GRADUATE SCHOOL SOLAR ACADEMY

CONTENT OF THE COURSES

Master Solar energy, law, economics and management (SoLEM)

YEAR 1 - SEMESTER 7 COURSE	S Ects
UE701Core Law	**4**
International and European regulations	3
Bases of contract law	1
UE702 Core Economics	4
Environmental economics and Externalities	2
Economics of energy and climate policies	2
UE703 Quantitative analysis	4
Advanced data analysis - multivariate analysis and clustering	2
Introduction to econometrics	2
UE704 Introduction to Solar Energy	4
Solar Thermal and Photovoltaïc	2
Projet	2
UE705 Sustainability for energy transition	8
Legal issues related to renewable energies	2
Human sciences for solar energy: Social, historical and industrial perspective	2
Sustainability analysis: principles, tools and metrics	2
Foreign language (French) - FLE Mandatory for foreign students	2
Foreign language English	2
UE706 Introduction to research	**6**
Library research tools and methods, publishing process in science Literature review project	6
	30

YEAR 1 - SEMESTER 8 COURSE	ECTS
UE801 Market and Energy Prices	**2**
Price dynamic modelling	1
International energy markets	1
UE802 Adoption of renewables	4
NPV Computation	1
Intertemporal optimization under uncertainty	1
Adoption of environmental innovations	2
UE803 Urban planning and city	2
Urban Planning	1
Urban Law	1
UE804 Energy transition and public policies	4
Public policies assessment in econometrics	1
Modelisation and economic prospective	1
Health Law	1
Energy and territorial development	1
UE805 Introduction to Energy use in Buildings and Cities	4
Energy use in Buidlings	3
Sustainable Urban Energy	1
UE806 Energy Environment and Society	6
Specific energy contracts and Fiscal law	2
International energy policies and markets	2
Foreign language (French) - FLE Mandatory for foreign students	2
Foreign language English	2
UE 807 Innovation, creativity and research	8
Creativity through biomimicry for solar cities	2
Research project	6
Optional Internship/Work placement	
	30

YEAR 2 - SEMESTER 9 COURSE	ECTS
UE901 Advanced Business Models	**4**
Legal regim for production and use for solar electricity	2
New Business models in energy industry	2
UE902 Energy Efficiency	4
Energy efficiency in buildings	2
Empirical case studies in energy efficiencies	2
UE903 Energy Transition and Development	4
Long run optimization (dynamic control)	2
100% renewable objective	1
Renewables in developing countries	1
UE904 Smart grids and Smart city	4
Modeling in the literature	2
Smart grids and Smart cities	2
UE 905 Urban development	6
Case study common project : CIM (BIM), Monitor, Energy forecast, Data analysis	2
Urban planning and architectural integration	1
Performance indicators and information processing	1
Foreign language (French) - FLE Mandatory for foreign students	2
Foreign language English	2
UE906 Research and Innovation Projec6	8
Multidisciplinary project	6
Entrepreneurship, Innovation challenge	2
	30

YEAR 2 - SEMESTER 10 COURSE	ECTS
Internship	30