AI 4 UNI Training

Replication Manual

Online Training for University Students

A practical guide for trainers and institutions

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Introduction

Małgorzata Kopalska, University of Szczecin

1.1 About the AI4Uni Initiative

The AI4Uni project focuses on AI literacy and aims at developing the digital skills and competencies of all members of the academic community: students, academic and administrative staff. It also addresses organizational needs of the universities to use newest technologies to their advantage to enhance their capacity.

When Chat-GPT was launched, it went viral like no other invention before. Technology is a rapidly changing environment, and artificial intelligence is playing an increasingly important role in all areas of life. AI, with its ability to analyze data, learn from experience and make autonomous decisions, is opening new opportunities and challenges for Higher Education.

The goal of the project is to equip the academic community with a comprehensive understanding of the impact of artificial intelligence.

AI can't be avoided. Bringing it down, in the academic context, to a question of plagiarism is counterproductive. The change has already happened and universities both as educational institutions and working environments are obliged to take active part in it.

The AI4Uni team takes a four-step approach to achieve planned results:

1. Analysis of the legal and ethical frames that each partner university must work within (the AI for Higher Education – The State of Play report is available HERE);
2. AI literacy training modules adjusted to the audience: students and university staff;
3. AI implementation at universities participating in the AI4Uni project;
4. AI guidelines and AI toolbox for higher education to connect with general audience and share experience.

The AI4Uni project is implemented by a consortium of 5 institutions: University of Szczecin, Poland (leader), University of Hradec Králové, Czechia, Pablo de Olavide

University, Spain, OSTIM Technical University, Turkey and SGroup – Universities in Europe network.

1.2 Purpose of the Manual

This manual is a result of the activities conducted within *WP3. Skills and competencies development* of the AI4Uni project. This work package contains training activities for students, academic and administrative staff that aim at providing them with skills and competences needed to confidently use AI solutions in their daily tasks. **This manual is dedicated to training activities for university students.**

The academic community should be encouraged to use AI and there should be institutional support in that matter. Conducting training and publishing content of the training modules to the public helps to promote skills and knowledge and in consequence, breaks the barrier that exists.

We publish this manual to:

- enable universities and other organizations to reproduce the training,
- support responsible AI adoption,
- increase digital competences among students and staff,
- promote ethical and sustainable use of AI.

The online training for university students was conducted in March – April 2026. This manual gather both professional knowledge and training experience of the AI4Uni team to help you replicate and implement similar AI literacy training at your institution.

1.3 How Training Topics Were Chosen

The training agenda and educational needs of the participants were identified on a basis of AI for Higher Education – The State of Play report created in WP2. of this project. It contains analysis of legal, practical and ethical implications of AI usage at the universities and a report with a summary of 10 interviews conducted with external stakeholders.

According to our findings, many users do not understand how AI systems work, where hallucinations and misinformation come from, ethical and legal implications of AI applications in the university and private life, as well as institutional responsibilities. Strong emphasis was put on unreliable AI outputs containing fabricated references and inaccurate information.

Students already use AI heavily for summarizing, grammar correction and document analysis. That is why the AI4Uni training agenda aims at building **AI literacy, especially in the academic context**. Students need training focused on safe, critical, and academically responsible use of AI that includes following aspects:

- citation and disclosure,
- plagiarism risks,
- checking references,
- avoiding blind trust,
- maintaining independent reasoning,
- using AI as a tutor rather than a replacement

Training participants after completing the training should not excel in use of AI tools but rather critically evaluate technologies, understand their ethical implications, and choose AI tools strategically depending on their purpose.

1.3.1 The training structure

Online training develops university students' digital competences in line with the DigComp framework, with a strong focus on the effective and responsible use of artificial intelligence. Participants enhance their **information and data literacy** by learning to critically evaluate AI-generated content and use AI tools for research and data analysis. The training also strengthens **digital communication and content creation skills**, enabling participants to produce professional materials and apply effective prompting strategies. A key component is **safety and responsibility**, including awareness of ethical, legal, and psychological aspects such as data protection, bias, and academic integrity. Finally, participants build **problem-solving competences**, allowing them to

integrate AI into their work, optimize processes, and make informed, reflective decisions about its use.

