

# Starter Kit

University of Zagreb Faculty of Organization and Informatics

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In case you find any errors, do not hesitate to report them to [dokresa \[at\] foi.unizg.hr](mailto:dokresa[at]foi.unizg.hr).

Language models and other AI-based tools were used in the process of creating this document.

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# Current Practice Examples

In order to provide the reader with some specific examples of how AI-based tools can be used in the teaching and learning processes, we have compiled a set of select examples of using AI-based tools, systems, and solutions from the partner institutions of the consortium of this project. These examples help paint the current state of affairs concerning AI-based solutions. Each example illustrates how AI-based solutions are used in various tasks and their impact on lecturers and learners. Our goal was to provide the reader diverse activities and approaches to AI-based solutions applied across various disciplines. It can be observed that the leitmotiv is a drive to enable and motivate more meaningful human interaction, automate routine tasks, and evolve, promote, and emphasise the significance of critical thinking in the face of emerging AI-generated outputs.

The following section (Sec. 1.1) provides an overview of the collected examples of current practice, each example presented with the name of the related course and a summary of the provided data. A detailed account of every presented practice example is provided later in Sec. ??.

## Overview

This section contains concise overviews of several real-world applications of AI-based solutions in higher education. While the specific details vary between the selected examples, all these cases highlight a shared theme: AI makes it possible to streamline routine tasks, boost collaboration, promote humane interaction between people, and encourage new ways of thinking. Educators are finding ways to integrate AI so that it amplifies rather than overshadows the human element. These summaries underscore a practical approach where AI is integral to teaching practices with clear objectives and transparency. By examining these snapshots, the reader is expected to gain insight into how different teams manage the capabilities and challenges of AI-based tools, platforms, and solutions in everyday academic life.

## The Course Description-Review Bot

The Course Description-Review Bot at the University of Applied Sciences BFI Vienna (UAS BFI) is a custom AI-based tool that helps lecturers refine their course descriptions. This chatbot is designed to align with the institution's academic standards and quality principles, following guidelines on constructive alignment and competence-oriented examination requirements. Teachers paste their draft course descriptions into the chatbot conversation and receive instant, AI-generated feedback. The feedback motivates them to reflect on whether each aspect of their course supports clear objectives and learning outcomes or if the examination method is aligned with the stated competencies. The idea is to ensure course descriptions across the university follow a consistent format and depth, i.e. the same standard. Access to the chatbot is provided through a Moodle-based system set up by the Teaching and Learning Center of UAS BFI, making it readily available to all faculty members. Lecturers are encouraged to use the tool's suggestions critically, adding or revising content to match their real teaching intentions best. Although the bot is helpful, it does not replace human oversight and should not be trusted unquestioningly. Quality managers and didactic experts still conduct traditional reviews of the submitted curricula for accreditation and compliance. The main advantages of this approach are the short feedback loop and the chance to detect gaps or inconsistencies that might otherwise be overlooked by a human, freeing staff time for more profound curriculum improvements.

Detailed account of this example is presented on page ??.

## Global Collaboration and Networking

In this international collaborative course, students at the University of Applied Sciences BFI Vienna (UAS BFI) join forces with peers from a Peruvian university and analyse cross-cultural marketing. The class relies heavily on remote teamwork, and AI-based solutions help free up time for genuine interaction by streamlining the research process. Rather than sifting through an endless collection of resources, the students rely on ChatGPT (described on p. ??) to fetch preliminary information, which they later refine and expand on together. This approach lets them focus on communication skills, cultural exchange, and cooperation – the fundamental driving forces of the course. Each group is tasked with projects set within an actual or simulated business context and uses AI-based output as a starting point in developing a project solution, continuously and increasingly adding depth. Lectures and in-person classes are reserved for group discussion, motivating students to critically observe, examine, and analyse the received AI-based output. Students are thus motivated to get immersed in critical and valuable activities such as data and content analysis instead of wasting time on

the tedious and uninteresting groundwork. This leads to improved quality of the final outputs, more frequent and fruitful peer discussions, and increased engagement. Lecturers can track the groups' progress through Moodle logs and the submitted student-used prompts, ensuring active and authentic participation. Since the core objective is cross-cultural communication, using AI as a scaffold to ease and foster research tasks helps students concentrate on international collaboration and practical activities.

