

Law for IT Computer Scientists (C004645)

Course size *(nominal values; actual values may depend on programme)*

Credits 3.0

Study time 90 h

Course offerings and teaching methods in academic year 2026-2027

A (semester 2)	Dutch	Gent	lecture	0.0h
			seminar	0.0h

Lecturers in academic year 2026-2027

Geiregat, Simon

RE21

lecturer-in-charge

Lievens, Eva

RE21

co-lecturer

Offered in the following programmes in 2026-2027

[Master of Science in Computer Science](#)

crdts

3

offering

A

[Master of Science in Information Engineering Technology](#)

3

A

Teaching languages

Dutch

Keywords

law; right; rights; technology law; law and technology; legislation; law; laws
personal data; privacy; gdpr; regulation; freedom; expression; free speech;
human rights; e-commerce; governance; AI Act
intellectual property; IP; copyright; database; data base; patent; software
protection; trade secret; non-disclosure agreement; NDA; open access; license;
licence; open source; opensource; creative commons; cc

Position of the course

This course introduces computer scientists to the main legal frameworks that they may encounter in practice.

First, the course familiarizes students with legislation on the protection of personal data (GDPR), on artificial intelligence (AI Act), and other relevant topics. Special attention is given to the impact of these legal frameworks on software development, data-driven applications, and innovative digital services.

Second, the course provides students with a thorough introduction to intellectual property law (also known as IP law). Applied to computer science, this means that particular focus is placed on the protection of software through copyright and patents, as well as on the protection of graphical and textual interfaces and databases. The course also addresses the protection of trade secrets, domain names, and trade marks in the IT context*. Alongside this, students study the practice of (software) licensing and the importance of initiatives such as open source, open access, Creative Commons, the GNU General Public License, the Copyleft movement, and related developments.

Contents

After a general introduction to the legal framework in which computer scientists operate, the course is divided into two parts:

I. Protection of personal data, the legal framework on AI, and related legislation

This first part covers the following topics:

- European data protection regulation: the General Data Protection Regulation (GDPR):
 - Basic concepts (personal data, controller, processor, etc.)

- Legal bases and principles for data processing
- Rights of data subjects and obligations of organizations
- Data breaches, DPIAs, and documentation requirements
- European regulation on artificial intelligence: the AI Act and related instruments:
 - Risk-based approach and classification of AI systems
 - Obligations for developers, providers, and users of AI systems
 - Transparency, documentation, and oversight requirements
- Other legal instruments directly relevant to the IT sector*

II. Protection of intellectual property (IP)

This second part covers the following topics:

- Basic concepts and objectives of intellectual property rights:
 - What are intellectual property rights?
 - Why does the law create these rights, and what is their purpose?
 - Which types of intellectual property rights exist?
- Copyright for texts and graphical interfaces:
 - Who obtains which rights over which material, and how and for how long?
 - What is a computer scientist allowed or not allowed to do with someone else's copyrighted work without the author's permission?
 - What is a licence? What is the meaning and legal status of initiatives such as open access and Creative Commons?
- Protection of computer programs under copyright law:
 - Who obtains which rights over which parts of software, and how and for how long?
 - What is a computer scientist allowed or not allowed to do with someone else's software?
 - What is the legal significance of initiatives such as open source, the GNU General Public License, and the copyleft movement?
- Protection of databases:
 - What is a database from a legal perspective?
 - Who obtains which rights over databases, and how and for how long?
 - What is a computer scientist allowed or not allowed to do with someone else's database?
- Patent law and the patentability of computer-related inventions:
 - What is a patent?
 - Who can apply for a patent on a software-related invention, how, under what conditions, and what does the protection consist of?
 - What should a computer scientist pay attention to when creating a potentially patentable invention?
 - What is a computer scientist allowed or not allowed to do with someone else's patented invention?
- Trade secrets in the IT sector*:
 - How and under what conditions are trade secrets protected?
 - What is an NDA (non-disclosure agreement)?
- Trademark and domain name law*:
 - How and under what conditions can someone register a trademark, and what rights does a trademark confer?
 - How are domain names managed, and how are domain name disputes resolved?
 - What is the relationship between the domain name system and trademark law?

*These topics are covered only if time permits.

Initial competences

None required.

