

SCUOLA DI ARCHITETTURA URBANISTICA INGEGNERIA DELLE COSTRUZIONI SCUOLA DI INGEGNERIA INDUSTRIALE E DELL'INFORMAZIONE

#### Internal Double Degree

Management of Built Environment (LM-24) and Urban Planning and policy Design (LM-48)

## 1. Aim of the programme

The Internal Double Master's Degree in **Management of Built Environment** - **Urban Planning and policy Design** aims at facing the new challenges emerging in the construction industry at national and international level, because of various technical social, cultural, and economic factors when integrating or modifying the built asset in existing urban area according to urban planning. This requires new professional profiles, capable of integrating technical and managerial skills.

Therefore, the aim of the Double Master's Degree in Management of Built Environment -Urban Planning and policy Design is to train professionals who can strengthen the skills of a urban planner for what concerns this particular sector, while also providing experts of the built environment in-depth urban planning and policy design skills. Thus, students can become more aware of the difficulties of building design, infrastructure and urban design interaction between management issues and techniques at all stages of the construction cycle. In this sense, particular attention will be paid to the problems of energy and urban planning, economic assessment of urban transformation, and the management of innovation and real estate functions.

## 2. Study plan

## 2.1 General structure of the double degree programme

The Double Degree programme is based on two Master's Degree Programs of Politecnico di Milano: the Master Degree in Management of Built Environment and the Master Degree in **Urban Planning and policy Design**.

Students can enter the double degree from either program, depending on their propensity and background; in other words, students can be admitted from either the Management of Built Environment or the **Urban Planning and policy Design** intake. This allows students to first deepen one of the two fields, then focus on the other one, to lastly integrate the two.



# 2.2 Detailed description of the study plan for students enrolling from the Management of Built Environment intake (PSPA: MT3 TECHNICAL CURRICULUM)

Students with the First Degree in Architecture, Planning, Civil Engineering, Built and Management Engineering access the program with no debt.

096311	Technical assessment of the built environment	MBE	CM	А	9	9	1	1	ICAR/12
	One among								
054436	Building types and real estate functions	MBE	СМ	А	9	•	1	1	ICAR/12
096307	Business economics	MBE	СМ	А	9	9	1	1	ING-IND/35
	One among								
053105	Building and construction technologies	MBE	СМ	А	9	•	1	1	ICAR/11
097610	Production management	MBE	СМ	А	9	9	1	1	ING-IND/17
053119	Durability and maintenance	MBE	СМ	А	12	12	1	2	ICAR/11
096312	Methods and tools for analysis of urban and territorial systems	MBE	СМ	А	6	6	1	2	ICAR/21
053109	Regional economics + land rent theory	MBE	CM	А	12	12	1	2	SECS-P/06
055729	Building maintenance proceedings and methods	MBE	CM	А	6	6	2	1	ICAR/11
054754	Facility management lab	MBE	СМ	А	6	6	2	1	ICAR/12
051336	Construction management	MBE							
051337	Construction management A: principles	MBE	CL	А	6	42	2	1	ICAR/11
051338	Construction management B: applications	MBE	CL	А	6	12	2	1	ICAR/11
051335	Administrative and public procurement law	MBE	СМ	А	6	6	2	2	IUS/10
053117	Economic assessment of urban trasformations	MBE	СМ	А	9	9	2	2	SECS-P/06
054437	Social housing estate and management	MBE	СМ	А	9	9	2	2	ICAR/12
096322	Internship	MBE	Т	А	3	3	2		
055734	Synthesis class - Technical Curriculum	MBE	PF	А	12	12	2		
059379	Planning theory and practice	UPPD	СМ	А	6	6	1	1	ICAR/20
054530	Conflicts management and resolution	UPPD	СМ	А	6	6	2	1	ICAR/20
	One among								
054497	Urban planning and design studio	UPPD							
054502	Urban design	UPPD	IL	А	6		1	1	ICAR/21
054503	Urban planning	UPPD	IL	А	6		1	1	ICAR/21
054504	Spatial planning and infrastructure design studio	UPPD				12			
054505	Spatial planning and design	UPPD	IL	А	6		1	1	ICAR/21
054506	Infrastructure design	UPPD	IL	А	6		1	1	ICAR/21
054512	Contemporary city: descriptions and projects	UPPD							
054513	Infrastructure and urban planning	UPPD	ICI	А	4	10	1	2	ICAR/04
054514	Urban planning and design	UPPD	ICI	А	6	10	1	2	ICAR/21
057932	Sociology of the City	UPPD							
096856	Social change	UPPD	ICI	А	4	8	1	1	SPS/09



096857	Social policies	UPPD	ICI	А	4		1	1	SPS/09
	Tematic workshop (one among):								
057171	Housing and neighbourhoods	UPPD							
057172	Social policies	UPPD	ICI	А	6		2	1	SPS/09
057173	Urban policies	UPPD	ICI	А	6		2	1	ICAR/20
055695	Energy, Climate and Urban Planning	UPPD				12			
096355	Sustainable urban design	UPPD	IL	А	8		2	1	ICAR/20
055696	Urban survey and representation	UPPD	IL	А	4		2	1	ICAR/17
081911	Internship	UPPD	Т	А	4	1	2	1/2	
099732	IC Economics of public issues	UPPD							
099733	Poverty, inequality and the welfare state	UPPD	ICI	А	4	8	2	2	SECS-P/03
099734	Economic analysis of public policies	UPPD	ICI	А	4	0	2	2	SECS-P/03



