

## **Master of Sciences – Sustainable Building: Design and Performance Management (SBDPM)**

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The Master Program in Sustainable Building: Design & Performance Management is a multi-disciplinary programme of graduate study tailored for green professionals of the built environment. The curriculum of this programme is specially designed to emphasise the successful integration of design & technology, and to build capability in the application of sustainable design globally. This includes passive 'green' design, renewable energy, solar technology, high impact energy efficient systems, computer simulations and total building performance. Students will acquire competencies in conducting macro & micro analysis and simulations for projects located anywhere geographically.

The course is carefully structured to accommodate the interests and skills of those who are related to building design and technology and building energy and environmental performance. The strong emphasis is targeted to successful integration of renewable and sustainable energy technologies into buildings, which requires an understanding of both design and technology and hence the close co-operation of architecture and engineering.

The course is designed to allow discussion and exchange of information between different disciplines and encourages novel and imaginative solutions to the challenge of producing environmentally friendly buildings.

Students will develop:

- vocational skills and an environmentally responsible attitude
- necessary in today's rapidly changing world
- the ability to plan and undertake an individual project
- interpersonal, communication and professional skills
- the ability to communicate ideas effectively in written reports, verbally and by means of presentations to groups
- the ability to exercise original thought

### ***Organisation***

**Duration : 2 years - ECTS : 120 credits**

**Bilingual Program (French and English) or Only in English**



1 <sup>st</sup> YEAR	1 <sup>st</sup> Semestre	Ects	2 <sup>nd</sup> Semestre	Ects
	SBDPM 311 - Energy in Buildings	4	SBDPM 321 - Ventilation in Architecture and Planning	4
	SBDPM 312 - Sustainable Development	4	SBDPM 322 - Introduction to Planning and Development	4
	SBDPM 313 - Group Development Workshop	4	SBDPM 323 - Environmental Management and Risk Assessment	4
	SBDPM 314 - Renewable Energy	4	SBDPM 324 - Dissertation Methods	4
	SBDPM 315 - Climate Analysis	4	Choose 1 major course	9
	SBDPM 316 - Building Physics and Thermal Comfort	4		
	SBDPM 317 - Energy Efficient Systems	4		
	LAN 318 - Language	2	Internship of 3 Months	5
60 ECTS				

2 <sup>nd</sup> YEAR	3 <sup>rd</sup> Semestre	Ects	4 <sup>th</sup> Semestre	Ects
	SBDPM 411 - Building Design for Different Climates	4	Internship of 6 Months	30
	SBDPM 412 - Solar Architecture for Different Regions	4		
	SBDPM 413 - Building Performance Management	4		
	Choose 1 major course	12		
	LAN 414 - Language	2		
60 ECTS				

Choose 1 major course from the following topics:

- Modelling and Passive Strategies
- Post-Occupancy Building Evaluation
- Low Carbon Building Technologies
- Building Heat Transfer and Air Conditioning
- Electrical Services and Lighting Design
- Acoustics, Fire, Drainage and Lifts
- Energy Conversion Technologies
- Building Services Design and Management
- Energy Efficient Ventilation in Buildings
- Future Building Solutions - Climate Engineering
- Future Building Solutions- Architecture

**Conditions to get the degree**

- Student must follow regularly all the courses - He/She had to attend their class work, project; exams required in each course - He/She must get at least 12/20
- Attend and realize Internships in company - Memory
- Student must get the TOEIC with 750 points or an equivalent in french

**Tuition fee**

**8700 euros per year**