

First year courses

Bachelor Digital Society year 1

Faculty of Arts and Social Sciences

Mentor Scheme

Full course description

The Mentor Programme in year 1 serves to help you to tackle academic challenges during your studies in the first year. Transition from secondary school to university is never easy. Many students will experience a period during which their study does not work out the way they expected, which often occurs in the first year. The Mentor Programme has been designed with this in mind and is aimed at easing transition to university and helping you to 'survive' your first year. The core component of the Mentor Programme is the student-mentor relationship. You are assigned to a mentor and a mentor group. You will have group meetings and individual meetings with your mentor. Meetings centre on your study expectations and your experiences.

The goal of the Mentor Programme is twofold. 1) First, it aims to assist you in becoming a successful student. To become a successful student you need to become engaged in your own academic development; to become what is often termed a "self-regulated learner". 2) Second, the programme offers you a social and academic community of peers in which you can exchange experiences, reflect on successes, challenges, opportunities and problems and learn from each other.

Course objectives

By participating in the mentor scheme, you will:

- Develop skills for making the transition from secondary school to university;
- Improve your study skills;
- Learn about how universities work;
- Learn from the experiences of other students and staff.

Prerequisites

none

Recommended reading

- The final qualifications of the Bachelor Digital Society
- [UM webpages on the Bachelor Programme Digital Society](#)
- Moust, J.H.C., Bouhuijs, P.A.J. & Schmidt, H.G. (2007). Introduction to Problem-based Learning. A Guide for Students. Groningen/Houten: Noordhoff.

Bachelor Digital Society

- Burns, T., & Sinfield, S. (2012). Essential study skills. The complete guide to success at university. (3rd ed.). London: SAGE.
- Cottrell, S. (2013). The study skills handbook. (4th ed.). Basingstoke: Palgrave Macmillan

DSO1500

Period 1

30 Aug 2021

3 Jun 2022

[Print course description](#)

ECTS credits:

1.0

Instruction language:

English

Coordinators:

- [B.C. Zwegers](#)
- R.L.A. Widdershoven
- [C.W. van Leeuwen](#)
- [E.D. Dieteren](#)

Teaching methods:

PBL, Coaching

Assessment methods:

Portfolio

Keywords:

study skills, time management, PBL, reflection skills, self-regulated learning

Faculty of Arts and Social Sciences

Surveillance Society

Full course description

In this lecture series, we explore questions related to surveillance society and investigate if and why privacy still matters in digital societies. You study the effects of sur-, sous-, and co-veillance on social behaviour, culture and self-understanding, and on rules and regulations of digital platforms and policies. The course runs over the entire year, and analyses privacy, surveillance, and related notions in the different domains touched upon in other first year courses: society, politics, ethics, culture. You will also learn about surveillance in the global and non-Western contexts.

Course objectives

At the end of the course, you will be able to:

- identify different concepts of and approaches to privacy and surveillance;
- understand examples of privacy violations and surveillance practices in their relevant political, legal and cultural contexts (e.g. related to social media, search engines, apps);

Bachelor Digital Society

- analyse and evaluate the consequences of technological developments for privacy, surveillance and related notions such as sousveillance, co-veillance, and self-surveillance.

Prerequisites

none/not applicable

Recommended reading

- Lyon, D. (2018). *The Culture of Surveillance: Watching as a Way of Life*. Cambridge, UK: Polity Press.
- Solove, D. (2008). *Understanding Privacy*. Cambridge, MA: Harvard University Press.

DSO1000

Period 1

30 Aug 2021

3 Jun 2022

[Print course description](#)

ECTS credits:

6.0

Instruction language:

English

Coordinators:

- [K. Wenz](#)
- P. de Vries
- [K. Gabriels](#)
- [M.M. Rossmann](#)

Teaching methods:

Lecture(s)

Assessment methods:

Written exam

Keywords:

surveillance; privacy; big data; sousveillance; panopticon

Faculty of Arts and Social Sciences

Making Your Own Online Presence

Full course description

In today's digital society, your online presence is a key part of your public identity. As soon as you search the Web, post on social media, sign up for a service, and blog about a recent experience, you start shaping your online identity and establishing a digital footprint that becomes your online personal brand. This course introduces you to the basics of analysing, reflecting on, and managing your digital identity. You will explore the benefits and downsides of having an online presence and you will develop skills, knowledge, and strategies for curating it. For example, you will analyse your 'digital self' by investigating how much information is publicly accessible. Based on this, we will discuss ways to shape your online identity and develop a professional presence. You will do this by

learning how to design and structure an online portfolio using the blogging platform *WordPress* as well as how to write for an online audience. During the course, we will discuss both design and content aspects, including navigation, searchability, multimedia, and the integration of social media presences. The design and the content of the blog will be used as the basis for the assessment of this course. This blog will also be used throughout the BA programme since blog posts will be assigned on topics covered during the various courses. After completing the programme, you will have developed your own professional online profile which can be used when you apply for jobs or for further studies.

Course objectives

At the end of this course, you will be able to:

- Demonstrate a basic understanding of how identities are constructed online;
- Be able to reflect on and manage your 'digital self';
- Use blog writing to effectively communicate and reflect upon your practice';
- Use the content management system (CMS) platform 'WordPress' to design your own online presence and demonstrate a basic understanding of CMS functions for website development.

Prerequisites

None

Recommended reading

- Dijck, J. van (2013). "You have one identity": *Performing the self on Facebook and LinkedIn*. *Media, Culture & Society*, 35(2), 199-215. <https://doi.org/10.1177/0163443712468605>
- Kirkup, G. (2010). Academic blogging: academic practice and academic identity. *London Review of Education*, 8(1), 75-84
- Marshall, K. (2015, January 5). *How to curate your digital identity as an academic*. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/How-to-Curate-Your-Digital/151001>
- Booth, W., Colomb, G., & Williams, J. (2008). *The craft of research*. Chicago: The University of Chicago Press.

Jackson, H. (2005). *Good grammar for students*. London: Sage.

DSO1502

Period 1

1 Sep 2021

22 Oct 2021

[Print course description](#)

ECTS credits:

4.0

Instruction language:

Bachelor Digital Society

English

Coordinator:

- K. Papadopoulos

Teaching methods:

PBL, Work in subgroups, Skills

Assessment methods:

Assignment, Final take home exam

Keywords:

online presence, digital identity, Portfolio, blogging, design, WordPress

Faculty of Arts and Social Sciences

What is (a) Digital Society?