THE ONLINE TRAINING

10 hours plus individual consultations with trainers available: 2 hours per person

Language of instruction: English

DigComp Color Coding

Session 1

- What is AI and responsible AI;
- Legal aspects of AI, how they influence us

Session 2



- AI tools for students: general overview
- Focus on AI tools for students
- Personal data and device protection

Session 3



- Focus on AI tools for students
- AI generated content in students' work, when and how

Session 4



- Green AI: environmental impact and user responsibility
- AI at workplace for future employers and employees

Session 5



AI in marketing, what every consumer should know

2. Competence Framework

Małgorzata Kopalska, University of Szczecin

2.1 Introduction to DigComp 3.0

DigComp 3.0 is the fifth edition of the European Digital Competence Framework for Citizens. It describes knowledge, skills and attitudes that are needed to be digitally competent for daily life, participation in society, working and learning.

The framework is technology-neutral and is designed to be tailored and adapted for a variety of purposes in education, training and employment contexts. The framework update reflects rapid digital technological developments that have occurred since 2022 and which have wide-ranging implications for digital competence. DigComp 3.0 includes new learning outcomes which provide a more granular view of digital competence than previously, as well as the systematic and transversal integration of AI across the framework.[1]

DigComp 3.0 lists 5 core competence areas which contain digital skills closely related AI literacy:

1. Information and Data Literacy
2. Communication and Collaboration
3. Digital Content Creation
4. Safety, Well-being, and Responsible Use
5. Problem Solving

The AI4Uni trainings were designed to develop skills described in all five competence areas.

You can read more about the European Digital Competence Framework for Citizens here »»

[1] COSGROVE, J. and CACHIA, R., DigComp 3.0: European Digital Competence Framework - Fifth Edition, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/0001149, JRC144121.

2.2 DigComp Mapping

This part of the manual presents how different sessions of the training develop skills and competencies according to DigComp 3.0[2]. Methodology and training materials are described in chapter 3 of this publication.

THE COMPETENCE AREA DESCRIPTION

1. INFORMATION SEARCH, EVALUATION AND MANAGEMENT	
• to articulate information needs, and to search for, locate and retrieve digital information and content; • to judge the relevance of the source and its content in digital environments; • to critically evaluate digital sources, content, and processes used to generate them; • to store, manage, organise and analyse digital information and data	**1.1 Browsing, searching and filtering information** Session 1, Session 3 **1.2 Evaluating information** Session 1, Session 5 **1.3 Managing information** Session 1, Session 4, Session 5

[2] COSGROVE, J. and CACHIA, R., DigComp 3.0: European Digital Competence Framework - Fifth Edition, Publications Office of the European Union, Luxembourg, 2025, https://data.europa.eu/doi/10.2760/0001149, JRC144121

2. COMMUNICATION AND COLLABORATION	
• to interact, share, communicate and collaborate in digital environments while being aware of cultural, generational and other diversity and the features and limitations of digital technologies; • to participate in society through digital technologies; • to assert one's rights and exercise choice in digital environments; • to manage one's digital presence, identity and reputation.	**2.1 Interacting through and with digital technologies** Sessions 2 – 5 **2.2 Sharing through digital technologies** Sessions 2 – 3 **2.3 Engaging in citizenship through digital technologies** *Session 1* **2.4 Collaborating through digital technologies** Sessions 2 - 3 **2.5 Digital behaviour** Session 1

