

# AI in Services Industries (S) (03SE22BO0145)

[Link to UZH Course Catalogue](#)

## Syllabus

### 1 Introduction

The service economy has been fundamentally transformed by the emergence of artificial intelligence, with machine learning, computer vision, and natural language processing emerging as the primary drivers of this digital revolution. As AI technologies gain widespread adoption, the underlying services and platforms built around them have become central to shaping the future of healthcare, finance, education, retail, transportation, and creative industries. This surge in AI-powered services is not just a trend; it reflects a broader shift in the way we deliver value, optimize operations, and enhance customer experiences.

In this seminar, we aim to explore the intricacies of managing services built on AI technologies across different industry sectors. Throughout the course, participants will gain a deeper understanding of the economic dynamics driving AI transformation in service industries, explore the challenges and opportunities they present, and examine the evolving business models that result. By the end of the seminar, students will be equipped with a solid understanding of how to manage, innovate, and lead in an era dominated by AI-enabled services. This knowledge is paramount for any forward-thinking individual ready to navigate the future of the AI-driven service economy.

[Prof. Helmut M. Dietl](#), University of Zurich

[Dr. Yu Pan](#), University of Zurich

### 2 Learning goals

After the seminar students understand

- the economic development of AI applications across different service industries
- the potential of AI technology for service innovations and business model transformation
- the competitive forces driving AI-based service innovations

- the disruption of existing service industries by AI-enabled services
- how to develop promising startup ideas in AI-powered service sectors

### 3 Application process

**Deadline:** August 31, 2025

**Application:** Apply via email to Dr. Yu Pan ([yu.pan@business.uzh.ch](mailto:yu.pan@business.uzh.ch)) with the subject title "Application for AI in Services Industries (S)". Include your CV, transcript, and a short motivation (less than 200 words).

**Process:** The number of participants is limited to 20 students. In the event of excess demand, we will select the participants based on the motivation statements provided in your application email. We will notify all students if their application is accepted by September 6, 2025. After receiving the confirmation of admission, an additional registration in the module booking tool of the UZH is necessary (please note deadlines).

### 4 Dates and location

- Information day: September 11, 2025; 10:15 AM – 12:00 AM (FRE-D-14)
- Day 1: October 20, 2025; 1:00 PM – 5:00 PM (KOL-F-123)
- Day 2: October 21, 2025; 1:00 PM – 5:00 PM (SOF-E-17)
- Day 3: November 3, 2025; 1:00 PM – 5:00 PM (KOL-G-212)
- Day 4: November 4, 2025; 1:00 PM – 5:00 PM (KOL-H-309)
- Deadline papers: December 14, 2025 (11:59 PM)

### 5 Overview

**(i) Information day:** We meet on September 11, 2025, at 10:15 - 12:00 for the introduction to the seminar where you will form groups and select your two AI service industries of choice. Registration of groups and topic choices no later than Monday, September 15, 2025.

**(ii) Industry analysis:** Students will analyze AI transformation in two different service industries (healthcare, financial services, education, retail, transportation, creative industries, or any other industry you find interesting) in groups of 3-4 students. Each group will analyze and present their two selected industries and provide feedback to the other groups. At the end, each group will submit two papers summarizing the AI transformation in both industries (content from the presentations, further context, and incorporated feedback from peers).

**(iii) Seminar** (see course catalogue): The first part of the seminar (presentations of first industry analysis) takes place on October 20, 2025, and October 21, 2025. The second part of the seminar (presentations of second industry analysis) takes place on November 03, 2025, and November 04, 2025. Students will present and discuss the analyzed AI transformations and business impacts.

## 6 Assessment

You will have to analyze and present AI transformation in two different service industries. You will provide feedback on your peers' presentations. Finally, you will write two papers summarizing the AI impact analysis for both industries. We will grade your presentations (30%), your papers (60%), and your participation (10%).

### Tasks:

- Select two different AI service industries from the provided list
- Present the AI transformation: What problems does AI solve in this industry?
- Explain the "before and after" analysis of AI implementation
- Business analysis of AI impact: What analytical or scientific approach do you apply?
- Reflection on the transformation analysis and future implications

## 7 Presentations and papers

**Presentations:** You will have 30 minutes for your presentation. Please send your presentation slides to Dr. Yu Pan ([yu.pan@business.uzh.ch](mailto:yu.pan@business.uzh.ch)) at least 24 hours before your scheduled presentation date.

**Papers:** Papers are due by Sunday, December 14, 2025 (23:59 CET). The papers should not exceed 5,000 words (excl. title page, references, appendix etc.). Please send a PDF version of your paper to Dr. Yu Pan ([yu.pan@business.uzh.ch](mailto:yu.pan@business.uzh.ch)). The style of the manuscript should follow the current APA scientific guidelines.

**Participation:** You are expected to actively participate in seminar discussions.