Full course description

This course introduces you to some of the core themes of the BA Digital Society and provides a basic understanding of how developments in digital technologies and societal trends are inter-related. We will pay particular attention to the relationship between technology and society, questioning whether technology is neutral and whether it always leads to social progress. We will examine topics such as the 'digital divide', 'big data', and 'digitisation of cultural heritage' through readings from the social sciences and the humanities. You will be introduced to the notion of a digital society. Is there such a thing as a digital society or might there be many? Together with other students, you will discuss where the notion originates from, why it has become popular and what it means to live in a digital society. To understand these, you will learn to link contemporary and historical examples of digital trends to academic readings and theories.

Course objectives

At the end of this course, you will be able to:

- Demonstrate understanding of how social and technological developments are interrelated in digital societies;
- Define and describe key terms relevant to studying digital society, such as digitalization, digital society and datafication;
- Demonstrate and apply knowledge on reading and processing academic literature from a variety of (interdisciplinary) perspectives;
- Summarize key academic texts discussed in this course and produce an annotated bibliography based on these summaries.

Prerequisites

none/not applicable

Recommended reading

Lindgren, S. (2017). *Digital Media and Society*. London, UK: Sage.

Bachelor Digital Society

DSO1001

Period 1

1 Sep 2021

22 Oct 2021

[Print course description](#)

ECTS credits:

8.0

Instruction language:

English

Coordinator:

- S.M.E. Wyatt

Teaching methods:

PBL, Lecture(s)

Assessment methods:

Final paper

Keywords:

digital society; technological determinism; technological imaginaries; cultural heritage; inequality

Faculty of Arts and Social Sciences

Introduction to Digital Technologies I

Full course description

In this course, you will learn about key concepts related to digital technologies, and about the historical development of the technologies underpinning digitalisation. The focus of the course is on computing and the main purpose is to provide you with sufficient knowledge to understand technical issues you may encounter in other courses, and current trends in digital technologies. The course will start with an overview of key vocabulary related to computing, and the history and key characteristics of computer systems. We will also discuss algorithms in depth, and learn, how to create, visualize and program them. Finally, we will develop a perspective on digital literacy and explore the way current debates are governed by these technologies.

Course objectives

At the end of this course, you will be able to:

- Describe how computer systems work;
- Identify and convert everyday problems into input a computer system can use in its work;
- Illustrate how algorithms guide the way we understand and address everyday problems;
- Break down and diagram digitisation processes in terms of their various components.
- Understand the role of computing in forming digital identities and literacy.

Prerequisites

Note that it is very important that you complete this course successfully before you start DSO1506 Introduction to Digital Technologies 2.

Recommended reading

Englander, I. (2014). *The architecture of computer hardware, system software, and networking*. John Wiley & Sons.

DSO1503

Period 2

25 Oct 2021

17 Dec 2021

[Print course description](#)

ECTS credits:

4.0

Instruction language:

English

Coordinator:

- [E.V. Sapir](#)

Teaching methods:

PBL, Lecture(s), Skills

Assessment methods:

Presentation and paper

Keywords:

Computer systems, digitisation, Algorithms, functional flowcharts, programming, pseudo-codes, digital identity, digital skills, digital literacy

Faculty of Arts and Social Sciences

What is Research?

Full course description

You have already been introduced to problem-based learning (PBL) in the BA DS Introduction Days and during your courses in Periods 1 and 2. In this course, you are taught to reflect more systematically on PBL, how problem solving generates knowledge, and how academic research differs from other methods of inquiry. You will begin to learn how to formulate research questions related to the rapidly changing digital environment, and how to use concepts and data to answer research questions. We will also develop skills to conduct a systematic literature search and examine the role of Wikipedia as a source of knowledge.

Course objectives

At the end of this course, you will be able to do the following:

1. demonstrate your ability to formulate a research question;
2. employ online resources in academic research;
3. describe your research topic by means of an oral presentation;
4. prepare a written introduction and literature review of an academic paper;
5. appraise the research questions and oral presentations of your peers;
6. apply correctly the referencing conventions of the American Psychological Association (APA).

Prerequisites

none/not applicable

Recommended reading

Booth, W.C., Colomb, G.G., & Williams (2016). The craft of research (3th ed.). The University of Chicago Press

Lund, A. (2017). Wikipedia, work and capitalism. A realm of freedom?. Palgrave Macmillan.

DSO1504

Period 3

3 Jan 2022

28 Jan 2022

[Print course description](#)

ECTS credits:

5.0

Instruction language:

English

Coordinators:

- F. Peters
- [F.C. Lysen](#)

Teaching methods:

PBL, Lecture(s), Skills

Assessment methods:

Presentation, Final paper

Keywords:

Writing, research questions, referencing, Wikipedia

Faculty of Arts and Social Sciences

ICT Revolutions: Continuity and Change

Full course description

The course challenges the idea that the world is experiencing a digital revolution. It systematically compares technological revolutions since the Late Middle Ages until the end of the 20th century (from the printing press to the internet) with today's digital transformation. We focus on differences and similarities between the past and the present in order to understand continuity and change. You will find out who is empowered by digital transformations, who is excluded from promises of progress and development, and whether it is possible to steer changes in information and communication technologies (ICTs).

Course objectives

By the end of this course you will be able to:

- Identify and define technological revolutions;

Bachelor Digital Society

- Explain the origins and consequences of technological change in these revolutions;
- Debate and critique revolutionary narratives about technological change in the past and present;
- Articulate these definitions, explanations, and critiques in an academic research paper.

Prerequisites

none/not applicable

Recommended reading

Kovarik, B. (2016). *Revolutions in communication: Media history from Gutenberg to the digital age* (2nd edition). Bloomsbury.

Winston, B. (1998). *Media Technology and Society: A History : from the Telegraph to the Internet*. Psychology Press.

