

NLIS 2024–2025: Syllabus

1 Learning Goals

The course covers fundamental and current research in Information Systems. Topics discussed range across fields and methods. Students will engage in in-class discussions of seminal and frontier papers. Each session is attended by ten or fewer students and is led by an expert faculty, creating an engaging and intimate setting for emerging IS scholars to interact with and learn from their established peers. Faculty and students come from RSM, VU, and Tilburg and can thus form new cross-institutional ties. The course will equip students with a broad understanding of Information Systems research that will inform their own projects as well as prepare them for the job market.

2 Schedule & Topics

The course takes place across three two-day blocks, each day consisting of two three-hour sessions and each block hosted at one of the participating universities.

Block 1

Location: RSM, [Mandeville building](#), T5-122 (fifth floor; use the stairs/lift of at the back of the building; there is no access from the stairs/lift at the front of the building)

Day 1: 27 January 2025, 9am – 4pm

Day 2: 28 January 2025, 9am – 4pm

Sessions:

1. Ting Li (RSM): IS Research Fundamentals

This session aims to familiarize students, particularly those in their first or second year of a PhD program, with the field of IS research. It serves as an introduction to a wide array of topics within the IS literature, setting the stage for future sessions that will delve into specific areas in greater detail.

2. Dominik Gutt (RSM): User-generated Content Research in IS

User-generated content is pervasive and utmost versatile. Whether we directly consume it, for instance in the form of videos or blog posts, or whether we use it to support or decision-making, in the form of online reviews, user-generated content is omnipresent. This makes it a premier topic to study for IS scholars. This session will provide students with an overview of the essential literature on user-generated content in Information Systems. Although mainly quantitative in focus, this course will appeal to students of various methodological traditions. Students will be familiarized with different angles on user-generated content, such as posting behavior, consumption behavior, or both. What scholars can learn from these studies is similarly multi-faceted, sometimes we learn something about the content, its format, or its dissemination but oftentimes we learn more about behavioral patterns of people interacting with the content. As for the tasks of this course, students will be asked to read assigned literature, present it in class, and engage in discussions with their peers.

3. Jovana Karanovic (RSM): Tackling Power Dynamics on Labour Platforms

The rapid growth of labour platforms like Uber, Upwork, and Deliveroo has raised significant concerns about the concentration of power they wield. At the heart of their success lies a vast collection of user data, which fuels highly sophisticated algorithms. These algorithms not only dictate consumer experience but also deeply influence the lives of platform workers. From determining how much a worker earns to whether they even secure

a gig, algorithmic control has become an invisible force driving labour conditions and market opportunities. As these platforms expand, questions emerge about transparency, fairness, and the ethical use of data. What responsibilities do these companies have toward their workers? How can power imbalances between platform companies and gig workers be addressed? This session will delve into these issues, equipping students with the tools to critically analyse the role of digital platforms in shaping the future of work and society at large.

4. Philipp Cornelius (RSM): Crowdfunding

Crowdfunding is a financing method that relies on small contributions from large groups of investors on online platforms. It has been used for a wide range of purposes, from new product development to art to charity. In this session, we review the crowdfunding literature from its early foundations to the latest results. We discuss the different perspectives people have taken, and we identify opportunities for new research.

Block 2

Location: Tilburg

Day 1: 3 April 2025

Day 2: 4 April 2025

Sessions:

5. Shiva Shekar (Tilburg): Introduction to Analytical Modelling in IS

We are now transitioning to a world where data is abundantly available and is employed by businesses to further their interests. However, for a lot of new business cases/strategies/technologies data is unavailable which leads to a clarity for managers whether to proceed with such risky manoeuvres. Moreover, even if they do so, it is unclear how to proceed in an optimal manner that achieves their goals in a sufficient manner. To fill this gap in understanding, analytical models are employed to help managers get a feel on how new technologies may affect their business and the appropriate manner to adapt their business strategies. In this course, we will discuss how to build analytical models, how to incorporate the effects of different technologies in models and how to gain business intuition from such models.

6. Sijia (Catherine) Ma (Tilburg): Chatbot and Human-AI interactions

In this session, we will cover the topic of human-AI interactions and, in particular, chatbot design and interactions in IS literature. Artificial intelligence builds on big data analytics and machine learning / deep learning methods to provide a more automatic and intelligence decision support for various areas. Numerous questions arise regarding the adoption, usage, and particularly interactions of AI with human. We will learn from the literature and see how to facilitate the collaboration between human and AI, how AI has been used or may have impact for different industries, and how to manage AI in businesses. Furthermore, we will dive into the literature on chatbot design and interactions as a more concrete scenario and share the theoretical perspectives to answer relevant questions.

7. Poonacha Medappa (Tilburg): Understanding the New IS Research Paradigm: ML and AI Techniques in IS Research

With advancements in AI and ML, researchers now have a large toolset of approaches to perform data-driven research and provide insights that were previously infeasible. In this session, we will explore how these techniques can be applied to IS research and discuss the common challenges encountered in their application. Specifically, we will answer four questions: Are ML and AI algorithms fundamentally new empirical tools, how do they fit with what we know? Are these algorithms merely applying standard techniques (like OLS) to

novel and large datasets? What are the issues in using the ML techniques for research? As IS researchers, how can we use them?

Block 3

Location: VU

Day 1: 26 May 2025

Day 2: 27 May 2025

Sessions:

8. Bart v/d Hooff (VU): Complexity in IS Research

In this session, we will discuss the basic tenets of Complexity Theory. Next, we will discuss examples of IS research where these have been applied – primarily focused on understanding (1) Business-IT alignment and (2) managing the increasing complexity of IS architectures, but also exploring other applications in published research. Then, participants will be invited to reflect on the possible value and applicability of complexity-related concepts in their own research.

9. Edona Elshan (VU): Bridging Theory and Practice in Information Systems Development: Reframing Practitioner Insights

This session will explore the intersection of theoretical frameworks and practitioner insights in the evolving field of Information Systems Development. With the rapid advancements in technology and the increasing adoption of low-code platforms and GenAI, there is a growing need to bridge the gap between academic research and industry practice.

10. Joey van Angeren (VU): Digital Platform Architecture

Open and modular architectures lie at the heart of the success of digital platforms such as iOS, PlayStation, and Salesforce. Such architectures enable the creation of participatory infrastructures, in which a variety of actors (e.g., a platform owners and app developers) jointly create and capture value. The IS discipline has a longstanding tradition of studying open and modular architectures. In this session, we will revisit seminal IS research on open and modular architectures. We will also discuss how those ideas have helped shape our understanding of contemporary digital platform architectures and their governance, management, and use.

3 Session Setup & Assessment

Each lecturer has substantial freedom in how they design their session, but the basic framework is a focus on paper discussions. In each session, you can expect around five assigned readings which you will discuss. Usually, the discussion will be led by one or more students who have read a paper in more detail.

The course comprises 6 ECTS. Students will be graded for each session and a 15-page research proposal. Lecturers can choose how to grade each session (e.g., presentation of an assigned reading and/or course participation). Attendance is mandatory for all sessions.