Compulsory courses

## Priv, cybersec & datamanag comp Year 1

Faculty of Law

## Orientation Course: Introduction to European Union Law

#### **Full course description**

The aim of the course is to ensure the common minimal standard of knowledge in the area of EU law to all students participating in the Programme. The course will be offered in an asynchronous manner; however,

additional support may be offered by the Faculty through Q&A sessions and feedback sessions by the staff of the

Programme. The course is developed with the view of supporting students in passing the final exam of the course

corresponding in terms of the body of knowledge to the European Union Law entrance exam, customarily used at

the beginning of Master's courses offered by the University of Maastricht Faculty of Law.

#### Assessment

MCQ and case study

#### Teaching Method

• Asynchronous, Mix of video, audio text

LAW5070 Period 1 5 Sep 2022 28 Oct 2022

Print course description

ECTS credits:

3.0

Instruction language:

English

Coordinator:

• T.A. Quintel

Teaching methods: Coaching Assessment methods: Assignment, Written exam Faculty of Law

## Orientation Course: Introduction to Computer Science and New Technologies

#### **Full course description**

This course aims to teach students basic skills of computer science in order to enable them to follow the ICT part of the master programme. Basic issues of software, hardware and algorithms will be covered, together with very basic practical coding skills in Python. The students will be familiarised with core programming principles and their potential uses in computer science environment.

LAW5071
Period 1
5 Sep 2022
28 Oct 2022
Print course description
ECTS credits:
3.0
Instruction language:
English
Coordinators:

- P. Bonizzi
- A.K. Martin

Teaching methods: Lecture(s), PBL Assessment methods: Assignment Faculty of Law

## **European Privacy and Data Protect Fund**

## **Full course description**

The purpose of this course is to provide the students with knowledge of European privacy and data protection law. Fundamental issues of privacy and data protection from the General Data Protection Regulation (GDPR) and the Directive on Data Protection for Prevention of Criminal Offences will be covered, together with the fundamental rights aspects of this protection as regulated by the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights. Moreover, crucial cases of the Court of Justice of the EU and the European Court of Human Rights will be discussed, together with the practical aspects of implementation of these judgments by companies and regulatory responses by policy-makers.

LAW5072
Period 1
5 Sep 2022
28 Oct 2022
Print course description
ECTS credits:

6.0

Instruction language:

English

Coordinators:

- T.A. Quintel
- H.R. Kranenborg

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Written exam Faculty of Law

## **EU and Global Cybersecurity Fundamentals**

#### **Full course description**

The course offers an introduction to security fundamentals (Physical Security, People Security, Data Security, IT Security, Crisis Management), Cyber security and PPP models for cybersecurity are addressed as well as preventive controls (here we can talk about the key elements for security, Policies, People, Technology (the PPT) – focusing on how to protect your systems). Students are also introduced to security models, such as Bell LaPadula. In addition, critical Infrastructure Protection and Detective Controls (again talking about the key elements for security but on how to detect an attack) will be addressed here. The EU legislative package on cybersecurity is analysed in detail, including national frameworks on network security, network security of operators of essential services and digital service providers, standardisation and voluntary notification, security requirements, incident notification and creation of computer security incident response teams (CSIRTs). Policy developments, including the planned overhaul of cybersecurity rules and establishment of a new cybersecurity agency on the EU level, will equally guide the direction of the course.

LAW5073
Period 2
31 Oct 2022
23 Dec 2022
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- M.H.M. Winands
- K.I. Podstawa
- P. Balboni

Teaching methods: Lecture(s), PBL Assessment methods: Assignment Faculty of Law

## Data Protection Compliance Management, Leadership and Communication

#### **Full course description**

This course is tailor-made for high-level managers in both multinational companies as well as small and medium-sized enterprises and public organisations. It provides the students with extended training on skills necessary to ensure compliance with personal data protection rules through building up of a resource-efficient data protection-compliant management framework. A sound methodology to assure that the fundamental principles on privacy and data protection are complied with and integrated in the design of the relevant data processing activities (pursuant to the core principles of Data Protection by Design and Data Protection by Default) will be provided. Necessary skills for organising adequate training to staff, assertiveness competencies to ensure budget for compliance programmes, sharp ability of information collection and privacy tool sourcing, as well as skills of interdisciplinary communication will be intensively trained. Finally, a case study on preventing and responding to data breaches will be used to concretely apply the notions learned during this course.