DSO1003

Period 4

1 Feb 2022

1 Apr 2022

[Print course description](#)

ECTS credits:

8.0

Instruction language:

English

Coordinator:

- [A.E.G. Jacobs](#)

Teaching methods:

PBL, Lecture(s)

Assessment methods:

Final paper, Portfolio

Keywords:

History, technological revolution, modernity, Globalisation

Faculty of Arts and Social Sciences

Using Digital Sources

Full course description

In this skills course, you will be trained in a critical and responsible use of digital primary sources. Building on period 3 course 'What is research?', we will explore how digitalisation changes how we find, select, and use primary sources, and how this affects notions of source criticism, reliability and validity that are well-established in the humanities and the social sciences. Working on topics that are central to the parallel content course, 'ICT Revolutions' (namely, the so-called "Computer Revolution"), this skills course focuses on three types of primary digital material: text, structured (numerical) data, and audio-visual material. Through hands-on, in-class assignments, you will learn to find, select, evaluate and interpret your own primary source material, which is an essential part of

any academic analysis. The course will make extensive use of resources and databases offered by the University Library.

Course objectives

By the end of the course you will be able to:

- Define and describe key concepts relevant to (digital) source critique and interpretation.
- Identify relevant digital source types and collections, and assess their potential and limitations.
- Prepare various data sources for analysis and perform basic analyses with dedicated software such as Atlas.ti.
- Develop and argument insights on the relationship between social change and digitalisation based on source evidence and analysis.

Prerequisites

none

Recommended reading

Owens, T., Padilla, T. (2020). Digital sources and digital archives: historical evidence in the digital age. *International Journal of Digital Humanities*. DOI:10.1007/s42803-020-00028-7

DSO1505

Period 4

1 Feb 2022

1 Apr 2022

[Print course description](#)

ECTS credits:

4.0

Instruction language:

English

Coordinator:

- [J.L.M. Bruyninckx](#)

Teaching methods:

Lecture(s), Assignment(s), Skills

Assessment methods:

Assignment, Portfolio

Keywords:

Primary sources, data, text, audio-visual, software, qualitative analysis

Faculty of Arts and Social Sciences

Digitalisation and Politics

Full course description

Students in this course ask how digitalisation affects politics and if digitalisation enhances or undermines the quality of democracy. The course draws on political philosophy, comparative politics and political economy. You analyse the new possibilities and limitations that digitalisation presents for politicians, citizens and corporations in terms of political power, participation, equality and inclusivity.

Course objectives

You will learn how digitalisation affects politics and, in particular, whether digitalisation is enhancing or undermining the quality of democracy. After completing this course, you will be able to:

- Demonstrate knowledge and understanding about the effects of digitalisation on key political institutions and practices;
- Analyse the relationship between digital developments and transformations in political behaviour, political participation and public control over the public domain;
- Formulate arguments in favour and against the effects of digitalisation on democracy;
- Evaluate ethical and societal consequences of digitalisation in politics for different people and groups in society.

Prerequisites

none/not applicable

Recommended reading

Sunstein, C. R. (2018). *# Republic: Divided democracy in the age of social media*. Princeton, NJ: Princeton University Press.

DSO1002

Period 2

25 Oct 2021

17 Dec 2021

[Print course description](#)

ECTS credits:

8.0

Instruction language:

English

Coordinator:

- [T.E. Swierstra](#)

Teaching methods:

PBL, Lecture(s)

Assessment methods:

Written exam

Keywords:

Digitalisation, Democracy, power, Politics, Platform economy

Digital Cultures

Full course description

In this course, you explore how digital technologies interact with culture and how culture shapes digital technologies. Digital technologies draw on established ways of experiencing and acting in the world, but they also challenge these ways, and open up new ones. Drawing on concepts and methods from philosophy, anthropology, and cultural and media studies, you will investigate topics such as AI and robots, digitally mediated identity and intimate relations, arts and remix culture, and the blurring of the distinction between the cultural and the natural.

Course objectives

At the end of this course, you will be able to:

- Understand why people can feel threatened or excited by the cultural changes provoked by digital technologies;
- Critically reflect upon the different facets of digital culture such as the narratives about technological innovation, robots and AI, authenticity and intimacy, nature and culture;
- Apply your understanding of digital culture and cultural changes to your own examples;
- Identify and distinguish how different actors attach different meanings to digital technologies and their expected impacts;
- Analyse the consequences of technological developments for digital cultures and critically investigate the narratives related to them;
- Answer a research question on the topic of digitalisation of culture and develop a coherent argumentation.

Prerequisites

none/not applicable

Recommended reading

Jordan, J. (2016). Robots. Cambridge, MA: The MIT Press.

Miller, V. (2011). Understanding digital culture. London: Sage.

Bachelor Digital Society

Verbeeck, P.P. (2006). Materializing Morality: Design ethics and technological mediation. *Science, Technology & Human Values*, 31(3), 361-380.

DSO1004

Period 5

4 Apr 2022

3 Jun 2022

[Print course description](#)

ECTS credits:

8.0

Instruction language:

English

Coordinator:

- [V.E.J.P. van Saaze](#)

Teaching methods:

PBL, Lecture(s), Training(s)

Assessment methods:

Final paper

Keywords:

Digital cultures; sense-making; technological mediation; identity and intimacy; digital arts and authenticities; argumentation skills

Faculty of Arts and Social Sciences

Introduction to Digital Technologies II

Full course description

This course builds on 'Introduction to Digital Technologies I' (DSO1503), and extends its perspective to include the basics of computer-networking. In this course, we will explore the fundamentals and historical development of computer networking. The main aim of this course is to provide you with perspectives on how networking works and the inter-relationships between technological and economic changes on the one hand, and social changes and changes in society on the other. We will start by reflecting on key computer networking concepts, move to reviewing the development of the internet and World Wide Web. You will learn about the different Web generations, social media and social networking, crowdsourcing, cyber security and cyber-attacks.

Course objectives

By the end of this course you will be able to:

- Demonstrate understanding of computer networks and the different components within them;
- Break down and illustrate the seven OSI model layers and the four TCP/IP model layers;
- Summarize the historical development and usage of computer networking and the World Wide Web;
- Classify different generations of the Web, social media and crowdsourcing, and the different types of user-generated content;
- Describe the main concepts and issues in network security, the risks and different types of cyberattacks.

Prerequisites

We strongly recommend that you have successfully completed DSO1503 Introduction to Digital Technologies 1 before starting this course. We will be building on material covered in DSO1503.

Recommended reading

Ryan, J. (2010). *A history of the internet and the digital future*. London, UK: Reaktion Books.

