Transitions and technology policy
Foray Dominique

**Cursus**

| Energy Science and Technology | MA1, MA3 | Opt. |
| Managmt, tech et entr. | MA1, MA3 | Opt. |
| Minor in Engineering for sustainability | H | Opt. |

**Remark**

**Summary**

This course addresses the issue of designing innovation strategies and technology policies to support transitions towards sustainable development goals.

**Content**

We present a general framework of analysis based on the notions of positive and negative externalities and market failures. Based on this framework various types of interventions by the State are explored in order to achieve sustainable development goals. These interventions involves promoting innovation, changing the economy, involving society and establishing better rules for policy.

**Keywords**

Mission innovations
Rate and direction of technical changes
Productivity
Green growth
Innovation policies
Push and pull mechanisms to promote innovation
Externalities
Policy monitoring and evaluation

**Learning Prerequisites**

Recommended courses
Principles of microeconomics (A.Mack)

**Learning Outcomes**

By the end of the course, the student must be able to:

- Define the key concepts of externalities
- Choose appropriate policy tools
- Assess / Evaluate national innovation policies
- Develop a policy roadmap

**Transversal skills**

• Access and evaluate appropriate sources of information.
• Make an oral presentation.
• Plan and carry out activities in a way which makes optimal use of available time and other resources.

Teaching methods
formal lectures
interactive sessions - team work - student presentations

Expected student activities
preparation of oral presentation
writing a document

Assessment methods
continuous assessment combining
25% individual work
75% final project

Resources
Bibliography
to be provided at the first session

Moodle Link
• https://go.epfl.ch/MGT-408