LAW5074
Period 3
9 Jan 2023
3 Feb 2023
Print course description
ECTS credits:
1.5
Instruction language:
English
Coordinators:

- K.I. Podstawa
- L.E. Kuusniemi

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Participation Faculty of Law

## **Advanced Cybersecurity and Global Cybersecurity Strategy**

#### **Full course description**

The course builds upon the knowledge acquired in the course 'EU and Global cybersecurity fundamentals'. It expands on the previous knowledge of the students and addresses advanced concepts of cybersecurity, including risk assessment and management, regulatory compliance and compliance management. Specifically, it focuses on Global Approval and Compliance for devices and operations, including (i) European Cyber certification and compliance: EU requirements, Cyber Security certification, CE approval, etc. (ii) US Cyber certification and compliance: NIST, FCC, PCI DSS 2.0, Cloud Act, etc. (iii) as well as Chinese and Indian certifications and standards in the field.

Lastly, it ties all of this together by introducing a global strategy dimension; here, students will learn how to align cybersecurity with business strategy and IT strategy.

LAW5077
Period 5
17 Apr 2023
16 Jun 2023
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- M.H.M. Winands
- K.I. Podstawa
- P. Balboni

Teaching methods: Lecture(s), PBL Assessment methods: Assignment Faculty of Law

## **Compr Risk Assessm Data Prot Imp Ass**

#### **Full course description**

Data subject privacy and data protection risk assessment lays at the basis of a thorough and effective data protection compliance framework. In fact, carrying out a risk assessment on all data processing activities and a DPIA on the ones that are likely to result in a high risk to the rights and freedoms of natural persons is essential to design data processing that both legally compliant and ethically respectful of the data subjects. This skills course teaches the students efficient ways to plan and conduct systematic risk assessment activities and specific DPIA where needed. Models of risk assessments and methodologies to perform a DPIA will be explained, discusses and practised. More precisely, the students will be required to prepare their own risk assessment plan and a number of full DPIAs on the basis of practical case studies given during the course. After completing this course together with Skills 1.1., the students will have a capacity to build a robust data protection compliance framework for their company or organisation pursuant to the risk-based approach and to the principles of Data Protection by Design and Data Protection by Default.

LAW5075
Period 3
9 Jan 2023
3 Feb 2023
Print course description
ECTS credits:
1.5
Coordinators:

• K.I. Podstawa

- P. Balboni
- T.A. Quintel

Teaching methods: Lecture(s), PBL Assessment methods: Assessment, Presentation Faculty of Law

## Advanced (International) Privacy and Data Protection

#### **Full course description**

The course builds upon the knowledge acquired in the course 'EU privacy and data protection fundamentals' by addressing pressing privacy and data protection questions more in depth and by focusing on issues of global relevance, relevant for multinational companies and international organisations. The fundamental international data protection principles (i.e. Openness, Collection Limitation, Purpose Specification, Use Limitation, Security, Data Quality, Access and Correction, Accountability) will be explained also making reference to their application in privacy systems outside the European Union (e.g. systems belonging to APEC, African systems etc.). International instruments such as Privacy Shield, Umbrella Agreement, Binding Corporate Rules, Agreements on Passenger Name Records (PNR) and Terrorist Finance Tracking Programme (TFTP) are put forward for a detailed discussion. Moreover, the course also covers the essentials of US privacy law (for example US Privacy Act, Clarifying Lawful Overseas Use of Data "CLOUD" etc.) and the related case law of US courts that is relevant for global compliance of multinational companies.

LAW5076
Period 4
6 Feb 2023
7 Apr 2023
Print course description
ECTS credits:
6.0
Instruction language:
English
Coordinators:

- K.I. Podstawa
- H.R. Kranenborg
- T.A. Ouintel

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Written exam

# Advanced Master in Privacy, Cybersecurity and Datamanagement Year II compulsory courses

Faculty of Law

## Digital Trust: ePrivacy and the Protection of Personal Data in Electronic Communications

#### **Full course description**

The course familiarises the students with a highly topical issue of e-Privacy by discussing in details questions related to the e-Privacy Directive and its successor, e-Privacy Regulation. The ePrivacy Directive ensures the protection of fundamental rights and freedoms, in particular the respect for private life, confidentiality of communications and the protection of personal data in the electronic communications sector. It also guarantees the free movement of electronic communications data, equipment and services in the EU. The European legislation is keeping up with the fast space at which IT-based services are developing and evolving by proposing a e-Privacy Regulation. The students will familiarise with the main changes that the e-Privacy Regulation aims to introduce in this scenario, e.g., the more user friendly rules on cookies and tracking technologies; new opportunities for telecoms operators (once consent is given for communications data - content and/or metadata - to be processed, traditional telecoms operators will have more opportunities to provide additionalservices and to develop their businesses, for example, they could produce heat maps indicating the presence of individuals; these could help public authorities and transport companies when developing new infrastructure projects; bans on unsolicited electronic communications by emails, SMS and automated calling machines; etc.