DSO1506

Period 5

4 Apr 2022

3 Jun 2022

[Print course description](#)

ECTS credits:

4.0

Instruction language:

English

Coordinator:

- [E.V. Sapir](#)

Teaching methods:

PBL, Lecture(s)

Assessment methods:

Written exam

Keywords:

Networking, OSI and TCP/IP models, open system interconnection, ARPANET, the internet, the World Wide Web and its different generations, the social web, crowdsourcing, Social media, network security

Second year courses

Bachelor Digital Society year 2

Faculty of Arts and Social Sciences

Mentor scheme

Full course description

The Mentor Programme in the second year continues to help you to become a successful student. In the first year, the focus was on how you study. In the second year, the focus rather is on what you (want to) study and how this relates to your individual plans and goals. Through individual meetings with your mentor and through plenary information sessions, we support you in making key choices in your second and third year, in light of what you want to achieve in and after your study.

Course objectives

At the end of this course, you will:

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1. Have more insight in what your goals and plans are for the second and third year of the bachelor.
2. Have improved your reflection skills, as well as the capacity “to set goals, plan a course of action, select appropriate strategies, self-monitor, and self-evaluate” (English & Kitsantas, 2013, p. 129).
3. Have made key choices for your second and third year, in light of what you want to achieve in and after your study (regarding for example a semester abroad, minor programmes, internships etc) .

Prerequisites

You need have received a positive BSA for the first year.

Recommended reading

Course catalogue for the second and third year of your bachelor.

DSO2501

Period 1

30 Aug 2021

3 Jun 2022

[Print course description](#)

ECTS credits:

1.0

Instruction language:

English

Coordinators:

- [E.D. Dieteren](#)
- [B.C. Zwegers](#)
- R.L.A. Widdershoven
- [C.W. van Leeuwen](#)

Teaching methods:

Coaching, Assignment(s)

Assessment methods:

Participation, Assignment

Keywords:

goal setting, study skills, reflection skills, making choices for the second and third year of your study.

Faculty of Arts and Social Sciences

Making Knowledge and Manufacturing Doubt

Full course description

Climate denialism, flat earthers, the anti-vaxx movement: we live in a world where “scientific facts” are increasingly doubted. But what makes a fact, and what makes you doubt it? And how has fact-making and doubting changed with digitalisation? In this course, you will look at the ways that knowledge and doubt are made and represented in the past and present.

Course objectives

At the end of this course, you will be able to:

- Explain the ways that knowledge and doubt are made and how they have changed.
- Differentiate between the geographical, sociological, chronological aspects of making knowledge and doubt.
- Analyse how digitalisation has influenced these aspects and ways of making knowledge and doubt.
- Evaluate your explanations of knowledge- and doubt-making and improve upon them.

Prerequisites

None

Recommended reading

Burke, P. (2012). *A Social History of Knowledge II: From the Encyclopédie to Wikipedia*. Polity Press.

Meyer, E. T., & Schroeder, R. (2015). *Knowledge Machines: Digital Transformations of the Sciences and Humanities*. MIT Press.

DSO2001

Period 1

1 Sep 2021

22 Oct 2021

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [J.W.A.P. Ward](#)

Teaching methods:

PBL, Lecture(s)

Assessment methods:

Presentation and paper

Keywords:

History, knowledge, doubt, Science, Museums, journalism, Digitalisation

Faculty of Arts and Social Sciences

Quantitative Data Analysis

Full course description

In this course you will be introduced to the methods and instruments used by researchers and professionals when designing and analyzing quantitative data in the Humanities and Social Sciences. You will gain skills and knowledge in a range of data analysis methods and visualization techniques

Bachelor Digital Society

to enable you to study cross-sectional, longitudinal and stacked data structures, analyze them employing univariate, bivariate and multivariate techniques, and use these skills to describe data and to draw inferences about society and the ways digital technologies are used, created, and influence our daily lives. This course will prepare you to carry out independent quantitative research. You will have plenty of hands-on experience working individually and within small working groups to conduct small scale, quantitative research projects, analyze the data collected, and present your findings.

Course objectives

At the end of this course, you will be able to:

- Understand the main concepts and building blocks in quantitative research methodology and probability theory;
- Interpret quantitative data analysis results and understand the limitations of statistical testing and how particular tests are used on certain types of data;
- Choose, conduct and implement adequate univariate, bivariate and multivariate statistical analyses using R to test theoretically informed research questions;
- Effectively communicate data analysis and interpretation using statistical tests, tables, graphics and other visuals.

Prerequisites

Note that it is very important that you complete this course successfully before you start DSO2003 Working with Big Data.

Recommended reading

Agresti, A. (2018). *Statistical Methods for the Social Sciences* (Fifth edition). Harlow: Pearson.

DSO2502

Period 1

1 Sep 2021

22 Oct 2021

[Print course description](#)

ECTS credits:

6.0

Instruction language:

English

Coordinator:

- [E.V. Sapir](#)

Teaching methods:

PBL, Lecture(s), Skills

Assessment methods:

Written exam

Keywords:

statistics, descriptive, inferential, central tendency and dispersion, tables and graphs, Probability, hypotheses testing, measures of association, regression analysis

Artificial Society

Full course description

The course *Artificial Society* will train students in addressing contemporary discussion on how Artificial Intelligence (AI) is embedded in society. The course starts from the acknowledgement that current debates about AI are predicated on earlier experiences and discussions. The hopes and concerns of AI show an historical variety, and this matters for current debates. In this course we follow seven decades of AI, roughly attributed to the following themes:

Themes of Artificial Society:

1950s/60s:	computers taking over manual labour
1970s:	computers taking over intellectual labour
1980s:	limitations of AI
1990s:	new ideas on intelligence
2000s	utopias of AI
2010s:	algorithms & datafication

While the themes, of course, are not neatly limited to one particular decade, they characterize the discussion on the societal ramifications of AI in a particular era. It helps students to grasp current debates when they recognize the longer themes.

In this course we will follow the six themes subsequently. In each theme, we will explore (i) the societal debate at that time (ii) the technical progress at that time (iii) the state of philosophical reflection at that time. Together, the themes provide a good introduction into what AI in society could mean.

