Courses International Technology Law (Master Programme in Law)

**International Technology Law**, mandatory (12 EC, period 1 and 2)

**Content**: This course provides the framework for the specialization in international technology law, and considers (i) how technology changes humanity’s relationship with the physical (including the social) world and (ii) how law generates, facilitates or obstructs these changes. The aim at the end of the course is that the student will have an informed idea, based on theory and examples, of the kinds of ways in which technology can change our relationship to nature, people, objects and society. They will also understand, based on examples, how laws and institutions can stimulate the development of technologies, and steer the direction of that development.

Building on Hirschmann’s idea of voice and exit as alternative responses to dissatisfaction the course divides technologies into those which allow us to adapt the physical world to our preferences, and those which allow us to opt-out of the physical world or the existing social order, usually through virtual substitutes. The suggestion is not that all technologies fit precisely into one box or another, but that this frame can be used to understand the choices made and their impact. The underlying idea is that successful technology responds to some kind of need or wish, and this need or wish may be the result of physical, social or legal limitations, which the technology then seeks to overcome or bypass.

16 seminars divided in 4 blocks:

**Block 1 Theory and History**
- History of technology regulation – using examples from the past, such as the compass, medical advancements, and medieval weapons technology, we will consider the normative (legal) context of these: were the breakthroughs encouraged, forbidden, or even generated by existing normative frameworks?
- Philosophical and psychological theories on the relationship between humanity and technology.

**Block 2 Changing the world**
- Climate technology, robots and automatization, biotechnology and human engineering, GMOs, and the legal framework and normative debate generated.

**Block 3 Opting-out of the world**
- Virtual reality and gaming, human substitution (artificial intelligence, virtual relationships, sex robots, blockchain, and the legal framework and normative debate generated.

**Block 4 Other technologies**
- In this block we look at technologies that do not fit easily in either category
and consider the nature of the changes they cause, or reflect, and the legal stimuli involved: Fin-tech, sharing economy, and social media.

**Mode of assessment:** Written papers and presentation.

**Open to:** The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course).

**Big Data, Human Rights, and Human Security, mandatory (6 EC, period 3 and 4)**

**Content:** The question addressed in this course is how digital technologies and big data are used to make decisions in human rights and security domains, and how these uses require us to rethink the basic tenets of existing legal norms and practices. The course focuses on three human rights and security domains in particular: big data and social and criminal justice; the use of digital technologies in warfare and the fight against terrorism; and the use of technology in border management and migration law. Students will become familiar with the legal framework regulating the collection, use and analysis of big data, and the storage and exchange of personal data through the use of digital technologies. For this purpose, they will be introduced to EU and international laws on privacy and data protection, and these laws will be fleshed out with regard to the three case studies.

Data privacy laws can serve as tools to focus microscopically on the ways in which the use of big data and digital technologies pose challenges to individual rights, and clarify possible remedies for these challenges (for example by de-identifying data, foregrounding the question of consent to the collection, use, or disclosure of the data, or through the concept of purpose limitation). Students will learn how to apply the principles of data protection laws in the three human rights and security domains, and become aware of the particular problems that feature in these particular domains. But through the case studies, the course will also require students to reflect on the more fundamental question as to what extent legal responses to human security threats are undergoing a fundamental shift through the use of modern technologies. Thus, it has been argued that these technologies facilitate a “fundamental jurisprudential shift from our current ex post facto system of penalties and punishments to ex ante preventative measures that are increasingly being adopted across various sectors of society.” Whether such a shift to from individual justice to so-called actuarial justice is currently taking place will be discussed through looking at diverse fields such as predictive policing, the use of smart city technology for crowd control and surveillance, the use of big data and algorithmic decision-making for tracking, capturing, killing or blacklisting suspected terrorists, and the use of modern technologies in the implementation of border and immigration policies.

