

SCIENCES, TECHNOLOGIES, SANTÉ

# Solar energy, law, economics and management (Droit, économie et gestion pour énergie solaire)

Master Energie solaire (Solar energy)





# Présentation

# JOIN US ON OUR VIRTUAL OPEN DAYS!



Information and inscription online



The Master program **SoLEM: Solar Energy, Law, Economics and Management**, is a highly innovative, new degree program preparing to tackle present and future

challenges of the energy transition. It is a part of Solar Academy Graduate School recently awarded to University of Savoie Mont Blanc (USMB).

The Master program SoLEM is a two-year full-time Master's degree, composed of 4 semesters representing a total of 120 ECTS (officially integrated in the European Bologna system of higher education).

This master program is jointly developed by the School of Engineering (Polytech Annecy-Chambery), School of Business and Administration (Institut d'Administration des Entreprises IAE Savoie Mont Blanc) and School of Law (Faculté de Droit) at USMB.

Located on the Bourget-du-Lac Campus of INES (National Institute for Solar Energy), you will participate in high quality education and multidisciplinary projects, stimulating your creativity and entrepreneurial skills.

### **Objectifs**

The core training, based on economics, management and law, provides knowledge on how to apply the main

tools of economic analysis and develop an in-depth understanding of the energy transition, including its relationship with public policies, industrial transformations, business models, legal concepts and tools specific to the renewable energy sector, in particular solar energy.





### Dimension internationale

Courses are taught, in English, by international experts and highly recognized partners from national and international research institutions and industry as well as by academic staff of USMB.

Disciplinary and international mobility, as well as immersion in an international research environment, are an integral part of the curriculum, bringing added value to students in terms of training and research. Grants for international mobility, awards for best projects as well as scholarships awarded for excellent academic results are available.

#### Les atouts de la formation

Innovative multidisciplinary education offers common introduction to economics and law, focusing on environmental economics and energy law (important challenges in the energy transition), and to engineering sciences, focusing on solar energy (highly growing sector of renewable energy) and on energy efficiency in building sector (responsible for over 40% of world primary energy consumption)

Projects and workshops complement this unique teaching experience.

M1 internship of 2 months.

Mandatory M2 internship of 6 months (February to July).

Excellence scholarships will be awarded to selected candidates, and funded by the Solar Academy Graduate School, in order to attract students with an excellent academic level and a real motivation (more information on the website).

# Organisation

### Effectifs attendus

12 students in M1 (2021)

### Aménagements d'études

https://www.univ-smb.fr/en/formation/amenagements-specifiques/

## Admission

### Conditions d'admission

Bachelor's degree in economics and/or management, AES, law, geography and development.

# Et après

### Poursuite d'études

Ph.D. in Economics, Management, for solar energy deployment and energy efficiency, PhD in Energy Law within the Solar Academy Grduate Program or at a French university.

### Poursuite d'études à l'étranger

Ph.D. in Economics, Management, for solar energy deployment and energy efficiency, PhD in Energy Law in a foreign university.

# Métiers visés et insertion professionnelle

Administrative and support service activities | Specialised, scientific and technical service activities | Modelling activities | Specialised, scientific and technical service activities





# Infos pratiques

### Contacts

#### Gestionnaire administratif

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#### Responsable pédagogique

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# Etablissements partenaires

Partners of the Solar Academy Graduate School

# Campus

n Le Bourget-du-Lac / campus Savoie Technolac





# Programme

### M1 - Solar energy, law, economics and management

#### Semestre 7

	Nature	CM	TD	TP	Crédits
UE701 Core Law	UE				4
Legal issues related to renewlable energies	EC	7,5h			2
Bases of contract law	EC	10,5h			2
UE702 Core Economics	UE				4
Environmental economics and Externalities	EC	21h			2
Economics of energy and climate policies	EC	21h			2
UE703 Quantitative analysis	UE				4
Advanced data analysis	EC	15h	15h		2
Introduction to econometrics	EC	10,5h	10,5h		2
UE704 Introduction to Solar Energy	UE				4
Solar Thermal and Photovoltaïc	EC	12h	4,5h		2
Projet	EC			4h	2
UE705 Sustainability for energy transition	UE				8
International and european regulations	EC	9h	10,5h		2
SEMINARS Human sciences for solar energy	EC	15h			2
Sustainability analysis	EC	9h	6h	9h	2
Foreign language choice	CHOIX				
Foreign language (French)	EC		30h		2
Foreign language English	EC		30h		2
UE706 Introduction to research	UE				6
Library research tools and methods	MODULE		4h		
Literature review project	EC	6h		24h	6

### Semestre 8

	Nature	CM	TD	TP	Crédits
UE801 Market and Energy Prices	UE				2
Price dynamic modelling	EC	12h	9h		1
International energy markets	EC	21h			1
UE802 Adoption of renewables	UE				4
NPV Computation	EC	10,5h			1
Intertemporal optimization under uncertainty	EC	10,5h			1
Adoption of environmental innovations	EC	10,5h			2
UE803 Urban planning and city	UE				2





Urban Planning	EC	18h			1
Urban Law	EC	18h			1
UE804 Energy transition and public policies	UE				4
Public policies assessment in econometrics	EC	10,5h			1
Modelisation and economic prospective	EC	10,5h			1
Law in Construction and Energy	EC	9h			1
Energy and territorial development	EC	10,5h			1
UE805 Introduction to Energy use in Buildings and Cities	UE				4
Energy use in Buidlings	EC	6h	15h		3
Sustainable Urban Energy	EC			4h	1
UE806 Energy Environment and Society	UE				6
Specific energy contracts and fiscal law	EC	9h	10,5h		2
SEMINARS International energy policies	EC	18h			2
Foreign language choice	CHOIX				
Foreign language (French)	EC				2
Foreign language English	EC				2
UE 807 Innovation, creativity and research	UE				8
Creativity through biomimicry for solar cities	EC		22h		2
Research project	EC			24h	6
Optional Internship/Work placement	MODULE				

# M2 - Solar energy, law, economics and management

### Semestre 9

	Nature	CM	TD	TP	Crédits	
UE901 Advanced Business Models	UE				4	
Legal regim: production, use solar electricity	EC	18h			2	
New Business models in energy industry	EC	18h			2	
UE902 Energy Efficiency	UE				4	
Energy efficiency in buildings	EC	18h			2	
Empirical case studies in energy efficiencies	EC	10,5h	9h		2	
UE903 Energy transition and development	UE				4	
Long run optimization (dynamic control)	EC	9h			2	
100% renewable objective	EC	9h			1	
Renewables in developing countries	EC	9h			1	
UE904 Smart grids and smart city	UE				4	
Modeling in the literature	EC			21h	2	
Smart grids and smart cities	EC	18h			2	
UE905 Urban development	UE				6	
Case study common project	EC	9h	10,5h	16h	2	
Urban planning and architectural integration	EC	10h		3h	1	





Performance indicators and information processing	EC	6h	12h		1
Foreign language choice	CHOIX				
Foreign language (French)	EC		30h		2
Foreign language English	EC		30h		2
UE906 Research and innovation project	UE				8
Multidisciplinary project	EC	6h	2	4h	6
Entrepreneurship, innovation challenge	EC	6h			2

### Semestre 10

	Nature	CM	TD	TP	Crédits	
UE001 Internship	UE				30	
Internship	EC				30	