3. CONTENT CREATION	
• to create and edit digital content; • to improve and integrate information and content into an existing body of knowledge while understanding how copyright and licences are to be applied, adopting an ethical and	**3.1 Developing digital content** Sessions 2 – 3

responsible approach in the creation, improvement and integration of digital content; • to know how to apply computational thinking and programming techniques to give instructions to a computer system.	**3.2 Integrating and re-elaborating digital content** Sessions 2 – 3 **3.3 Copyright and licences** Session 3

4. SAFETY, WELLBEING AND RESPONSIBLE USE	
• to protect, devices, content, personal data and privacy in digital environments; • to support physical, mental and social wellbeing of oneself and others, and to be aware of the benefits and risks of digital technologies for wellbeing and social inclusion; • to be aware of the environmental impact of digital technologies and their use, to take action; • to reduce such impact, and to use digital technologies to support sustainability.	**4.1. Protecting devices** Session 2 **4.2 Protecting personal data and privacy** Sessions 1 – 3, Session 5 **4.3 Supporting wellbeing** Sessions 4 – 5 **4.4. Environmental impacts of digital technologies** Session 1, Session 4

5. PROBLEM IDENTIFICATION AND SOLVING	
• to identify and assess needs, and to use digital technologies and adapt digital environments to meet these needs; • to identify and resolve technical and conceptual problems and problem situations in digital environments; • to use digital technologies to make improvements in, or new solutions for, processes and products; • to build capabilities to operate autonomously in digital environments; • to stay informed about digital technological developments and their implications.	**5.2 Identifying needs and digital technological responses** Sessions 2 – 3 **5.3 Identifying creative solutions using digital technologies** Sessions 2 – 3 **5.4 Identifying and addressing digital competence needs** Session 4

3. Methodology of the AI4Uni training

What is AI and responsible AI

Author(s): Ángela del Robledo Troncoso García

The session began with an introduction to the concept of Artificial Intelligence, exploring what AI really is and challenging the idea that it is a “magical” technology. It was explained that AI systems are fundamentally based on mathematics, data, and computer science, and that their functioning can be understood through the relationship between input, model, and output.

The session then provided an introduction to how Deep Learning models work, as well as the difficulty of understanding what happens internally in some AI systems. In this context, the concept of the “black box” was introduced and contrasted with Explainable AI, highlighting the importance of being able to interpret and understand the decisions produced by these systems.

After that, the students were encouraged to participate in a practical activity, in which they had to distinguish between real news and AI-generated news. The aim was to demonstrate in a practical way how difficult it can be to differentiate genuine content from artificially generated content and, consequently, to introduce the importance of developing a critical attitude towards information produced or disseminated through AI.

Finally, the session introduced the importance of responsibility and ethical AI use, emphasizing that AI does not replace human responsibility, but rather makes it even more important to use these technologies critically and consciously.

Legal aspects of AI, how they influence us and what they are for

Author(s): Aleksandra Klich

The primary objective of the session was to enhance students' awareness of the opportunities and limitations associated with generative AI tools and to develop their

ability to use these technologies responsibly, transparently, and in accordance with applicable legal and academic standards. The training addressed the increasing use of AI in academic activities, including essay writing, summarizing scientific literature, translating materials, preparing presentations, generating ideas, and organizing research.

The introductory part explored the concept of AI-generated content and its different forms, including written assignments, summaries, translations, images, and presentations produced entirely or partially through AI systems. Particular attention was paid to distinguishing between the legitimate use of AI as an assistive learning tool and situations in which AI-generated content replaces students' independent intellectual contributions. A substantial part of the session was devoted to copyright law and intellectual property rights. Participants were introduced to the fundamental principles governing authorship and copyright protection, including the importance of human creativity and the legal implications of content generated by artificial intelligence. The discussion addressed the question of whether AI can be regarded as an author and emphasized that students remain responsible for the work they submit, regardless of the technological tools used during its preparation.