8 Lectures:
1. Introducing the Legal Framework: Big Data and Digital Technology, Human Security and Individual Rights
2. Big Data and Criminal Justice: Predictive Policing
3. Smart Cities: Big Data, Surveillance and Social Justice
4. The Disposition Matrix: Algorithmic Decision-making for Military Purposes
5. Big Data Blacklisting: The use of big data for terrorist blacklisting by the UN Security Council, the EU, and national states.
6. Smart Borders in the EU: Frontex, integrated border management, and the entry-exit system
7. Schengen Information System (SIS II): Digital information in the area of freedom, security and justice
8. Presentations by students

**Mode of assessment:** Written paper, peer review and presentation.

**Open to:** The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course).

**Bioethics, Technology and Law, integration course (6 EC, period 1)**

Biomedical developments radically question the foundations of current legal and ethical ways of thinking. This interdisciplinary course will enable the student to critically reflect upon legal and ethical dimensions of current public debates on the regulation of biomedical technologies. This course will teach the student to come to an understanding of the key concepts and categories within legal regulation of biomedical technologies, and to connect these with various normative ethical theories.

Through an examination of the existing legal frameworks surrounding biomedical technologies from the perspectives of law and bioethics against the background of ongoing contemporary political and societal discussions, the student will be trained to integrate ethical reasoning, daily practices and legal rules and regulations into a normative evaluation of these technological developments. In this process the student will be encouraged to take a legally and ethically argued position in scientific debates on current developments in the field of the life sciences through written and oral presentations of a legal and philosophical nature.

Central to this course are the fundamental legal-ethical questions that are raised by emerging biomedical technologies. Foundational legal-philosophical notions, such as human dignity, autonomy, justice, freedom and equality, have acquired a renewed meaning and urgency in light of recent developments within the field of the medical biotechnology. Medical biotechnology has enabled us to intervene with the human body and human life in radically new and far-reaching ways. Existing and emerging biomedical technologies, such as pre-implantation genetic diagnosis, gestational surrogacy, organ transplantation, whole genome sequencing, human genetic engineering and synthetic biology, are confronting lawyers and ethicists with new and controversial questions that touch upon the foundations of national and international legal orders. Indeed, the foundational distinctions between, for example, person and thing, life and death, human and animal, and chance and choice, are
no longer a natural given, but are increasingly becoming subject to human decision-making. Moreover, the traditional legal image of the person is put to the test. A few examples:

Why are women not allowed to sell their egg cells in most European countries? How should human embryos, frozen egg cells, organs and biological materials be legally qualified: as part of the person, or as the object of property rights? How should the limits of life and death be understood on a legal level, now that these boundaries have become fluid as a consequence of technological developments? How should national governments respond to new forms of medical tourism, such as surrogacy and organ tourism? What are the legal limits to human enhancement, and on which thoughts and principles are they based?

These and other questions will be examined on three levels: a legal, a philosophical and a social-political level. Firstly, the key concepts and principles will be identified and analysed within the context of current legal regulation of biomedical technologies. In this process, the student will become familiar with the most important ‘biolegal’ legislation and case-law. Secondly, these notions will be discussed against the background of several philosophical schools of thought, including liberalism, communitarianism, utilitarianism, bioconservatism, transhumanism and more symbolic and phenomenological approaches. Lastly, the practical effects of these legal and philosophical values will be discussed through an examination of recent public and political debates on biomedical issues.

**Mode of assessment:** paper and presentation.

**Open to:** The course is open to master students in the master in philosophy, students in the LLM in law, students from other universities/faculties, Exchange students, Contractor (students who pay for one course).

**European Consumer Law in a Digital Society, integration course (6 EC, period 4)**

Consumer law deals with transactions between a consumer and a professional party. Increasingly, consumers conclude contracts through internet. The European Union considers this type of transactions, which is part of the digital market, an important means to increase economic growth. European consumer law also plays a role in the platform economy. European consumer law also plays a role in the platform economy, since consumers conclude contracts with platforms, for instance Air BNB and E-bay. This course focuses on the contractual aspects of these transactions and dispute resolution in national and in international situations. The starting point is the European Union perspective. After having followed this course, a student will know which EU directives are important with respect to b2c-transactions After this course, a student has knowledge of Directive 93/13 on unfair terms in consumer contracts, Directive on unfair commercial practises, Directive on Consumer Sales, Directive consumer rights, and knows how to deal with an international transaction.