Course objectives

At the end of this course, you will be able to:

1. Recognize and characterize the interdisciplinary questions (historical, political, philosophical, cultural, sociological) pertaining to AI's role in societal developments. [2.1]
2. Follow an author's argument and indicate how it resonates with older discussions [2.1]
3. Recognize and situate arguments in broader debates and critically engage. [2.2]
4. Compare, contrast and assess arguments on AI and society. [2.2]
5. Build an argument in relevant debates on AI and society, including the use of pertinent examples to clarify theoretical positions. [2.2]

Prerequisites

None

Recommended reading

The course material will consist of a reader that will be made available through Reference List.

DSO2002

Period 2

25 Oct 2021

17 Dec 2021

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [K. Gabriels](#)

Teaching methods:

Lecture(s), PBL

Assessment methods:

Written exam

Keywords:

Artificial intelligence (AI), intelligence, job automation, AI utopias, datafication

Faculty of Arts and Social Sciences

Maker Cultures

Full course description

This course takes a critical making perspective to connect thinking and making, two modalities of engaging with the world that are typically considered separately, creating an artificial distinction between conceptual and material exploration. You will learn how making in different forms, from physical (un)making to gaming, can enhance your thinking, help you formulate arguments, and answer research questions. You will also be able to problematise and analyse the ethics of technological designs. By taking a project-based approach in which you will be actively involved in the process of making, this course will delve into theoretical and methodological aspects of maker culture, emphasizing the shared act of making as a process of critical inquiry, decision-making, and reflection. The course will also provide you with skills and competencies that will enable you to work in teams, follow robust approaches to carry out projects from start to finish, and reflect on the products of your work.

Course objectives

At the end of this course, you will be able to:

- Develop a critical understanding of maker culture, its current cultural and social context and its role in the 21st century knowledge production.
- Apply the concept of critical making to reflect on and analyze the value of technology designs as well as your own practice.
- Use design thinking as a method to respond to problems and create (digital) solutions.

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- Conceptualize and make (digital) objects collaboratively and reflect critically on your own digital objects and the making process.

Prerequisites

None

Recommended reading

- Bogers, L. & Chiappini, L. (2019). Introduction. In Bogers, L. & L. Chiappini (eds.), *The critical makers reader: (un)learning technology*. Amsterdam: Institute of Network Cultures, pp. 8-12.
- Jenkins, T. & Bogost, I. (2015). Escaping the Sandbox: Making and its Future. TEI '15, January 16 - 19, 2015, Stanford, CA, USA <https://dl.acm.org/doi/10.1145/2677199.2680558>
- Ratto, M. & Hertz, G. (2019). Critical Making and Interdisciplinary Learning: Making as a Bridge Between Art, Science, Engineering, and Social Interventions. In Bogers, L. & Chiappini, L. (eds), *The Critical Makers Reader: (Un) learning Technology*. Amsterdam: Amsterdam University of Applied Sciences, pp. 18-28.
https://www.researchgate.net/publication/220175067_Critical_Making_Conceptual_and_Material_Studies_in_Technology_and_Social_Life.
- Richterich, A., & Wenz, K. (2017). Making and Hacking: Introduction. *Digital Culture & Society*, 3(1), 5-21. DOI: <https://doi.org/10.14361/dcs-2017-0102>

DSO2503

Period 2

25 Oct 2021

17 Dec 2021

[Print course description](#)

ECTS credits:

6.0

Instruction language:

English

Coordinator:

- [K. Papadopoulos](#)

Teaching methods:

Assignment(s), PBL, Presentation(s), Research, Skills, Training(s), Work in subgroups

Assessment methods:

Presentation, Take home exam, Computertest

Keywords:

Critical making, Design Thinking, Minecraft, game design, hacking

Faculty of Arts and Social Sciences

Working with Big Data

Full course description

This course provides a systematic introduction to the tools and analytical methods that are being used by data analysts, with special attention to sentiment analysis, the process of computationally identifying and categorizing opinions expressed in text, in order to determine whether the writer's

attitude towards the topic is positive, negative, or neutral. This includes understanding how to collect and organise data at scale, and gain new insights on how Big Data analysis can help in addressing high impact research questions. You will develop both the technical-computational skills that are in high demand across a range of research organizations and industry, as well as critical skills in computational thinking, algorithm design, big data fundamentals, and data-driven analysis, with plenty of opportunities to apply and explore your new learnings through case studies.

Course objectives

At the end of this course, you will be able to:

- Understand key concepts and identify technologies in the field of Big Data;
- Design research based upon Big Data sentiment analysis, including selecting appropriate digital methods, technologies, and strategy for storage and processing data;
- Learn Big Data analytics and apply guided Sentiment Analysis and data mining tool on Structured and Unstructured datasets using R;
- Use appropriate digital methods to interpret and share results obtained by means of Big Data analyses;
- Critically evaluate and discuss the implications of employing Big Data and sentiment analysis in society.

Prerequisites

We strongly recommend that you have successfully completed DSO2502 Quantitative Data Analysis before starting this course. We will be building on material covered in DSO2502.

Recommended reading

Agresti, A. (2018). *Statistical Methods for the Social Sciences* (Fifth edition). Harlow: Pearson

DSO2003

Period 3

3 Jan 2022

28 Jan 2022

[Print course description](#)

ECTS credits:

5.0

Instruction language:

English

Coordinator:

- [E.V. Sapir](#)

Teaching methods:

PBL, Lecture(s), Skills

Assessment methods:

Written exam

Keywords:

big data, web scraping, data wrangling, sentiment analysis, data visualization.

Faculty of Arts and Social Sciences

The 'Good Life'

Full course description

The focus of this course lies on how (digital) technologies can influence the good life and related notions such as quality of life, happiness, and well-being. We will investigate how the idea of a good life is visible already in the way societies are organized – think for instance of the welfare state – and taken into account by policy makers. The guiding concern is: to what extent can (digital) technologies contribute to or negatively impact the good life?

We will introduce the topic by looking at how different disciplines (philosophy, psychology, cultural and media studies, social sciences, history, political economy) have approached the good life, and we will critically investigate how and where these theories overlap and deviate.

We will introduce the topic first by looking back to Aristotle's writings in his Nicomachean ethics and the recent academic debate on virtue ethics before we then discuss and apply Aristotle's ideas to contemporary examples and the societal and academic debates around them. We will investigate the use of technologies to quantify and qualify the self (e.g. apps that measure our heartbeat and fitness), eHealth in general and questions that relate to it as e.g. who is responsible for health? Is it the user? Is it the welfare state? We will look at the use of robots (care robots and sex robots) and how we relate to them. When we think about technologies and the good life, we also need to investigate design and ask whether we can engineer the good life.

