

USE – Patents, design rights and standards

This learning line is phased out in 2025-2026.

Patents, design rights and standards	
Offered by	Department of Industrial Engineering and Innovation Sciences
Language	English
Primarily interesting for	All students.
Prerequisites	Required courses: - Recommended courses: -
Contact person	prof.dr.ir. R.N.A. Bekkers

Content and composition

Course code	Course name	Level classification	2024-2025	
OSEUBO	Patents design rights & standards: Exploration	1.	Regular Education	Re-exams for written exam
OSSUCO	Patents design rights & standards: Specialization	2.	Regular Education	Re-exams for written exam
OSAUCO	Patents design rights & standards: Application	3.	Regular Education	Project offered in Q1, re-exam alternative project in Q3

Course description

OSEUBO Patents design rights & standards exploration course

This course addresses all 3 USE perspectives. It shows how some companies can only survive if they position themselves properly in compatibility standards, how innovation is affected by patents, how patent behaviour impacts markets, and how firms adopt specific patenting strategies. It explains how patents have developed far beyond their original role into business assets necessary to obtain freedom to operate, to defend against others and to strategically block them or extract money from them.

Learning objectives

Students that successfully finished this course should:

- Have a good understanding of what patents, design rights and standards are;
- Have a good awareness of the various aspects and dimensions relevant for patents and standards;
- Differentiate the different roles and meaning of the patent system for various types of stakeholders, including various types of firms, universities, and society as a whole;
- Evaluate the overall functioning of the patent system, - Understand how design rights, copyrights, trade marks and other IPRs are used in conjunction with patents,
- Be able to develop their own thoughts and opinions about moral aspects of patents and standards and report these thoughts in an essay.

OSSUCO Patents design rights & standards specialized course

This course is split into two parts: (1) patents and technological change and (2) standards and technological change. Part (1) builds upon the disciplines law, economics, and management science and provides insights into various dimensions of the patent system. Part (2) provides a deeper understanding of the phenomenon of standardization, and how it shapes technological change.

USE – Patents, design rights and standards

Learning objectives

Students that successfully finished this course should:

- Be able to understand studies on patents and standards from various disciplinary perspectives. In specific, they should:
- Know what the main research strands are in economics, business studies, and law
- Understand the benefits and threats of university patenting
- Understand how patent law is constantly evolving, among other things in subject areas - Understand copyrights and its economic effects
- Know how inventions or subjects or activities can be effectively protected by design rights, trademarks, copyrights, patents, and more
- How institutional arrangements can address problems with patents, such as in patent pools
- Have learned the skills to perform quantitative analysis on patents, including patent searches and building patent datasets, and analyze such data with a specific research question in mind

OSAUCO Patents design rights & standards project

Before investing into research or market entry in a given area, firms are advised to study the existing patent situation ('landscape'). A patent landscape study provides insights in the existing state of the art, such as the need to obtain licenses from others, and the risk of being blocked. In a patent landscape study, students select a focus technology, investigate the important aspects of this technology, learn how to find necessary patent data, perform analysis, and present the findings.

Project A Patent landscape study

Project B Patent pool investigation

Project C Standards adoption and discourse

Project D Patent an invention

Learning objectives

Students that successfully finished this course should be able to:

- a. Perform a patent landscaping study, in a specific technical context,
 - (a1) making an appropriate technology selection and developed a good understanding of important the technological elements
 - (a2) identify, collect and process the necessary underlying patent data
 - (a3) perform a sufficient set of patent landscape analyses
- b. Report the findings and present them to a larger public;
- c. Cooperate in a group setting to perform a data based study.