





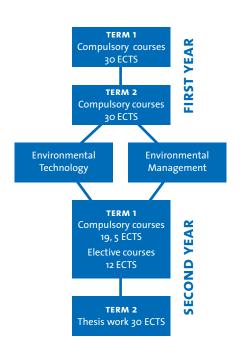
# MASTER OF SCIENCE IN

# Sustainable Technology

The Department of Industrial Ecology
School of Energy and Environmental Technology
Royal Institute of Technology (KTH), Stockholm, Sweden



KTH Energy and Environmental Technology



	TERM 1		
FIRST YEAR	Compulsory courses (30 ECTS): Introduction Industrial Ecology Environmental Management Environmental Effects and Strategies Environmental System Analysis Technology and Sustainable Development	6 6 6 6	

TERM 2				
Compulsory courses (30 ECTS): Risk Management Cleaner Production Ecology Waste Management Branch: Environmental management Environmental Management II Branch: Environmental Technology Environmental Technology	6 6 6 6			

**Compulsory courses (19.5 ECTS):**Research Methodology and Theory of Science Environmental Economy Branch: Environmental Management Risk Management II

Branch: Environmental Technology 6 6 Cleaner production II Elective courses (12 ECTS):

- Example of elective courses:
   Applied Environmental System Analysis II: project based course
- Sustainable development in theory and practise Environmental modelling: Chemical and Physical **Fundamentals**
- Scenario methods
- Renewable energy
- Sustainable Energy Utilization or Sustainable Power Generation

Master's thesis work	30 ECTS

### PRESENTATION OF THE PROGRAMME

The Sustainable Technology Programme has its basis on the concept of Industrial Ecology with a focus on the understanding of interactions between technical, economical, social and ecological systems and processes. Industrial ecology can be considered as a concept aspiring for characterizing how the industry, or rather the entire industrial society of today, should work in the future in reducing its interference with the life-supporting ecosystems of the world.

Technology is an important driving force for economical development, and technology and communication are two essential factors in the development of more sustainable societies. Without new sustainable technologies, it will not be possible to obtain economic growth and global equity; and without communication skills, it will not be possible to reach consensus in the democratic processes in society for different new technologies. These insights are the foundation of the International Master Programme in Sustainable Technology.

The programme is divided into two streams, Environmental Management and Environmental Technology, a choice the students will make in the middle of the programme.

# PROGRAMME OUTLINE

**SECOND YEAR** 

The programme has a total duration of 2 years, divided into 4 terms. It consists of 3 terms of course work which sums up to 91.5 ECTS credits. Compulsory courses make up 79.5 ECTS while 12 ECTS are elective courses.

The course study period is followed by an average of five to six months of thesis project work (30 ECTS). The programme is open to applicants from all over the world. The programme language is English.

Our pedagogical idea in the learning process is to work with projects, best practices and case studies. We put a lot of effort to train our students in discussions, methods for critical analysis and written and oral presentations. We also have a high priority to link our courses and projects to practical experiences through cooperation with companies, institutes and public authorities.

# MASTER'S THESIS

After completing the course work block, every student starts to work with a thesis project. The thesis project may be carried out either in an academic environment in a public or in an industrial setting. Students are highly recommended to try to find relevant thesis project related to important sustainability topics in their home countries.

#### CAREER PROSPECTS

Students graduating from the programme have a spectrum of knowledge and skills adapted to work with sustainable development specially focused on environmental management, both in the private and public sectors. In view of the growing awareness regarding the need to build more long-term sustainable societies, graduates from the programme will have the skills to help them become key players in developing the necessary strategies for the future.

# ADMISSION REQUIREMENTS

Applicants must hold a degree of Bachelor in Technology/Engineering or Science or an equivalent degree.

# APPLICATION AND DEADLINES

Application form and information on deadlines is available at: http://www.kth.se/eng/education/ application\_admission/masters.html.

# SCHOLARSHIP

Applicants to our programme can apply for the MKP Scholarship through the Master Programme for Key Personnel in Developing Countries, financed by SIDA and SI. Further information can be accessed at http://www.studyinsweden.se

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# **DEPARTMENT OF INDUSTRIAL ECOLOGY**

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