Course objectives

At the end of this course, you will be able to:

- understand academic theories concerning the good life (well-being; happiness; quality of life) from different disciplines (philosophy, psychology, cultural and media studies, social sciences, history, political economy).
- apply these theories to (digital) technology and, vice versa, being able to relate examples and case studies of technologies to theories, concepts, debates, and authors.
- build and problematize arguments regarding social, ethical, philosophical, political implications of (digital) technologies (these implications might problematize the good life: students can think of possible solutions to overcome problems).
- understand and critique the tension between individual and community values in engineering, technology, and the 'good life'.

Prerequisites

None

Recommended reading

We encourage students to buy the novel *Machines like Me* by Ian McEwan (2019) as we will repeatedly refer back to the story in the course.

DSO2004
Period 4

Bachelor Digital Society

1 Feb 2022

1 Apr 2022

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [P.B. de Vries](#)

Teaching methods:

Lecture(s), PBL

Assessment methods:

Participation, Written exam

Keywords:

Good life, quantified and qualified self, robots, responsible research and innovation, design ethics, Sustainability

Faculty of Arts and Social Sciences

Qualitative Research Methods: Foundations and Practices

Full course description

This course introduces you to qualitative research methods using a combination of problem-based, interactive, and applied techniques. You will gain skills and knowledge in a range of qualitative research methodologies, including ethnographic methods, such as observation and interview, case studies, discourse analysis, and focus groups, while delving into digital approaches for researching and analysing how digital technologies are used, created, and influence our daily lives. This course prepares you for independent qualitative research in the third year of your studies.

Qualitative research methodologies are interpretative and naturalistic. This means that researchers study people, events, and things in their everyday contexts, trying to interpret these in relation to the meanings assigned to them by their social, cultural, and temporal circumstances.

We go beyond the practicalities of doing interviews, observing people, organising focus groups or conducting discourse analysis on historical documents. Each method comes with its own assumptions about the objects in the world (ontology), and how people can know about what is in the world (epistemology). In addition to these philosophical questions, we also pay attention to the normative and ethical issues associated with qualitative research.

Course objectives

At the end of this course, you will be able to:

- Select and apply appropriate qualitative methods for different areas of research relating to digital societies;
- Motivate and critically evaluate qualitative methods to respond to different types of research questions;
- Implement a range of qualitative data collection methods, including interviews, observations, case studies, digital ethnography, and discourse analysis;

- Analyse, interpret, and present your findings;
- Problematise and reflect on the ethical dilemmas in qualitative research.

Prerequisites

None

Recommended reading

To be confirmed, but look again at Booth from Year 1, 'What is research?'

DSO2504

Period 4

1 Feb 2022

1 Apr 2022

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [T.J.M.M. Frissen](#)

Teaching methods:

Research, Skills, Lecture(s), PBL

Assessment methods:

Final paper

Keywords:

Digital methods, Ethnography, discourse analysis, epistemology, research ethics

Faculty of Arts and Social Sciences

Regulating the Digital: White Papers and Red Tape

Full course description

Facebook-founder Mark Zuckerberg famously used the motto 'move fast and break things' – a slogan in favour of disruptive innovation and minimal state interference. The tech industry is notoriously regulation averse, justifying their position by the claim that state regulation would impede innovation. Critics, however, have pointed out that governments have played a key (facilitating) role in many technological breakthroughs, including the development of the Internet. As digital technologies have become engrained in all aspects of society, governments increasingly push back against this notion and put in place regulatory frameworks, e.g. to protect critical infrastructures or citizens' rights. At the same time, media coverage and political debates exposing the risks and vulnerabilities of digital technologies can stir anxiety among the general public and gives rise to calls for increased governmental intervention. Some even posit that Internet access should be seen as a public good, thus recasting users or consumers into citizens with digital rights. While the digital is increasingly subject to regulation, the very process of regulating and governing is transforming in parallel, for example through the adoption of algorithmic decision-making.

Bachelor Digital Society

While the general consensus is that regulation is necessary, the extent and means by which state intervention should occur is subject to debate. To what extent can the market take care of addressing any imbalances and negative outcomes? When should the state step in to create a market in fields where none exists and competition is desired? Does it suffice to extend and apply existing legislative frameworks (e.g. competition law, protection of intellectual property rights) or should digital technologies be regulated separately? To what extent do the various policy domains in which digitalisation processes take place differ in this respect?

In this course, you will study how various manifestations of digitalisation are regulated and governed at the local, national and international levels. Throughout the course, you will be introduced to key public policy and legal concepts. You apply these concepts onto a policy area (e.g. transport, health) of your choice, while exploring if and how this area should be regulated on the basis of five key themes:

- Public vs. private sector
- Multilevel governance
- Global governance
- Human rights
- Public goods

In addition to sharpening your debating skills in a policy debate, you will write a final paper on a policy issue or regulatory instrument of your choice within your policy area, demonstrating your understanding of the particularities of policymaking in the digital domain. This can be, for example, the local regulation of Uber in Paris or privacy regulations in health care. Since many of the questions that arise as a result of digitalization concern transnational problems, services and/or corporations, the level at which they should be addressed is up for debate. Can the issue best be addressed by individual states, or should norms be established in international organisations? In turn, each of these levels involves its own dynamics and limitations that result from different cultural and other norms.

Course objectives

At the end of this course, you will be able to:

- Understand the theoretical aspects of studying public policy, and how the policy cycle can be applied to different domains in local, national and international policymaking;
- Apply the tools of public policy analysis to a specific initiative in a given policy domain;
- Analyse the relationship between regulation and innovation in a given policy domain;
- Reflect upon how the context and conditions of policymaking can shape policy outcomes.