## 2.3 Detailed description of the study plan for students enrolling from Urban Planning and Policy Design (PSPA)

057932	Sociology of the City	UPPD							
096856	Social change	UPPD	ICI	А	4	8	1	1	SPS/09
096857	Social policies	UPPD	ICI	А	4		1	1	SPS/09
057929	IC Urbanism	UPPD							
057930	Introduction to visual thinking	UPPD	ICI	А	4	10	1	1	ICAR/14
054496	Urbanism: issues and tools	UPPD	ICI	А	6	10	1	1	ICAR/21
059379	Planning theory and practice	UPPD	СМ	А	6	6	1	1	ICAR/20
	Planning studio (one among):								
054497	Urban planning and design studio	UPPD							
054502	Urban design	UPPD	IL	А	6		1	1	ICAR/21
054503	Urban planning	UPPD	IL	А	6		1	1	ICAR/21
054504	Spatial planning and infrastructure design studio	UPPD				12			
054505	Spatial planning and design	UPPD	IL	А	6		1	1	ICAR/21
054506	Infrastructure design	UPPD	IL	А	6		1	1	ICAR/21
054511	Policy analysis	UPPD	СМ	А	4	4	1	2	SPS/04
054512	Contemporary city: descriptions and projects	UPPD							
054513	Infrastructure and urban planning	UPPD	ICI	А	4	10	1	2	ICAR/04
054514	Urban planning and design	UPPD	ICI	А	6	10	1	2	ICAR/21
054515	Strategic planning and urban policies	UPPD	СМ	А	6	6	1	2	ICAR/20
	Planning studio (one among):								
054516	Urban policies and design studio	UPPD							
054518	Urban policies	UPPD	IL	А	6		1	2	ICAR/20
054519	Urban Design	UPPD	IL	А	6		1	2	ICAR/21
054520	Master plans studio	UPPD				12			
054521	Urban design	UPPD	IL	А	6		1	2	ICAR/21
054522	Urban design process management	UPPD	IL	Α	6		1	2	ICAR/20
099717	Regional economics	UPPD	СМ	А	4	4	2	1	SECS-P/06
	Tematic workshop (one among):								
057171	Housing and neighbourhoods	UPPD							
057172	Social policies	UPPD	ICI	А	6		2	1	SPS/09
057173	Urban policies	UPPD	ICI	А	6		2	1	ICAR/20
055695	Energy, Climate and Urban Planning	UPPD				12			
096355	Sustainable urban design	UPPD	IL	А	8		2	1	ICAR/20
055696	Urban survey and representation	UPPD	IL	А	4		2	1	ICAR/17
081911	Internship	UPPD	Т	А	4	4	2	1/2	
098631	Final Thesis	UPPD	F	А	1 2	12	2	1/2	



054530	Conflicts management and resolution	UPPD	СМ	А	6	6	2	1	ICAR/20
054529	Transport planning and economics	UPPD	СМ	А	4	4	2	1	SECS-P/06
054685	Land use ethics and the law	UPPD	СМ	А	6		2	2	ICAR/20
099732	IC Economics of public issues	UPPD							
099733	Poverty, inequality and the welfare state	UPPD	ICI	А	4		2	2	SECS-P/03
099734	Economic analysis of public policies	UPPD	ICI	А	4	10	2	2	SECS-P/03
057174	EU policies for Sustainability and the City	UPPD	СМ	А	6		2	2	ICAR/20
057934	Global Urban Challenges Concepts and Contexts	UPPD	СМ	А	4		2	2	M- GGR/02
096311	Technical assessment of the built environment	MBE	СМ	А	9	9	1	1	ICAR/12
	One among								
054436	Building types and real estate functions (c)	MBE	СМ	А	9		1	1	ICAR/12
096307	Business economics (d)	MBE	СМ	А	9	9	1	1	ING- IND/35
	One among								
053105	Building and construction technologies (a)	MBE	СМ	А	9		1	1	ICAR/11
097610	Production management (b)	MBE	СМ	А	9	9	1	1	ING- IND/17
053119	Durability and maintenance	MBE	СМ	А	1 2	12	1	2	ICAR/11
051336	Construction management	MBE							
051337	Construction management A: principles	MBE	CL	А	6	10	2	1	ICAR/11
051338	Construction management B: applications	MBE	CL	А	6	12	2	1	ICAR/11
053117	Economic assessment of urban trasformations	MBE	СМ	А	9	9	2	2	SECS-P/06

(a) Mandatory education for students who have completed the Bachelor in Economic-Management and Civil-Environmental.

(b) Mandatory education for students who have completed the Bachelor in Building Engineering or Architecture. (c) Mandatory education for students who have completed the Bachelor in Economic-Management and Civil-Environmental.

(d) Mandatory education for students who have completed the Bachelor in Building Engineering or Architecture.

## 3. Final thesis

The final thesis has to be drafted by each candidate. Because of the peculiar nature of the Double Degree programme, double authors thesis is not allowed.

The final thesis can be assigned a final mark of -1/5 points (thesis without external reviewer/controrelatore) or -1/7 points (thesis with external reviewer/controrelatore).