Final competences

- 1 Demonstrate knowledge of and insight into the general legal framework within which professionals in computer science operate.
- 2 Demonstrate knowledge of and insight into the concepts, basic principles, developments, and policies in data protection law, AI and data legislation, and related domains.
- 3 Demonstrate knowledge of and insight into the concepts, basic principles, developments, and policies in intellectual property law relevant to the field of computer science.

- 4 Identify, define, and distinguish between different intellectual property rights.
- 5 Correctly name and explain advanced concepts related to the GDPR, the AI Act, copyright law, the *sui generis* database right, patent law, and trade secrets law, and apply these concepts to simple cases.
- 6 Determine, for each creation of the human mind arising in an IT context, which legal framework(s) apply, how such creations can be protected under intellectual property law, what the practical impact is, and how such protection can be obtained.
- 7 Apply relevant legal rules from data protection law, AI law, data law, and intellectual property law in practice, and articulate the legal risks associated with IT practices.
- 8 Independently analyze simple practical cases and research questions from IT practice, and formulate a strategy for resolving these cases and questions, with legal assistance if necessary.
- 9 Reflect on the relationship between computer science and the legal framework applicable to the IT sector, with a critical and solution-oriented mindset.
- 10 Recognize and contextualize developments in data protection law, AI law, and intellectual property law within a broader societal context, with a critical mindset.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture

Extra information on the teaching methods

Most of the lecture time consists of ex cathedra sessions in which the instructors present new material, while providing sufficient room for interaction and questions. One of the lectures may be dedicated to solving a practical case study in class. This case study is made available to students in advance for preparation. The purpose of this session is to offer students a realistic practice scenario and to prepare them for the exam.

Lecture recordings

The lectures are recorded if the facilities of the lecture hall allow it. Recordings of the case study session are not made available.

The instructors are not responsible for unforeseen technical issues that may result in a recording not being available as expected. Students are therefore advised to have a plan B in place in case technical problems occur.

Study material

Type: Slides

Name: Recht voor informatici - hand-outs
 Indicative price: Free or paid by faculty
 Optional: no
 Language : Dutch
 Oldest Usable Edition : N/A
 Available on Ufora : Yes
 Online Available : No
 Available in the Library : No
 Available through Student Association : No

Type: Reader

Name: Various texts, to be consulted before each lecture
 Indicative price: Free or paid by faculty
 Optional: yes
 Language : Dutch
 Available on Ufora : Yes
 Online Available : No
 Available in the Library : No
 Available through Student Association : No

Additional information: Lecturers may provide suitable texts for students to participate to each lecture with more background knowledge.

References

For IT professionals, this is an interesting reference with a **general scope**:

- M. HILDEBRANDT, *Law for Computer Scientists and Other Folk*, Oxford University Press.

On **data protection** and the **AI Act**, see:

- B. VAN DER SLOOT, *De Algemene Verordening Gegevensbescherming in gewonemensentaal*, Amsterdam University Press;
- KNOWLEDGE CENTRE DATA & SOCIETY, *The EU AI Act in 6 steps*, https://data-en-maatschappij.ai/uploads/Tools-downloads/Tool-AI-Act-in-6-steps_ENGv_2025-09-12-080857_nmyn.pdf.

Several works are available on **intellectual property law** that provide practitioners with an overview. A very concise introduction can be found in the following book (in Dutch), which also offers a general introduction to private law:

- R. DE CORTE, B. DE GROOTE en D. BRULOOT, *Privaatrecht in hoofdlijnen*, 16e ed., LeA Uitgevers, 2025: zie m.n. S. GEIREGAT, hoofdstuk "Intellectuele rechten", in vol. II, pp. 498-521.

Course content-related study coaching

Information is given during the lectures.

Assessment moments

end-of-term assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment with multiple-choice questions, Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Written assessment with multiple-choice questions, Written assessment with open-ended questions

Examination methods in case of permanent assessment

Possibilities of retake in case of permanent assessment

not applicable

Extra information on the examination methods

The course is evaluated on the basis of a written exam scheduled at the end of the semester. The exam may consist of cases, open questions and/or multiple-choice questions.

Calculation of the examination mark

Written exam: 100% of the final score.

Facilities for Working Students

Working students can participate in this course thanks to the lecture recordings.