The training also examined the relationship between generative AI, plagiarism, and academic integrity. Participants explored situations in which using AI-generated content may conflict with university regulations or principles of academic honesty, particularly when automatically generated text is presented as independent work without appropriate disclosure. The importance of verifying AI-generated information, checking the reliability of references, and accurately acknowledging the use of AI tools was highlighted. Another important component concerned personal data protection and privacy. The session introduced the risks associated with entering personal or confidential information into external AI systems, including the unauthorized disclosure of personal data, the uploading of sensitive information, and the limited control users may have over subsequent data processing. Particular emphasis was placed on the relevance of the General Data Protection Regulation (GDPR) and the need for caution when using AI tools in activities involving personal information.

The session further distinguished between acceptable and potentially problematic uses of AI in academic work. Examples of appropriate applications included brainstorming, language improvement, summarizing materials, and structuring assignments, provided that students retain control over the final content and comply with applicable university requirements. Conversely, the training identified practices that may raise serious concerns, such as generating entire assignments without meaningful student involvement, submitting unverified information, relying on unreliable references, or failing to disclose AI assistance when required.

A separate section addressed students' legal and academic responsibility for AI-assisted work. The discussion emphasized that students remain accountable for the accuracy, originality, and integrity of their submissions and must respect intellectual property rights and institutional academic standards. Potential consequences of inappropriate AI use were considered in the context of academic assessment and disciplinary responsibility.

The practical component was based on interactive questions, quizzes, and case studies. Participants were invited to assess realistic situations involving AI-generated academic content and determine whether particular practices were legally and academically acceptable. The exercises included scenarios concerning the use of ChatGPT for generating essay ideas, submitting AI-generated assignments, relying on unverified AI-produced summaries, and entering clients' personal data into AI systems. The case-based activities also addressed possible disciplinary consequences of academic misconduct involving AI-generated materials. Particular attention was given to the challenges of identifying AI-generated content and the limitations of automated AI-detection tools, including the possibility of false positives and the need to avoid treating automated detection results as conclusive evidence of misconduct. The interactive format encouraged participants to apply legal principles to practical academic situations, assess potential risks, and develop informed approaches to using AI tools in their studies.

The training contributed to the development of competencies associated with AI literacy, academic integrity, intellectual property awareness, data protection, and critical evaluation of AI-generated information. It promoted an understanding of AI as

a supportive technology that can enhance learning and academic productivity without replacing independent reasoning, intellectual responsibility, or compliance with institutional rules. The central message of the session was that artificial intelligence can provide valuable support for academic work, but responsibility for the accuracy, legality, and integrity of the final output remains with the student.

AI tools for students: general overview

Author(s): Ángela del Robledo Troncoso García

The session focused on Artificial Intelligence tools for students, particularly on the potential of Generative AI to support learning. It introduced the concept of Generative AI, the types of content it can produce, including text, images, code, audio, and other formats, and how tools such as ChatGPT, Gemini, and LLaMA are transforming the educational environment.

The responsible use of these tools was also addressed, highlighting that AI generates responses based on patterns and that its outputs may contain errors, biases, or fabricated information. Particular emphasis was therefore placed on the importance of verifying sources, reviewing outputs, and using appropriate prompts.

Different applications of AI for students were presented, including improving and summarizing texts, clarifying concepts, generating ideas, practicing exam questions, translating and improving academic language, organizing study plans, and receiving step-by-step explanations, thereby supporting more personalized learning.

Particular attention was given to risks and inappropriate practices, such as copying answers without understanding them, using AI to avoid studying, trusting its outputs without verification, sharing personal data, or submitting AI-generated content as one's own work. Good practices were presented based on using AI as a learning assistant rather than a replacement for learning, while maintaining critical thinking, reviewing outputs, and taking personal responsibility.

The final part introduced different AI tools and applications, including multimodal tools and applications for creating mind maps, flashcards, presentations, audio and video summaries, reports, infographics, data tables, and questionnaires.

