Climate economics for engineers
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Cursus
Génie civil & environnement

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Summary
The course introduces non economists to the economic analysis of climate change: economic activity and climate change, estimation of climate impacts, optimal mitigation and adaptation, national and international climate policy, instruments for climate policy.

Content
Economic activity as a source of greenhouse gases, climate scenarios
Impacts of climate change: valuation and uncertainty, net costs (aggregation, intergenerational discounting)
Adaptation to climate change
Mitigation: mitigation as a public good, efficiency and sufficiency, abatement measures, marginal abatement cost curves, innovation
Solar radiation management: economics and governance
Instruments for climate policy: voluntary approaches, regulation, economic instruments
Climate policy: Swiss climate policy, international climate policy, prisoner’s dilemma, cooperation, climate risk mitigation game

Note
This course does not require any prior economic knowledge, but it is easier for those who attended ENV-615 "Environmental Economics for Engineers" or Env-620 "Environmental Economics for Engineers (2018)"
It will only be given for a minimum of 5 students.

Keywords
climate change
economics

Learning Prerequisites
Recommended courses
Recommended: ENV-615 Environmental Economics for Engineers (before 2018) or Env-620 "Environmental Economics for Engineers (2018) from 2018"

Learning Outcomes
By the end of the course, the student must be able to:
• to explain how economic activities contribute to climate change
• to develop the economic analysis of the main instruments of climate policy
• to explain the main dimensions of climate policy ‘games’

Resources

Bibliography

Ressources en bibliothèque