Detailed account of this example is presented on page ??.

## Scientific Working

In this master-level course on scientific methods at the University of Applied Sciences BFI Vienna (UAS BFI), AI-based tools like [researchrabbit.ai](#) (described on p. ??) and [elicit.com](#) (described on p. ??) have been included in the curriculum to transform how students discover and analyse academic sources and literature. The goal is to sharpen students' ability to develop good research questions and propose well-founded hypotheses. Students are tasked with a traditional search to identify a key paper, which later anchors their AI-assisted exploration. Using citation-based networks enhances their research for thematic connections. Afterwards, the students examine the methodological structures and soundness of the studies they discover and retrieve. This approach saves time and promotes deeper reflection because the students compare AI-driven results with those gained using conventional searching approaches. Students are instructed to keep a research diary throughout the course, focusing on several aspects, including but not limited to documenting their experience with AI-based tools, their prompt engineering choices and finalised prompts, and the verification process of the received results. Through this process, they notice how effectively AI can lay out relevant theories or conceptual links while recognising its flaws. Some students discover new lines of inquiry they would not have spotted alone, but they still have to verify the received content's truthfulness, correctness, and relevance. The overall impact is noticeable and significant in structured thinking, which leads to stronger hypotheses and better grounding in proper scientific practices.

Detailed account of this example is presented on page ??.

## Introduction to Political Science

At the University of Applied Sciences BFI Vienna (UAS BFI), this first-year bachelor's course on political science blends in-person sessions with online self-study segments, where students learn how to utilise AI in analysing political speeches. The teaching method focuses on introducing the concept of prompt writing and encouraging

repeated adjustments until ChatGPT's (described on p. ??) output lines up with the theories the students studied in class. This assignment is focused on the real-world application of knowledge about various rhetorical strategies and populism, making the course and study material feel more authentic and usable in real life. During online sessions, students realise that simply inputting a vague query is insufficient. They must clearly reference the relevant theoretical concepts to receive accurate or meaningful replies. The lecturer increases awareness of how crucial it is to refine and question AI-based output by allowing the students to use ChatGPT while documenting each prompt iteration freely.

In many cases, ChatGPT suggests points of view or nuanced details that students might overlook should they be analysing the topics on their own. Since the assignment promotes constant revision and enhancement of the used prompts, students are motivated to employ a critical mindset. They must observe and notice if the AI-generated response mixes various political themes or fails to pick up cultural nuances. The class then discusses how well ChatGPT's suggestions fit actual theories and whether specific rhetorical topics within the response enhance or distort the source.

Detailed account of this example is presented on page ??.

## Intelligent Interactive Systems

This bachelor-level course at the University of Zagreb Faculty of Organization and Informatics (UNIZG FOI) focuses on building AI-driven software with which human users can interact naturally. Students learn how to merge large language models, such as GPT (described on p. ??) or Claude (described on p. ??), with traditional machine learning solutions. The students are guided and engaged through the entire development cycle, from conceptualising how humans and AI solutions should interact and collaborate to implementing responsible design principles that avoid reckless and overbearing reliance on automation. Student projects might include, for example, building chatbots that respond contextually to user queries or interactive dashboards that offer real-time feedback on specific tasks. Lecturers want students to grasp the positives and negatives of different AI architectures. Therefore, they encourage side-by-side comparisons between older machine learning methods, modern large and small language models, and the related state-of-the-art solutions. Working in teams, learners gain, e.g. first-hand experience in linking language model capabilities with human oversight – an approach that provides insight into the importance of controlling the AI-provided output when mistakes or unexpected, unsolicited, or unusual responses are received. This example also highlights the ethical dimension of using AI because the final implemented system must consider and preserve user trust. This design approach, combining multiple AI methods with well-thought-out user interactions, helps

students model, implement, and refine interactive tools with increased awareness of real-life demands and limitations.

Detailed account of this example is presented on page ??.