Focus on AI tools for students

Author(s): Hasibe Aysan

This session built a practical, workflow-based AI toolkit for students, opening with the question “How many hours do you spend on tasks AI could do in minutes?” and following a clear session flow: note-taking, research, writing, organization, collaboration, and ethics. The aim was not to make students expert users of any single tool, but to help them combine several AI tools into efficient study workflows that save time and improve the quality of their academic work.

The session mapped a “Student AI Ecosystem” across four stages. In the Capture stage, Otter.ai was presented for automatic lecture transcription and speaker identification, paired with Notion AI for turning raw notes into structured study guides and summaries. In the Deep Dive stage, Perplexity.ai was introduced for cited web research, Elicit for searching and comparing over 200 million academic papers, and Scholarcy for extracting key findings and generating flashcards from long academic PDFs. In the Mastery stage, Motion/Reclaim.ai was shown automatically scheduling study blocks around deadlines, while Notion centralized project plans and thesis tracking. In the Synergy stage, Fireflies.ai was presented for recording and summarizing group meetings, and Miro AI for visual brainstorming and mind mapping. Practical student scenarios illustrated how these tools chain together in practice, for example Perplexity → Elicit → Scholarcy → Notion AI when writing a research paper, or Otter.ai → Notion AI → Scholarcy flashcards when preparing for exams.

A dedicated part of the session addressed academic integrity and ethical AI use, contrasting appropriate practices, using AI to understand difficult concepts, getting feedback on drafts students wrote themselves, summarizing sources before reading the originals, and disclosing AI assistance where required, with academic misconduct such as submitting AI-generated text as one’s own work, using AI to answer exam questions,

or fabricating citations from AI output. Students were reminded that university policies vary and that AI is a productivity multiplier only if the student remains the one doing the thinking. The session closed with a five-step starter plan for building a personal AI study system one tool at a time: starting with Otter.ai for the next lecture, Perplexity.ai for the next research topic, Notion AI for the current course, Elicit for the next essay, and Motion or Notion for scheduling the next two weeks of study.

The second half of the session was dedicated to Claude, developed by Anthropic and trained using Constitutional AI, an approach that trains the model against a written set of ethical principles rather than human feedback alone. Students were introduced to Claude's core capabilities across writing and language, reading and document analysis, reasoning and mathematics, coding, research support, and agentic tasks, together with real-world use cases most relevant to student life, such as explaining complex topics in simple terms, getting feedback on essays and drafts, creating quizzes for exam preparation, and breaking down research papers. The session covered the different ways of accessing Claude (the free and paid claude.ai web and app, and the Anthropic API) and was explicit about its limitations: hard ethical limits that hold regardless of how a request is framed, and technical limitations such as hallucination, a fixed knowledge cutoff without search tools, the absence of persistent memory between sessions, and the inability to generate images. The session closed with practical prompt-engineering guidance for students such as being specific, providing context, iterating on outputs, and breaking complex tasks into steps summarized in five key takeaways: Claude is a safety-first AI, is multimodal and capable, can hallucinate so important facts must always be verified, produces better output with better prompts, and should be used ethically, assisting a student's thinking rather than replacing it.

Personal data and device protection

Author(s): Tymoteusz Miller

The session focused on protecting personal data and digital devices in the context of increasingly widespread Artificial Intelligence use. Participants were introduced to the idea that AI brings significant convenience and efficiency, but that every interaction with

an AI-enabled service may also create new privacy and security risks. Particular attention was given to the fact that information entered into chatbots, cloud services, or intelligent applications may leave the user's device and become subject to external processing, storage, or logging.

The session presented several categories of emerging risk. These included inadvertent leakage of personally identifiable information and health-related data, long-term profiling by service providers, prompt-injection attacks designed to expose sensitive information, and the possibility that personal data may enter model-training pipelines. Participants were encouraged to treat every AI interaction as a potential data-transfer event and to consider whether the information being shared is genuinely necessary.

Practical examples illustrated how sensitive information may be exposed unintentionally. Examples included health information entered while asking an AI system for advice, financial details copied into prompts, and API keys pasted into AI systems during debugging. The session emphasized that even technically sophisticated users may accidentally disclose information when convenience overrides careful assessment of what is being shared.

