Content and composition

We live in a technological world. In our everyday life we use technologies all the time when we cook, shower, communicate and travel. Businesses cannot operate without technologies. Governments are also much concerned with technologies and innovation, e.g. as a problem solver for sustainability challenges, as engines of economic growth or as potential sources of major risks. In this package you develop a deep understanding of the interrelationship between technologies and their social and economic context. Challenging and enlightening cases are discussed, in particular from the field of sustainable innovation. Different perspectives from the field of Science and Technology Studies (STS) are offered to understand and govern these cases and relationships. These include among others large technical systems theory, actor-network theory, social construction of technology, socio-technical scenario’s, strategic niche management and the multi-level perspective. After successfully finishing the three courses in this package you will be able to value the complex relationships between technology and society and have gained important knowledge and skills for socio-technical management and governance. For further deepening their knowledge and skills, students can participate in an additional fourth course ' Sustainable Technology in Society: Advanced'.

Course description

Sustainable Technology in Society: Introduction

This course introduces students to the inter-wovenness of technology and society, the challenges this brings to sustainable innovation, and the pros and cons of open innovation as a sustainable innovation strategy. The course focuses on a set of compelling and captivating cases to create student awareness of these themes and introduces analytical perspectives for analysis.

Managing Sustainable Technology

This course builds upon the cases and perspectives offered in the previous course but focusses on ways to govern complex relations between technology and society. Managing Sustainable Technology introduces students to the possibilities and limitations of how societies can manage sustainable innovations, drawing on insights from the field of Science and Technology Studies (STS). This course discusses three important realms that play a role in this: the state, civil society and markets. Based on a simultaneous 'unpacking of the black boxes' of technology and society, we critically examine the role of these realms and their interactions with each other in managing sustainable innovations in society.
Managing Sustainable Technology OGO

During the Managing Sustainable Technology OGO students learn to practically operationalize insights and tools from the field of Science and Technology Studies and apply these on a "real life" sustainable innovation case, e.g, in energy, ICT or mobility. The aim is to study how technology is/can be managed in society and design policy or strategy recommendations based on their analysis. A combination of application of knowledge and a theoretically informed reflection forms the core of this OGO.