## Informatics Services Management

In this course at the University of Zagreb Faculty of Organization and Informatics (UNIZG FOI), teams of three or four students learn how to design and deliver IT services in a project-based setup. The emphasis is on bridging real business needs with IT solutions, and while using AI-based tools and platforms is permitted, it is neither mandated nor guided by the lecturer. Each student group creates user personas, journey maps, and value propositions, then moves on to their solution's wireframes and prototypes. Teachers give direct feedback on the student teams' work during practical classes. In contrast, at home, students often turn to tools like ChatGPT (described on p. ??) or DALL-E (described on p. ??) to see if the available existing AI-based solutions can fill-in creative gaps and help them create some multimedia content. This open and unregulated approach reveals how students use AI-based solutions when left to their devices. Some students find using AI-based tools and platforms speeds up specific tasks they are faced with or sparks new and interesting ideas, but others see no real difference in the quality of the finalised product. Teachers of this example notice that overall familiarity with AI remains inconsistent. By mid-semester, student projects are presented as a business-style pitch, allowing the lecturers to provide feedback on whether using AI-based solutions added significant value to the produced student deliverable or simply spent some of their time with no observable beneficial outcome. Although using AI-based solutions sometimes supports and enhances fresh thinking and novel ideas, many student teams realise that it is not a magical solution to their tasks and challenges. The final verdict emphasised in this example is that integrating AI-based solutions in a freeform way boosts the learners' digital literacy but does not consistently boost creativity, speed, or quality of the final output.

Detailed account of this example is presented on page ??.

## Business Decision Making

Students pick a real-world company in this bachelor-level course at the University of Zagreb Faculty of Organization and Informatics (UNIZG FOI). They are tasked with solving a strategic or tactical decision problem. ChatGPT (described on p. ??) is recommended here as an optional assistant to help the students identify a set of criteria that would help them solve the received task, i.e. they might not consider or discover



through standard non-AI-enhanced processes. Students use the traditional approach first. Afterwards, they interact with ChatGPT to receive additional points of view or sub-criteria to evaluate their problem, comparing the AI-generated output with their own. Through this exercise, the students can experience first-hand that an AI-based solution can highlight fresh insights or alternative perspectives.

Nevertheless, AI-based solutions occasionally produce incomplete or questionable ideas and related content. The focus is on the course learning outcome related to applying quantitative, qualitative, and risk-assessment methods to decision-making processes and information and communication technology (ICT) projects in real business challenges. Through the evaluation activities of the AI-generated outputs containing suggestions and potentially valuable data, students become more aware of how and when it is fitting to include AI-based solutions in structured decision-making processes. A short survey captures the level at which the students liked or disliked the technology and whether it improved their group work. The lecturer reviews how the students integrate AI-based output into their conclusions and the finalised problem solution. Students find that while AI fosters a more diverse approach to the problem they face, it still demands scrutiny and careful consideration of the received output. Ultimately, the students gain a balanced understanding of combining quick AI-powered brainstorming with systematic methods, resulting in more substantial insights in complex business contexts.

Detailed account of this example is presented on page ??.

## Communication and Virtual Teams in the Organization

At the University of Zagreb Faculty of Organization and Informatics (UNIZG FOI), this bachelor-level course focuses on effective communication strategies and dynamics of virtual teams, especially in business, management, and information sciences. Students engage with AI-based solutions by using Bing Chat, now rebranded to Copilot (described on p. ??), to collect and evaluate information for structured team presentations. Each team of students picks a specific topic, formulates queries for the AI-enhanced chatbot, and then compares the generated responses against more traditional academic resources, such as sources found via Google Scholar or local library books. Participating students are required to document their findings using screenshots accompanied by their reflections on the conducted process to develop and enhance students' critical thinking and digital literacy skills. The students are thus given the opportunity to experience and learn first-hand how AI-generated content can be unreliable or prone to "hallucinations," reinforcing and emphasising the importance of

cross-referencing and questioning the AI-generated output. This supervised introduction to AI-based solutions promotes ethical awareness in the context of emerging AI-based technologies. In addition, it engages students to observe and recognise how AI-based solutions fit broader communication contexts while remaining mindful of potential pitfalls and challenges. For the instructors, the exercise is a window into how learners adopt emerging AI-based tools and a prompt for implementing and utilising more innovative teaching practices. Since students must present and discuss the AI-generated output in class, they also develop their teamwork abilities and sense of responsibility. In essence, this task promotes and establishes academic rigour and helps form a foundation for responsible AI-enhanced and AI-driven collaboration.

Detailed account of this example is presented on page ??.

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