Participants were then introduced to the concept of privacy-first AI. This approach prioritizes keeping sensitive processing under the user's control through mechanisms such as on-device processing, real-time anonymization, and privacy proxies that detect or remove sensitive information before it reaches external AI services.

The session also discussed the growing role of local and self-sovereign AI architectures. Rather than relying exclusively on centralized cloud systems, privacy-preserving approaches may process information directly on a user's device or within controlled infrastructure. Such approaches can reduce the exposure of sensitive information and give users greater control over what data is transmitted, stored, or reused.

Key features of modern data-protection tools were presented, including local processing, real-time detection and masking of personally identifiable information, visual feedback informing users about sensitive content, granular access controls, and logging mechanisms that support accountability and compliance.

AI generated content in students' work, when and how

Author(s): Aleksandra Klich

The training session "AI-Generated Content in Students' Work: When and How", delivered as part of the international AI4UNI project, focused on the legal, ethical, and academic implications of using generative artificial intelligence in higher education, with particular emphasis on students' responsibilities when incorporating AI-generated content into their academic work.

The primary objective of the session was to enhance students' awareness of the opportunities and limitations associated with generative AI tools and to develop their ability to use these technologies responsibly, transparently, and in accordance with applicable legal and academic standards. The training addressed the increasing use of AI in academic activities, including essay writing, summarising scientific literature, translating materials, preparing presentations, generating ideas, and organising research. The introductory part explored the concept of AI-generated content and its different forms, including written assignments, summaries, translations, images, and presentations produced entirely or partially through AI systems. Particular attention was paid to distinguishing between the legitimate use of AI as an assistive learning tool and situations in which AI-generated content replaces students' independent intellectual contributions.

A substantial part of the session was devoted to **copyright law and intellectual property rights**. Participants were introduced to the fundamental principles governing authorship and copyright protection, including the importance of human creativity and the legal implications of content generated by artificial intelligence. The discussion addressed the question of whether AI can be regarded as an author and emphasized that students remain responsible for the work they submit, regardless of the technological tools used during its preparation.

The training also examined the relationship between generative AI, plagiarism, and academic integrity. Participants explored situations in which using AI-generated content may conflict with university regulations or principles of academic honesty, particularly when automatically generated text is presented as independent work without

appropriate disclosure. The importance of verifying AI-generated information, checking the reliability of references, and accurately acknowledging the use of AI tools was highlighted.

Another important component concerned **personal data protection and privacy**. The session introduced the risks associated with entering personal or confidential information into external AI systems, including the unauthorized disclosure of personal data, the uploading of sensitive information, and the limited control users may have over subsequent data processing. Particular emphasis was placed on the relevance of the General Data Protection Regulation (GDPR) and the need for caution when using AI tools in activities involving personal information.

The session further distinguished between acceptable and potentially problematic uses of AI in academic work. Examples of appropriate applications included brainstorming, language improvement, summarizing materials, and structuring assignments, provided that students retain control over the final content and comply with applicable university requirements. Conversely, the training identified practices that may raise serious concerns, such as generating entire assignments without meaningful student involvement, submitting unverified information, relying on unreliable references, or failing to disclose AI assistance when required.

A separate section addressed students' legal and academic responsibility for AI-assisted work. The discussion emphasized that students remain accountable for the accuracy, originality, and integrity of their submissions and must respect intellectual property rights and institutional academic standards. Potential consequences of inappropriate AI use were considered in the context of academic assessment and disciplinary responsibility. The practical component was based on **interactive questions, quizzes, and case studies**. Participants were invited to assess realistic situations involving AI-generated academic content and determine whether particular practices were legally and academically acceptable. The exercises included scenarios concerning the use of ChatGPT for generating essay ideas, submitting AI-generated assignments, relying on unverified AI-produced summaries, and entering clients' personal data into AI systems.