LAW5079
Period 1
5 Sep 2022
28 Oct 2022
Print course description
ECTS credits:
3.0
Coordinators:

- K.I. Podstawa
- C.F. Mondschein

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Final paper Faculty of Law

## **Cybersecurity Governance and Management**

#### **Full course description**

This course focuses on the practices and processes of cybersecurity management and governance and provides the students with practical guidance on what the management of cybersecurity involves. It further offers an overview of Information Security Management Systems, focusing on what an information security management system is and why it is so important in developing a security plan for protecting systems and data. In this context, standards such as the ISMS frameworks such as ISO 27001, COBIT, NIST 800 will be addressed. Next to this, the element of risk

management is elaborated on and put in context by addressing what cybersecurity risk management is and by giving an overview of what risk management is about, how to manage risk, why risk management is important. Here, an overview of the different risk management frameworks, ISO 27005, Octave, FAIR, etc. will be provided. Lastly, the concepts of security metrics and security key performance indicators will be introduced.

LAW5080
Period 1
5 Sep 2022
28 Oct 2022
Print course description
ECTS credits:
3.0
Coordinators:

- M.H.M. Winands
- P. Balboni

Teaching methods: Lecture(s), PBL Assessment methods: Assessment, Written exam Faculty of Law

## **Leadership Development Trajectory**

### **Full course description**

This course is set up to develop students' leadership effectiveness in a personalized and engaging way. An important characteristic of the trajectory is that it stimulates learning which students can directly apply to current leadership challenges. These can be challenges related to personal leadership (leading oneself) or leadership of others with or without formal authority. The course is designed to empower students to discover how they can effectively lead in the field of data protection and cybersecurity and deal with new regulation and on-going developments in the privacy and cybersecurity market. Either from a leadership position in a hierarchy, or from taking on a leadership role in something that mattersto them. Developing leadership is first and foremost a personal learning trajectory characterized by building self. The design of this leadership development course is built on the assumption that students take personal ownership of their trajectory. This means that students are in the driver's seat when it comes developing their own leadership trajectory.

LAW5081
Period 2
31 Oct 2022
23 Dec 2022
Print course description
ECTS credits:
3.0
Coordinators:

• M.G. Heijltjes

• D.M.L. Meyers

Teaching methods: Project-Centered Learning Assessment methods: Assignment Faculty of Law

#### ICT and Data-related contracts

#### **Full course description**

We live in the "Big Data Era", which is characterised by the so called "Data gold rush". This means that large amounts of different types of data are produced from multiple sources and exchanged between several parties on a daily basis at high speed requiring increasingly powerful processors and algorithms to process and to effectively analyse them. Not all of this information is personal, but businesses and governments are more and more using big data to understand, predict and shape human behaviour. Big data is therefore putting strain on not only privacy and data protection, but other fundamental rights including freedom of expression and non-discrimination. Contracts are becoming increasingly relevant to regulate business models based on data and also to allocate privacy roles (e.g. controllerprocessor, joint-controllership) and the relevant compliance duties and obligations. This course will familiarise the students with the technology deployed and typical business models based on data analysis and data sharing of ICT services. We will discuss phenomena like cloud computing, big data,

149 analytics, internet of things, online behavioural advertising, programmatic advertising, data management platform etc. Moreover, students will learn how ICT and data related contracts are typically structured. During the course, legal issues and solutions concerning privacy, data security, contractual, consumer protection and intellectual property matters will also be discussed providing a multidisciplinary approach to the subject matter.

LAW5082
Period 3
9 Jan 2023
3 Feb 2023
Print course description
ECTS credits:
3.0
Coordinator:

• P. Balboni

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Participation, Written exam Faculty of Law

## Data Protection and Security Assessment/Audit: Case Study

## of Cloud Computing

#### **Full course description**

The course deepens the legal-theoretical background, the methodologies and the standards for privacy, data protection and cybersecurity assessments/audit activities, contextualizing and explaining

their usefulness for specific cases. Cloud computing will be used as complex scenario to practise the relevant assessment/audit skills. The course explains different cloud models, privacy and regulatory issues to consider with cloud computing, how to risk assess the cloud with respect to the protection of personal data, the managing of security threads in the cloud, the selections of cloud vendor based on the "privacy levels" that they offer. More precisely, the students are also introduced to principles and practice of cybersecurity auditing in cloud environments through auditing frameworks, standards

and technical measures, including vulnerability testing and penetration testing. The course finishes with a hands-on exercise in which students conduct a mock personal data protection on security audit

on a service provided by a cloud service provider.