Prerequisites

None

Recommended reading

- Audouin, M., & Finger, M. (2018). The development of Mobility-as-a-Service in the Helsinki metropolitan area: A multi-level governance analysis. *Research in Transportation Business & Management*, 27, 24-35. <https://doi.org/10.1016/j.rtbm.2018.09.001>
- Berard, B. (2018). I second that emoji: The standards, structures, and social production of the

- emoji. *First Monday*, 23(9). <http://dx.doi.org/10.5210/fm.v23i9.9381>
- Bowles, N. (2016, April 27). Uber, Google and others form self-driving car lobby to shape US policy. *The Guardian*.
<https://www.theguardian.com/technology/2016/apr/26/uber-google-lyft-ford-volvo-self-driving-car-lobby>
 - Clarke, J. (2009). Governance puzzles. In L. Budd & L. Harris, Lisa (Eds.), *e-Governance: Managing or Governing*. Routledge e-Business (pp. 29-52). Routledge.
<http://oro.open.ac.uk/18135/2/D868E856.pdf>
 - Crootof, R. (2019). Regulating new weapons technology. In E. T. Jensen & R. T. P. Alcala (Eds.), *The Impact of Emerging Technologies on the Law of Armed Conflict* (pp. 3-25). Oxford University Press.
 - DeNardis, L. (2014). *The global war for Internet governance*. Yale University Press (pp. 1-25).
 - Dupont, B. (2017). Bots, cops, and corporations: on the limits of enforcement and the promise of polycentric regulation as a way to control large-scale cybercrime. *Crime, Law and Social Change: An Interdisciplinary Journal*, 67(1), 97-116.
 - European Commission. (2020). White paper on Artificial Intelligence: A European approach to excellence and trust.
https://ec.europa.eu/info/sites/info/files/commission-white-paper-artificial-intelligence-feb2020_en.pdf
 - Gorwa, R., & Peez, A. (2019). Big tech hits the diplomatic circuit. *Berlin Policy Journal*.
<https://berlinpolicyjournal.com/big-tech-hits-the-diplomatic-circuit/>
 - Hofmann, J. (2016). Multi-stakeholderism in Internet governance: Putting a fiction into practice. *Journal of Cyber Policy*, 1(1), 29-49. <https://doi.org/10.1080/23738871.2016.1158303>
 - Jørgensen, R. (2018). Human rights and private actors in the online domain. In M. Land & J. Aronson (Eds.), *New Technologies for Human Rights Law and Practice* (pp. 243-269). Cambridge University Press. doi:10.1017/9781316838952.011
 - Kaul, I., & Mendoza, R. U. (2003). Advancing the concept of public goods. In I. Kaul, P. Conceição, K. Le Goulven, & R. U. Mendoza (Eds.), *Providing Global Public Good: Managing Globalization* (pp. 78-111). Oxford University Press.
 - Mazzucato, M. (2013). *The Entrepreneurial State: Debunking public vs. private sector myths*. Anthem Press. (pp. 15-28).
 - Metcalfe, P., & Dencik, L. (2019). The politics of big borders: Data (in)justice and the governance of refugees. *First Monday*, 24(4).
<https://firstmonday.org/ojs/index.php/fm/article/view/9934/7749>
 - Princen, S. (2010). Agenda-setting. In E. Versluis, M. van Keulen & P. Stephenson, *Analysing the European Union Policy Process* (pp. 107-131). Palgrave Macmillan.
 - Zepeda, L. M. (2002). A&M Records, Inc. v. Napster, Inc. *Berkeley Technology Law Journal*, 17(1), 71-90.

DSO2005

Period 5

4 Apr 2022

3 Jun 2022

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [M.W. Wijermars](#)

Bachelor Digital Society

Teaching methods:

Assignment(s), Lecture(s), Paper(s), PBL, Presentation(s), Research, Work in subgroups

Assessment methods:

Assignment, Final paper

Keywords:

Regulation, Governance, digital technologies, Internet Governance, Disruptive innovation

Faculty of Arts and Social Sciences

Interdisciplinary Research Design

Full course description

The aim of this course is to help students begin to chart a path through the broad and diverse research landscape entailed by the notion of “digital society”. It builds on earlier courses of qualitative and quantitative research methods and aims to help students understand that there is no one right path through the thickets of topics, questions and methods. A thriving research field has many roads to research success, in particular in interdisciplinary research. Students will also learn about the importance of “failure” or achieving negative results, and the important role that this plays in the development of science.

Interdisciplinary research design brings many intertwined fundamental and practical challenges. The practical challenges are how to triangulate interesting/relevant questions, appropriate methods and available data. Yet, the challenge of ‘good’ questions, methods and data, point to fundamental questions about knowledge production itself. The course combines lectures on the basic philosophical outlooks on science, student-led interview sessions with leading researchers about exemplary interdisciplinary research, and workshops where practical questions on data, method and questions will be addressed.

Course objectives

After this course, students will be able:

- To formulate interdisciplinary research questions relating to processes of digitalisation [2.2]
- To articulate how a research proposal is related to fundamental questions about knowledge production (such as demarcation, justification, falsification, socialisation, credibility) [1.2]
- To identify and justify appropriate methods for answering interdisciplinary research questions, and to recognize their limits and (ethical) implications [3.2]
- To design a long-term project proposal [4.2]

Prerequisites

None

Recommended reading

The course material will consist of a reader that will be made available through Reference List.

DSO2505

Period 5

Bachelor Digital Society

4 Apr 2022

3 Jun 2022

[Print course description](#)

ECTS credits:

7.0

Instruction language:

English

Coordinator:

- [H. van Lente](#)

Teaching methods:

Lecture(s), PBL, Work in subgroups

Assessment methods:

Assignment

Keywords:

Interdisciplinary research, Research methods, philosophy of science, Research design, Research proposal

Third year courses

Bachelor Digital Society year 3

Faculty of Arts and Social Sciences

Mentor scheme

Full course description

The third year mentor programme will offer plenary sessions and workshops to guide and support you through the final stages of the bachelor. Emphasis will be placed on how to prepare for the thesis (stress, motivation, time management etc.) and how to navigate your plans for the future (master applications, employability etc.).

DSO3500

Period 1

30 Aug 2021

3 Jun 2022

[Print course description](#)

ECTS credits:

0.0

Instruction language:

English

Coordinators:

- [Dieteren, Eva](#)
- [B.C. Zwegers](#)
- R.L.A. Widdershoven
- [C.W. van Leeuwen](#)
- [E.D. Dieteren](#)

Faculty of Arts and Social Sciences

Preparation for the BA DS Thesis

Full course description

During the first months of year 3, you will choose between pursuing study in another country or conducting an internship or following a minor in Maastricht. This course helps you to stay in contact with other BA Digital Society students and staff, and to prepare for the thesis which has to be completed in the final months of year 3. The purpose of this course is to help you develop their skills in formulating researchable questions, one of which may form the basis of the thesis. Ideas for these research questions may come from the internship, minor, study abroad or from news stories relating to digital technologies. You are expected to prepare and share three research ideas, in different digital forms, such as a podcast, video or blog post. Other students and tutors will provide feedback, and by the end of the course you will prepare three abstracts of their research ideas.