The case-based activities also addressed possible disciplinary consequences of academic misconduct involving AI-generated materials. Particular attention was given to the challenges of identifying AI-generated content and the limitations of automated AI-detection tools, including the possibility of false positives and the need to avoid treating automated detection results as conclusive evidence of misconduct.

The interactive format encouraged participants to apply legal principles to practical academic situations, assess potential risks, and develop informed approaches to using AI tools in their studies. The training contributed to the development of competencies associated with **AI literacy, academic integrity, intellectual property awareness, data protection, and critical evaluation of AI-generated information**. It promoted an understanding of AI as a supportive technology that can enhance learning and academic productivity without replacing independent reasoning, intellectual responsibility, or compliance with institutional rules.

The central message of the session was that artificial intelligence can provide valuable support for academic work, but responsibility for the accuracy, legality, and integrity of the final output remains with the student.

Green AI: environmental impact and user responsibility

Author(s): Tymoteusz Miller

The session introduced Green AI as a response to the growing environmental footprint of Artificial Intelligence. Participants were shown that AI is not an immaterial digital service: every AI query, recommendation, or generated image depends on physical infrastructure consuming electricity, water, computing hardware, and raw materials. The environmental impact of AI therefore extends across the entire lifecycle of AI systems, from hardware manufacturing and model training to everyday inference and eventual equipment disposal.

The session examined the rapid growth of AI-related electricity demand. Increasing model complexity, expanding data-center infrastructure, and the global scale of AI services mean that energy consumption is becoming an important component of

responsible AI assessment. Participants were encouraged to recognize that improvements in hardware efficiency do not automatically reduce total environmental impact when the overall volume and complexity of AI computation continue to increase.

Particular attention was given to the growing scale of AI models. Larger models require substantial memory, computational resources, cooling capacity, and specialized hardware. The rapid development cycle of frontier AI systems therefore creates environmental pressures not only through electricity consumption but also through the production and replacement of high-performance computing equipment.

The session also addressed electronic waste as an often-overlooked component of AI sustainability. Rapid hardware replacement cycles contribute to growing volumes of obsolete GPUs, accelerators, servers, and related equipment. Manufacturing these components requires significant energy and materials, while recycling remains difficult and incomplete. Participants were therefore encouraged to consider hardware lifecycle and resource consumption alongside operational energy use when discussing the environmental cost of AI.

A separate part of the session focused on Generative AI and reasoning-intensive models. These systems may require substantially greater computational resources than conventional digital services, particularly when generating complex text, images, video, or multi-step reasoning outputs. The training therefore highlighted that users themselves influence environmental impact through the type, frequency, and complexity of AI interactions they initiate.

Participants were also introduced to the concept of digital waste. Unused stored data, redundant synthetic content, unnecessary model artefacts, and repeated generation all consume storage and computational resources despite providing little or no practical value. This extends the Green AI discussion beyond model training to everyday information-management practices and the long-term accumulation of unnecessary digital resources.

The final part of the session focused on practical approaches to more sustainable AI. These included improving transparency around energy and water consumption, measuring environmental impact across the AI lifecycle, investing in more efficient

computing architectures, improving data-center efficiency, and using AI selectively when it provides genuine value. Strategic AI use was presented as an important part of environmental responsibility: not every task requires the largest model or an AI-based solution.

The central message was that Green AI is a shared responsibility. Developers, institutions, service providers, and individual users all influence the environmental footprint of AI. Responsible use therefore means not only asking whether AI can perform a task, but also whether the computational cost is justified by the value produced.

AI at workplace for the future employers and employees

Author(s): Hasibe Aysan

This session introduced students, as future employees and future employers, to how Artificial Intelligence is already reshaping workplaces, opening with current data on the pace and scale of AI adoption. Participants were shown that most workplaces already use at least one AI tool, that AI adoption reached scale far faster than earlier general-purpose technologies, and that organizations actively adopting AI report measurable productivity gains. The guiding message of the session was that “AI won’t replace you, a person using AI will.”

