

- Faculté des sciences économiques
- [www.unine.ch/seco](http://www.unine.ch/seco)

## Energy Economics (5ER2032)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en développement international des affaires</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3
<b>Master en économie appliquée</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3
<b>Master of Arts en innovation, orientation Innovation et société</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3
<b>Master of Law en innovation</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3
<b>Master of Science en innovation</b>	<b>Cours: 2 ph</b>	Voir ci-dessous	3

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

### Période d'enseignement:

- Semestre Printemps

### Equipe enseignante

Mehdi Farsi (professor), Fabien Giauque (assistant)  
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### Contenu

While focusing on policy perspectives regarding energy transition, the course addresses the following general themes:

- Energy and economic systems
- Static and dynamic efficiency
- Conventional energy sources
- Renewable energy
- Energy efficiency
- Electricity markets

The students will have the opportunity of working on an individual writing project on a topic of their choice but within a specific methodological framework preferably drawn from a selection of published papers.

### Forme de l'évaluation

Final grade is based on a written take-home exam, an individual essay (preferably with a critical review of a given paper) and a number of class quizzes. Performance in class debates and presentations will be rewarded by a bonus. Further details and weights will be given in class. Plagiarism in any form and quantity will cause failure with grade 1 out of 6. Please make sure to check your written work by Compilatio.

### Modalités de rattrapage en cas d'évaluation interne (hors session d'examen)

In the case of a re-take exam, the evaluation is based on a written take-home exam and an oral defense, with no bonus. Plagiarism in any form and quantity will cause failure with grade 1 out of 6. Please make sure to check your written work by Compilatio.

### Documentation

- Energy Economics, 2nd edition, Peter M. Schwarz, 2022.
- In addition to the main textbook above, the course draws on selected readings that will be made available during the semester.

### Pré-requis

Basic knowledge of microeconomics

### Forme de l'enseignement

Lecture: 2 hours per week  
Office hours: upon request by e-mail

### Objectifs d'apprentissage

Au terme de la formation l'étudiant-e doit être capable de :

- Formulate policy-relevant questions and criticisms
- Describe economic efficiency in static and dynamic states

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### **Energy Economics (5ER2032)**

- Communicate the results of an economic analysis
- Explain the role of energy in the economy
- Apply microeconomic models to energy markets and policy analysis
- Define different aspects of energy transition

#### **Compétences transférables**

- Develop scientific rigor and curiosity
- Solve quantitative problems
- Write a scientific essay
- Generate new ideas (creativity)