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## Master of Sciences – Sustainable Energy and Natural Resource Management (SENRM)

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Energy and Natural Resource management using sustainable technologies and implementation of environmental initiatives plays a rapidly increasing role in many public organisations and industry. There is an urgent need for trained personnel to advise, implement and deliver strategies and management for sustainable practices

The Interdisciplinary Master's Degree in Sustainable Energy and Resource Management offers an integrated, comprehensive education relating to sustainable energy development in the broadest sense. This Program is designed to provide a technical background while giving a balanced education with instruction in the areas of law, business, engineering and environmental design. This Program is for high potential professionals from any discipline who have demonstrated the ability to produce results, communicate effectively and have an interest in sustainable development

Students will gain essential technical skills in the field as well as becoming fluent in the financial, marketing and managerial aspects of modern business. The course aims to develop confidence and understanding in the specialist field of entrepreneurship applied to technology that can arise from the research base of sustainable energy subjects. Graduates from the course will be well placed to pursue careers in renewable energy technology industries.

Students will develop:

- useful and technical knowledge in the areas of sustainable energy and business
- 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 knowledge of the application of technologies to proposed business models

### **Organisation**

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

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

<b>1<sup>st</sup> YEAR</b>	<b>1<sup>st</sup> Semestre</b>	<b>Ects</b>	<b>2<sup>nd</sup> Semestre</b>	<b>Ects</b>
	SERM 311 - Sustainable Energy Systems, Resources and Usage	4	SERM 321 - Renewable Energy I – Hydro, Tidal, Wave, and Bio-energy	4
	SERM 312 - Sustainable Development	4	SERM 322 - Renewable Energy II – Wind, Solar, and Geothermal	4
	SERM 313 - Group Development Workshop	4	SERM 323 - Environmental Management and Risk Assessment	4
	SERM 314 - Strategy Management & Entrepise	4	SERM 324 - Dissertation Methods	4
	SERM 315 - Climate Change Impacts	4	Choose 1 major course	9
	SERM 316 - Energy Policy and Economics	4		
	SERM 317 - Natural Resource Economic	4		
	LAN 318 - Language	2	Internsip of 3 Months	5
	60 ECTS			

2 <sup>nd</sup> YEAR	3 <sup>rd</sup> Semestre	Ects	4 <sup>th</sup> Semestre	Ects
	SERM 411 - Project Management	4	Internsip of 6 Months	30
	SERM 412 - Regulation & Mangement of Energy Supply & Use	4		
	SERM 413 - Measurement and analysis in natural resource management	4		
	Choose 1 major course	12		
	LAN 414 - Language	2		
	60 ECTS			

Choose 1 major course from the following topics:

- Innovation Management
- Coastal and marine resource management
- Climate change
- Waste management
- Water resources management
- Advanced Topics of Heat Transfer
- Air Conditioning Technologies
- Cooling Technologies & Applications
- Combined Heat & Power Systems
- Modelling & CFD
- Pollution Prevention and Remediation Technologies
- Process Emissions and Control
- Risk Management, Toxicology and Health

### **Conditions to get the degree**

- Student must to follow regularly 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**

**8700 euros per year**