

# Patents, design rights, and standards

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

## Content and composition

Provide a description of the content and composition of the elective package. For a hi-tech firm, being smart and innovative in technology is not enough. It also needs some way to capture the value of its inventions. Patents and standards are two of the most effective tools to do so, but may also be abused, causing problems for users, firms, and society as a whole. This USE course sequence provides valuable insights into how these phenomena are critical to the success of companies and shape the future of technology.

For patents, it addresses the user perspective, where we discuss why and when you should aim to protect your own inventions; the enterprise perspective, where we study contemporary firm strategies ranging from defensive use through patent trolls to open innovation, and the societal perspective, where we consider the positive but also negative impact of the patent system. For standards, the enterprise perspective is explored, in order to understand how firms can use their influence to protect their interests, and how this impacts others.

Course code	Course name	Level classification
OSEUBO	Patents design rights & standards: Exploration	1.
OSSUCO	Patents design rights & standards: Specialization	2.
OSAUCO	Patents design rights & standards: Application	3.

## Course description

### OSEUBO, Patents design rights & standards Exploration

The Patents, Design Rights and Standards Explorative Course addresses all three perspectives. It shows how some companies can only survive if they position themselves properly in a compatibility standard, how innovation is positively and negatively affected by patents, how patent thickets impact markets and how patents trolls threaten and sometimes kill their prey. It explains how patents have developed far beyond their original role (providing a manufacturing monopoly) towards business assets necessary to obtain freedom to operate, to defend a company against others, and to strategically block others or extract money from them. Students will learn how patents and standards are most relevant in a number of selected areas (as much as possible related to the 3 TU/e strategic areas Energy, Health and Smart Mobility). Students are also stimulated to take a broader view, like thinking about the societal impact of patents on the availability of AIDS drugs, for instance. Finally, students will learn how design rights, copyrights, trademarks and other Intellectual Property Rights are used in conjunction with patents.

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## **OSSUCO, Patents design rights & standards Specialization**

Compared to the explorative course, the Patents, Design Rights and Standards Specialized Course is mostly analytical in nature. It is split into two parts: (1) patents and technological change, and (2) standards and technological change. The first part of this course builds upon the disciplines of law, economics, and management science and provides insights into various dimensions of the patent system: its rich history and ratio, the legal foundations, the institutional setting, patenting strategies from a firm perspective, patent pooling, patent trolls, spinoffs and startups, patent data and research, the economic and societal impact of patents, and policy and intervention. The course will also consider university patenting, tech transfer and the entrepreneurial university, and the dilemma between publishing and patenting. The second part of this course provides a deeper understanding of the phenomenon of standardization, and how it shapes technological change. It includes topics such as the economic ratio and impact of standards, their role in shaping technologies, the institutional setting and rule sets for standards, open standards and eGov, environmental standards, antitrust/competition law, policy aspects, and current problems and issues.

## **OSAUCO, Patents design rights & standards Application**

The USE sequence by a project, in which the students apply knowledge gained during the explorative and specialized courses within a specific technical or disciplinary context. They can perform an analysis, which can be of different types.

Within the application course you can choose between four projects:

- Project A Patent landscape study
- Project B Patent pool investigation
- Project C Standards usage and standardization discourse
- Project D Patent an invention