**Mode of assessment:** To be able to participate in the written exam, the students will have to
give a presentation (pass or fail) and/or write a paper.

Open to: The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course), provided they have passed a course in contract law.

**Law and Ethics on Robots and Artificial Intelligence**, elective of the specialization (6 EC, period 5)

Amongst emerging technologies, robotics and artificial intelligence are prominent both in terms of existing as well as expected use in society. These technologies are special, because they come close to how we humans function. At this moment both robots and artificial intelligence are primarily used for specific tasks (playing games, surgery, self-driving cars), but developments are moving fast. What exactly the future brings is difficult to tell, but no one denies the potential and risks related to robotics and artificial intelligence. Not surprisingly, in the legal and policy arena an active discussion is going on related to legal and ethical issues. These are the issues addressed in this course. The legal angle includes both existing law and the need for new law. If new law is needed, discussion will also be on how this new law should be drafted. For instance, presently the European Parliament is analyzing if maybe some time in the future we may need some sort of legal personality for robots, and Harari is even fantasising about legal personhood for algorithms. Ethics can apply to both the development and use of robots and artificial intelligence. In this course ethics is primarily used to either constrain the application of existing law or to guide the drafting of new law. Applications that are covered in this course include softbots, the internet of (robot) things, ambient technology, autonomous intelligent vehicles, and social robots (care and sex).

Mode of assessment: paper assignments.

Open to: The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course).

**International Weapons Law**, elective of the specialization (6 EC, period 4)

The international law of weapons existing today comprises a large variety of rules from different levels. Weapons of mass destruction are governed by a comprehensive regime, but in the field of conventional arms, the rules are less extensive and leave more leeway for states. Because of the direct link with national security, regulation in this area is a sensitive issue for states. Existing treaties in this area thus often only govern specific categories of weapons, and they may differ in their scope of regulation – from a complete ban to mere limitations on the manufacture or trade in arms. After providing an overview on general sources on international weapons law and institutions dealing with weapons, arms control and disarmament (including weapons of mass destruction), this course will address the laws
Students will also be introduced to new technologies and the challenges they pose for the regulation and control of small arms and light weapons, such as record keeping and tracing. Moreover, the course will cover EU law on export controls, and address the legal framework of export controls on dual-use goods—goods that can be used for both civilian and military purposes. Legal challenges posed by autonomous weapons systems, which select and engage targets without human intervention, will receive separate attention. The role of civil society in shaping international weapons law will also be covered.

**Mode of assessment:** take home exam and written assignments.

**Open to:** The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course), provided they have sufficient background in law.

**Blockchain and other disruptive business-tech challenges to the law, elective of the specialization (6 EC, period 4).**

New technologies, such as, inter alia, blockchain, the sharing economy and fin-tech challenge the existing legal order, by posing new questions concerning responsibility, liability, compliance with existing rules, governance, and ultimately a state’s power to regulate and enforce within its own territory. These technologies challenge us to reconsider: why do we have regulation covering these respective areas in the first place. What do we want to achieve? Is that still relevant? If so, is there any way in which we still can strive to accomplish these goals? For example, blockchain technology underlies phenomena like cryptocurrencies and smart contracts, effectively undermining the need for trusted third parties like banks, public notaries, etc. As things are today, what do we need trusted third parties for? Is the regulation that empowers them still relevant and necessary? How can we protect consumers, how can we guarantee financial stability? The course is not just about the challenges that use of new technologies pose to the law, but also about how the law can enable and shape new technologies and maybe steer developments in a certain direction.

**Mode of assessment:** Paper assignments and video.

**Open to:** The course is open to students in the LLM in law, students from other universities/faculties, Exchange students, contractor (students who pay for one course).