LAW5083
Period 4
6 Feb 2023
7 Apr 2023
Print course description
ECTS credits:
3.0
Coordinator:

• K.I. Podstawa

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Participation, Written exam Faculty of Law

## Ethics, Accountability and Corporate Social Responsibility in the Digital Age

### **Full course description**

Current scandals surrounding the misuse of data are mounting (e.g. the Cambridge Analytica scandal, among many), casting doubt on the current approach towards how we use data. An accountable and sustainable approach regarding the use of (personal) data as well as the integrity and security of the processing of data is required to ensure that the tension between, on the one hand, the protection of individuals' fundamental rights – such as the protection of personal data – and, on the other hand, data usage practices for value creation, reflect the societal needs and expectations. The European Data Protection Supervisor and the European Commission are increasingly and consistently stimulating an ethical approach to privacy and personal data

protection. The course aims to translate such recommendations into practical applications. It covers questions of legal accountability, social responsibility and related ethical compliance that go beyond the strict privacy and data protection

issues. More precisely, increased processing of vast amounts of personal data, also in the context of business intelligence, imposes on companies and on organisation in general additional social and ethical responsibility, as data processing should not lead to abuses or manipulation of individuals/data subjects.

LAW5084
Period 4
6 Feb 2023
7 Apr 2023
Print course description
ECTS credits:
3.0
Coordinators:

- K.I. Podstawa
- P.V.F.L. Breitbarth

Teaching methods: Lecture(s), PBL Assessment methods: Assignment, Final paper Faculty of Law

## The Future of Privacy, Cybersecurity and Data Management: New Technologies and new approaches

### **Full course description**

The course 'The Future of Privacy, Cybersecurity and Data Management: New technologies and new approaches' is the last module of the programme and it is a forward-looking course that touches upon future, potential and unresolved open questions related to the fields of privacy, cybersecurity and data management. The course ties together all previous subjects in an interdisciplinary way and requires students to work in teams to solve forward-looking and interdisciplinary challenges at the forefront of privacy, cybersecurity and data management. During the course, student teams will work on one of a number of challenges presented by challenge owners. Challenge owners will be actors from industry, regulators or civil society who will present a specific challenge regarding the future of privacy, cybersecurity and/or data management. During the course, students will be exposed to challenge owners and industry thought leaders through a series of workshops and online webinars to discuss emerging trends and practices at the forefront of privacy, cybersecurity and data management. The student teams are tasked with solving these issues and will present their solution in a final conference 150 and submit their solution (paper/prototype/etc.) for assessment to the challenge owner and the course staff.

LAW5085
Period 5
10 Apr 2023
9 Jun 2023
Print course description

ECTS credits:

3.0

Coordinators:

- K.I. Podstawa
- C.Monda
- M. Brkan
- P. Balboni

Teaching methods: Lecture(s), PBL, Presentations Assessment methods: Assessment, Assignment, Presentation Thesis

## Advanced Master in Privacy, Cybersecurity and Data Management, Master Thesis Year I

Faculty of Law

## Master Thesis Year 1 Adv master Priv Cyb

#### **Full course description**

Master's Thesis procedure involves two separate components that need to be followed by students. The process begins with Master's Thesis I component during Period 5 and Period 6 of the first academic year of the course. In order to equip candidates with the knowledge to independently formulate a research question, conduct research and write a thesis, a seminar on thesis writing and research methods will be held at the end of the first academic year in July. In this series of seminars and workshops, candidates will be acquainted with various research methods and approaches, including conducting literature reviews, defining a research question, finding an appropriate methodology and thesis writing and legal English workshops. In the course of seminars students will be encouraged to engage critically with sources and with themes of their enquiry.

LAW5078
Period 6
19 Jun 2023
14 Jul 2023
Print course description
ECTS credits:
3.0
Coordinators:

- M. Brkan
- K.I. Podstawa
- K.E. Francis

# **Advanced Master in Privacy, Cybersecurity and Data Management, Master Thesis Year II**

Faculty of Law

## Advanced Master in Privacy, Cybersecurity and Data Management, Master Thesis Year II

#### **Course objectives**

During the second academic year, in the course of Master's Thesis II component students choose their thesis topic, if necessary, with the help of staff members. The topics shall be closely related to the specific subject matter of the programme. In order to ensure that candidates are on track with their thesis and are able to finalize the programme in a timely manner, a number of stepping stone events are planned during the second year: Candidates will work together with a supervisor to draft and submit a thesis outline. During the second Period of the second year, candidates will present their outline. This will be the first instanceof the written exchange between the student and the supervisor. Students will work on the thesis to draft the first version that will need to be presented to the supervisor in June of the second academic year. After the exchange of feedback, students will submit the final version of the thesis by 31 August of the second academic year. In the course of the supervision relationship, supervisors and students are at liberty to define the milestones of the process and contact moments, save for the obligation imposed on supervisors to provide written feedback twice in the process of writing (in reaction to the submitted outline and first draft of the thesis).

LAW5086
Period 5
17 Apr 2023
16 Jun 2023
Print course description
ECTS credits:
9.0
Coordinators:

- M. Brkan
- K.I. Podstawa