BSc Sustainable Energy and Building Technology (SEBT)

Our Sustainability Energy and Building Technology undergraduate program positions graduates with a portfolio of skills that are in high demand.

Our unique program prepares graduates to examine, model and improve the energy and environmental performance of existing buildings; to support the design, construction and operation of new, sustainable buildings being built to increasingly stringent performance standards; to implement renewable energy technologies; and to support new approaches to understanding and managing energy use and building resilience into campuses, neighbourhoods or whole cities. At one time we paid little attention to the cost, availability or environmental impact of energy use – today, these are issues of growing importance to **every** individual, business and government.

Upon successful completion of the program, a graduate will:

- Perform a land site assessment to determine potential for renewable energy harvesting, optimum placement of wind, solar and earth energy technologies and building orientation for passive solar gain and protection from the elements.
- Perform an energy needs analysis for residential or small-scale commercial or industrial structures,, and identify building system components that save energy.
- Perform an energy audit on residential, small-scale commercial and industrial buildings, to determine energy efficiency, problem areas and energy loss and advise on corrective actions.
- Adhere to legal, regulatory and health and safety codes and guidelines in sustainable energy and building technology practice.
- Estimate the costs and time schedule of implementing a renewable energy/energy efficiency system, including annual running costs and return on investment.
- Assist in land development, regulatory and stakeholder processes regarding the placement of renewable energy/energy efficiency technologies during the planning/approval phase.
- Assist in the selection of heating, cooling, hot water and electrical systems and equipment during the building specification phase in a new structure or retrofit to ensure high energy efficiency.
- Assist in the delivery, handling, installation and testing of renewable energy/energy efficiency technologies during the construction phase
- Prepare a viable business plan for a new energy business venture.
- Assist in the development of sales and marketing strategies for energy products and services.
- Promote an integrated or whole building approach with clients, industry professionals and associations.

Sustainable Development Management Institute

	1st Semestre	Ects	2nd Semestre	Ects
1st YEAR	CADD Fundamentals	3	MAT 121 - Elementary Statistics	3
	Energy Metrics	4	Electric Circuits 2	4
	Electric Circuits 1	3	COM 123 - Oral Communication Skills	2
	Sustainable Buildings and Infrastructure	4	COM 124 - Writing Communication Skills	2
	Mathematics 1	4	Building Systems	4
	Technical Reading and Writing Skills	4	Renewable Technologies	4
	Calculus	3	Mathematics 1	4
	LAN 118 - Language	3	Law	4
			Internsip of 3 Months	5

	3rd Semestre	Ects	4th Semestre	Ects
2nd YEAR	An Introduction to Arts and Sciences	12	Computer-Aided Design 2	12
	Computer-Aided Design 1	3	Introduction to Project Management	3
	Low Energy Building Systems	3	Energy Auditing	3
	Sustainable Building Design 1	3	Principles of Management and Economics	3
	RE and Green Building Policies and Programs	4	Energy Performance Simulation Software	3
	LAN 216 - Language	3	Building Energy Load	3
	Capstone Project 1		Internsip of 3 Months	5

	5th Semestre	Ects	6th Semestre	Ects
3rd YEAR	Computer-Aided Design 3	12	Internship of 6 months	30
	Sustainable Building Design 2	3		
	Economic Analysis of Renewable Energy and Energy Efficiency Systems	3		
	Energy Systems Integration and Programming 1	3		
	Energy Systems Integration and Programming 2	3		
	Capstone Project 2	3		
	Energy Entrepreneurship, Sales and Marketing	3		

Conditions to get the degree

- Student must to follow regullarly all the coures - He/She had to attend their class work, project; exams required in each course - He/She must to 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 **7200 euros per year**