOVATION	5	ENG	1	BV	54832
ELECTRIC SYSTEM FOR TRANSPORTATION C	6	ENG	1	BV	97671
CLIMATE AND GLOBAL CHANGES IN THE AGE OF SUSTAINABLE DEVELOPMENT	8	ENG	1	LEO	54196
ELECTRICITY MARKETS	8	ENG	1	LEO	52589
INTRODUCTION TO GREEN AND SUSTAINABLE CHEMISTRY	5	ENG	1	LEO	96125
WATER AND FOOD SECURITY	8	ENG	1	LEO	95854
DIGITAL TWIN FOR ENERGY SYSTEMS MANAGEMENT	8	ENG	2	BV	57006
DIRITTO DELL'ENERGIA	5	ENG	2	BV	51509
EMERGING TECHNOLOGIES AND SOCIETAL CHALLENGES	5	ENG	2	BV	55807
POWER PRODUCTION FROM RENEWABLE ENERGY	8	ENG	2	BV	97394
ECOLOGIA E SOSTENIBILITÀ DEI SISTEMI PRODUTTIVI	8	ITA	2	LEO	85722
POLLUTION MEASUREMENT [1ST MOD]		ENG	2	LEO	51745
POLLUTION MANAGEMENT [2ND MOD]	5	ENG	2	LEO	51744
SUSTAINABLE DEVELOPMENT	5	ENG	2	LEO	52583

Course	ECTS	Language	Sem.	Campus	Code
AUTOMATION AND CONTROL IN ELECTRIC AND HYBRID VEHICLES	5	ENG	2	LEO	056810
METHODOLOGIES FOR LIFE CYCLE THINKING	10	ENG	2	LEO	056818
DATA ANALYSIS FOR SMART AGRICULTURE	5	ENG	-1	LEO	057498
DATA MODELLING FOR URBAN PERFORMANCE	5	ENG	2	LEO	057530
INTEGRATION OF NUCLEAR AND RENEWABLE ENERGY FOR CARBON NEUTRAL SCENARIOS	5	ENG	2	LEO	057533
NATURE-BASED SOLUTIONS FOR A RESILIENT WORLD	5	ENG	2	LEO	057524
PLASTIC TODAY: KEY CHALLENGES AND OPPORTUNITIES	5	ENG	1	LEO	057520
SOCIAL MEDIA AND VOLUNTEERED GEOGRAPHICAL INFORMATION FOR SUSTAINABLE DEVELOPMENT GOALS	5	ENG	2	LEO	057495

## **GENERAL INDICATIONS**

# Students will have to:

- Present application to the call through a specific application function available on the online services (section Admission requests> Admission to selection procedures). DEADLINE: 16/09/2021, h 12.00 (Italian time)
  The list of students enrolled in the program, for each Degree Program, will be published by 17/09/2021 on the web page <u>www.polimi.it/en/polimi-ambassador</u>
- Fill in the Form for your Degree Program to indicate a choice of at least 30 CFUs from only the courses in Tables A and B, as reported in the Ambassador call. DEADLINE: 24/09/2021
- Fill in the Study Plan as per the ordinary procedure (in force for all students and in line with what reported in the Educational Rules of your Degree Program), adding all the courses indicated in the Form (previous point) that are already available in the system. The other courses indicated in the Form, but not available in the system will be inserted by the responsible of the Study Plan of your Degree Program (names reported on the website of the Degree Program and/or of the School).
- Pay next year's first installment by September 16<sup>th</sup>

NB. The excess 10 ECTS will not be paid, if the total ECTS in the study plan will stay below 74 ECTS/year

# **CALLS & TIMING**

<b>I semester</b> Study Plan	opening 31/8	closure 24/9	enrollment 15/9	
Call1 Form1	19/7 31/8	16/9 24/9		
	https://forms		<u> 'ResponsePage.aspx?id=K3EXCvNtXUKAjjCd8ope6</u> IzlOMk0zVUZETkJBQjRHR0hZWi4u	7c9Up_I
II semester				
Study Plan	opening 24/1	closure 1/3	enrollment 23/2	
Call2 Form2	17/12 25/2	24/2 1/3		