Practical applications were reviewed across three stages of the employee lifecycle that students are likely to encounter early in their careers: recruitment and hiring (resume screening, video interview analysis, and bias-reduction algorithms), performance management (real-time tracking, engagement analytics, and early-warning systems for turnover or burnout), and decision support (predictive dashboards, scenario simulation, and resource optimization). At each stage, the session stressed the “black box” problem: AI-supported management decisions must remain transparent, auditable, and ultimately backed by human judgment that is a standard students should expect from any employer they choose to join.

A central part of the session was devoted to the ethical concerns that future employees and employers alike need to understand: privacy and surveillance, algorithmic bias, job displacement, and transparency, framed around the discussion question “If an AI system

decided you should be fired, would you accept the decision?". Students discussed AI as a tool for augmentation rather than replacement, combining the machine's pattern recognition, scale, and speed with distinctly human strengths such as empathy, ethical reasoning, and strategic judgment, the qualities that remain in demand regardless of how far automation advances.

The session then turned to future skills and career readiness, presenting workforce statistics on the scale of reskilling expected by 2030 and introducing a four-level AI literacy staircase (basic, intermediate, advanced, expert) that students can use to benchmark their own progress before entering the job market. Participants received a practical action plan structured around concrete steps for this week, this month, and this year, together with curated free learning resources, real-world case studies of AI-driven impact across industries (e.g. JPMorgan Chase, Amazon, Mayo Clinic, and Netflix), and a shortlist of everyday workplace AI tools worth adding to a CV or LinkedIn profile.

The session closed with a forward-looking message for students preparing to enter the workforce: the future of work is not predetermined but actively architected by the choices organizations and individuals make today, and those who treat AI as a collaborative partner, underpinned by sound judgment and awareness of its risks, will be best placed to thrive. The golden rule presented to students was the same one given to university staff: use AI to augment your thinking, never to outsource your judgment.

AI in marketing, what every consumer should know

Author(s): Elif Akagün

The session provided an introduction to "Artificial Intelligence (AI) and its growing role in education". AI was defined as a software technology capable of thinking, learning, and assisting users in ways that resemble certain human cognitive functions. The session emphasized that AI is transforming education by enabling personalized learning experiences, providing instant feedback, and offering continuous support to learners. AI was presented as a cognitive tool that can enhance learning and productivity when used

appropriately, functioning as a resource that supports thinking and problem-solving rather than replacing human intelligence.

The session then explored the core capabilities of AI tools and their practical applications for students. It highlighted how AI can assist with language learning, concept explanation, writing support, idea generation, problem solving, and translation. Various categories of AI tools were introduced, including chat-based AI systems, writing assistants, study and note-taking tools, and creative AI applications. These tools can support activities such as assignment preparation, understanding course materials, generating practice questions, improving grammar and writing clarity, organizing notes, summarizing lectures, creating study plans, and developing visual content for presentations and projects. Thus, it was emphasized to students that AI can serve as a valuable academic support resource when integrated into their learning process.

A significant portion of the session focused on the responsible and effective use of AI. Participating students were advised not to copy AI-generated content directly, cheat on examinations, or submit AI-produced work as their own. Instead, AI should be used to enhance understanding, verify information, and improve original work. The session also introduced the concept of prompt engineering, emphasizing that specific, context-rich, and goal-oriented prompts produce higher-quality outputs. Furthermore, the limitations of AI were discussed, including the possibility of inaccurate information, lack of genuine understanding, and potential biases in generated responses. The session concluded by encouraging learners to combine AI tools with traditional educational resources, critically evaluate AI outputs, and reflect on the ethical implications of AI use in academic settings.

AI use in this manual

This manual contains original work of the authors. AI tools were used to help with translation and proper language usage, image and presentation generation, and summarizing long texts.