Course objectives

After completing this course, you will be able to:

- Demonstrate understanding of contemporary developments and debates related to 'digital society'
- Apply knowledge from reading and processing academic literature from a variety of perspectives
- Turn observations of everyday life (from your direct experience or from the news media) into researchable questions
- Select methods appropriate to answering different research questions
- Present ideas in a concise way in different forms
- Practise giving and receiving feedback (not assessed)

Recommended reading

not applicable

DSO3501

Period 1

30 Aug 2021

17 Dec 2021

[Print course description](#)

ECTS credits:

4.0

Instruction language:

English

Coordinator:

- [C. Rasterhoff](#)

Faculty of Arts and Social Sciences

Bachelor Thesis

Full course description

The BA thesis is the final piece of work in the BA Digital Society programme, providing you with the opportunity to demonstrate the skills and knowledge developed in the preceding two and a half years. You are expected to write a substantial thesis (9000-11,000 words) that adheres to the conventions of academic writing and to make a digital object. Making a digital object enables you to approach research questions from a practical perspective. The digital object can be part of an established digital method, such as GIS, text mining, or data visualisation, but it can also enrich a method we would not usually consider digital. For example, you could make a podcast that deals with digital art and write an essay on sound and digital art, or take digital photos to be used to elicit answers from interviewees in an ethnographic study. This combination enables you to demonstrate their understanding of digital technologies inside-out, their technical design, how to make digital objects, as well as the societal implications of making and using them.

Course objectives

After completing your BA thesis, you will be able to:

- Write a substantial academic essay that draws on the knowledge and skills acquired in previous Digital Society courses;
- Develop a methodological framework and conduct independent research;
- Collect literature that is relevant to the chosen research question and use it to build a sound, written academic argument;
- Consider the possibilities and limitations of using digital objects to collect and/or analyse data.

Recommended reading

Booth, W.C., Colomb, G.G., & William J. M. (2016). *The craft of research* (4th ed.). University of Chicago Press.

Greetham, B. (2014). *How to write your undergraduate dissertation* (2nd ed.). Palgrave Macmillan.

Rawlins, J., & Metzger, S. (2009). *The writer's way* (7th ed.). Houghton Mifflin.

DSO3900

Period 4

31 Jan 2022

1 Jul 2022

[Print course description](#)

ECTS credits:

17.0

Instruction language:

English

Coordinator:

- [M.W. Wijermars](#)

Faculty of Arts and Social Sciences

Critical Debates in Digital Society

Full course description

The ways in which digital technologies affect society, culture, and politics continue to change rapidly. Topics that were headline news when you started your degree might have faded from memory by the time you have reached your final year. Other topics remain salient and controversial over time.

In this course we study processes of digitalisation that have sparked contentious debates. The course will challenge you to analyse and understand them in their full historical, social, technological, and infrastructural context, drawing on what you have learned in previous courses (e.g. Digitalisation and Politics, Surveillance Society, The Good Life, Artificial Society). You will be specifically trained in looking at these debates from different—and sometimes diametrically opposed—perspectives. In effect, you will be challenged to take on the identity of different stakeholders ranging from scholars to policy makers, from critical thinkers to political activists, and from platform developers to civil society actors. This will be done by means of in-class debates and role-playing games.

The Critical Debates in Digital Society course will develop your skills in thinking with/against different positions in contemporary topics of debate. Furthermore, it will hone your analytical reading, critical thinking and persuasive arguing skills. The multidisciplinary setup of the course will contribute to knowledge of a variety of theories and concepts from the social sciences and humanities.

DSO3001

Period 4

1 Feb 2022

1 Apr 2022

[Print course description](#)

ECTS credits:

9.0

Instruction language:

English

Coordinators:

- [Frissen, Thomas](#)
- S.M.E. Wyatt

Bachelor Digital Society year 3 electives unit of study

Faculty of Arts and Social Sciences

Technology Assessment

Full course description

In the 1960s, Technology Assessments (TA) came into being as a way of assessing the risks of innovation and averting undesirable consequences of new technologies. Even though it is impossible

to map out every possible consequence in advance, TAs provide greater insight into the impact and effects of technology.

For a long time, TAs focused on the hard impact of technology, such as environmental harm and health and safety risks. Yet, recently, the ethical ('soft') impacts of new and emerging technology such as privacy have gradually received more attention. The General Data Protection Regulation (GDPR), for instance, includes Data Protection Impact Assessment (DPIA).

In this course, you will be introduced to different forms of TA. In specific, focus lies on three TA frameworks, that will be studied in-depth: Responsible Research and Innovation (RRI), Constructive TA, and Ethical TA. The assessment consists of two individual mini essays (i.e., apply a TA framework to a digital and emerging technology, and the other way around), a group presentation, and a group paper that focuses on the TA of a new and emerging technology of your subgroup's choice.

Course objectives

By the end of this course, students will be able to:

- Explain/Understand how modern societies and academic disciplines have approached technological risk and uncertainty.
- Explain/Understand key theories, concepts, and approaches to technology assessment, as well as the similarities and differences between them.
- Identify an appropriate form of technology assessment for a given emerging digital technology.
- Apply these technology assessment frameworks to emerging digital technologies.
- Produce a professional collaborative report that assesses an emerging digital technology using a technology assessment framework.

Prerequisites

None

DSO3002

Period 5

4 Apr 2022

3 Jun 2022

[Print course description](#)

ECTS credits:

6.0

Instruction language:

English

Coordinator:

- A.S. Richterich

Teaching methods:

Lecture(s), PBL, Work in subgroups

Assessment methods:

Final paper, Presentation and paper

Keywords:

Technology Assessment - Risk - Uncertainty - Responsible Research and Innovation - Constructive

Bachelor Digital Society

Technology Assessment - Ethical Technology Assessment

Faculty of Arts and Social Sciences

Internship

DSO9900

Year

1 Sep 2021

31 Aug 2022

[Print course description](#)

ECTS credits:

0.0

Instruction language:

English