

PEES9AA ENERGY AND ENVIRONMENT TRADING

PEES9AA	Duration : 21 hours	ECTS Credits : 2	Semester : S9
Energy and Environment trading			
Person(s) in charge:			
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Keywords :			
Energy market			
Prerequisites:			
None			
Objective:			
Examine the energy policies in relation to their main economic and environmental challenges and get basic skills in the field of technical and economic optimization of energy consuming industrial processes, with mathematical modelling			
Program and contents:			
<ul style="list-style-type: none">• Macroeconomics of energy, major energy policies, geostrategy of energy (2 classes) <i>Growth, ressources, environmental constraints, sustainable development</i>• Financial mathematics applied to energy management (2 classes) <i>Hotelling rule, speculation, market's price</i>• Introduction to quantitative finance (2 classes) <i>Study of different models (Cos-Ross-Rubinstein, Black & Scholes...)</i>• Case studies (1 class) : oil price			
Techno-economic optimization of industrial processes: accounting principles for energy, optimal choice of investments, saving energy, techno-economic assessments, industrial case studies (the networks that will be particularly examined: techno-economic optimization of networks, the assumptions of the software used, economics, technology choices for economic solutions).			
Evaluations :			
<input checked="" type="checkbox"/> Written test	<input checked="" type="checkbox"/> Continuous Control	<input type="checkbox"/> Oral Report	<input type="checkbox"/> Project
		<input type="checkbox"/> Written Report	