

Name of Study Program	
Module Name "Artificial Intelligence and Digital Assistants in Professional Activities"	
Module number	
Person responsible	Dr. Janara Baitugolova, Prof. Bekejanov M., Researcher Osmonova B.
Duration of the module	_ semester
Semester	—
Frequency of the module	Ones in a semester
ECTS Credits (CP)	2 CP
Semester hours per week, number of weeks	2/ 8
Workload	Contact hours: 16 Self-study: ...32
Module type	Module 5 in the “Professional Competencies of a University Professor” Course
Recommended prior knowledge for the module	Module Prerequisites : • Basic computer and internet skills. • Proficiency in Office programs (Word, Excel, PowerPoint). • Ability to use email and cloud services.
Teaching language	Kyrgyz/Russian/English
Competencies gained / Learning outcome	Acquired competencies / Learning outcomes Students are aware of: • What is Artificial Intelligence? • How can AI and Digital literacy help teachers and students? Students will be able to: • Apply Kahoot, Jamboard, Menti, Padlet, google questionnaire, Google classroom to their work; • apply artificial intelligence technologies and digital assistants in professional activities; • analyze the possibilities and limitations of using AI tools in teaching and learning; • select and use appropriate digital services to automate tasks, search for information, and improve work efficiency;

	• develop simple scenarios for interaction with virtual assistants and chatbots; • critically evaluate the ethical and legal aspects of the use of AI in teaching and learning. Work based on : • studying the principles of artificial intelligence, machine learning and natural language processing; • analysis of practical cases and examples of the use of digital assistants in various industries; • mastering AI tools (ChatGPT, Copilot , Gemini , Siri , Alexa , etc.) in educational and professional tasks. By means of : • lectures, demonstrations and practical classes with digital assistants; • implementation of individual and group projects; • practical problem solving using AI platforms; • interactive discussions, tests and presentations and e-portfolios.
Contents of the module	Module Contents This module provides students with theoretical knowledge and practical skills in using artificial intelligence technologies and digital assistants in their professional work. Students will become familiar with AI and Digital learning principles, modern tools, and services, and learn how to apply them to solve real-world problems. Main thematic sections module : 1. Basics artificial intelligence ○ The concept, history and development directions of AI. ○ Key technologies: machine learning, neural networks, natural language processing. ○ Ethical and legal aspects of using AI. 2. Digital assistants ○ Types and functions of digital assistants (chatbots, voice assistants, intelligent decision support systems). ○ Review of popular assistants: ChatGPT, Google Assistant , Siri , Alexa , Copilot , etc. ○ Setting up, interacting with, and integrating assistants into professional activities.

	3. Practical application of AI ○ The use of AI tools in education, business, marketing, and other industries. ○ Automate routine tasks and increase productivity with AI. ○ Development of mini-projects using digital assistants.
Applicability of the module	Relevant curriculum(s) The module is recommended for Professional Competences of a University Professor” course for PhD students of all directions of DAMFA KR as: ✓ International Relations; ✓ Law; ✓ Economics and Management; ✓ Linguistics.
Requirements for the award of credit points (Study and exam requirements)	Requirements for earning credit points (training and examination requirements) To successfully complete the module and earn credit points, students must meet the following requirements: 1. Attendance and activity : ○ mandatory participation in at least 80% of classes (lectures and practical work); ○ active participation in discussions, demonstrations and practical tasks; ○ maintaining academic integrity and discipline. 2. Current (benchmark) assessment : ○ completion of individual and group assignments; ○ preparing mini-projects or presentations using AI and Digital tools; ○ participation in tests, quizzes or practical tests. <i>Total weight rating : 50%</i> 3. Final certification (exam/project defense): ○ defense of the final project demonstrating the practical application of digital assistants; ○ oral or written testing on theoretical questions of the course;

	○ grade level formed competencies . <i>Total weight rating : 50%</i> 4. Criteria assessments : ○ completeness and quality of assignments; ○ originality and practical value of solutions; ○ competent use of AI and Digital tools ; ○ Ability to discuss and present the results of work.
Learning and teaching types	Types of learning and teaching Types of teaching: • Lectures with multimedia presentations and demonstrations of AI tools; • Training in seminars and interactive classes; • Practical exercises using digital assistants (ChatGPT, Copilot , Gemini , etc.); • Work on individual and group projects; • Discussions and analysis of cases from professional practice. Types of training: • Self-paced learning program on an educational platform (online materials, video-tutorials , tests); • Training with an instructor and mentor in person or online; • Completion of research and creative assignments; • Reflection and self-assessment of the learning outcomes obtained. Training formats: • Asynchronous self-paced online learning - study of theoretical materials, completion of online assignments and tests at a convenient time; • Synchronous online and face-to-face classes - participation in lectures, practical seminars, presentations and discussions in real time, office hours; • Blended learning (blended learning) is a combination of distance and classroom forms aimed at developing digital and communication skills.
Literature (latest editions) and other instruction material	References: ● Kolmogorova, S. S. Fundamentals of Artificial Intelligence: A Textbook for Students / S. S. Kolmogorova. - Saint Petersburg: SPbGLTU, 2022. - 108 p. ● Arshinsky, L. V. Methods and Algorithms of Artificial Intelligence: A Textbook / L. V. Arshinsky, T. K. Kirillova. - Irkutsk: IrGUPS, 2022. - 124 p.

	• Fundamentals of Artificial Intelligence: A Textbook / Yu. A. Antokhina, A. A. Ovodenko, M. L. Krichevsky, Yu. A. Martynova. - Saint Petersburg: GUAP, 2022. - 169 p. • Okrepilov, V. V. Fundamentals of Artificial Intelligence in Professional Activity: a tutorial / V. V. Okrepilov, A. S. Stepashkina, E. A. Frolova. - St. Petersburg: GUAP, 2022. - 153 p. Recommended Internet resources • Section 1. Basics artificial intelligence https://stepik.org/course/58303 https://www.coursera.org/learn/ai-for-everyone • Section 2. Digital assistants https://chat.openai.com https://yandex.ru/alice/ https://assistant.google.com • Section 3. Practical application of AI https://copilot.microsoft.com https://www.notion.so/product/ai https://openai.com/education
Sample projects and topics for independent work	Sample projects and topics for independent work 1. Individual projects : • Developing a scenario for interaction with a digital assistant to solve a professional problem (for example, automating responses to frequent customer requests). • Analyze the possibilities of using ChatGPT, Copilot or Gemini in your future profession. • Creation of a mini-presentation "The role of artificial intelligence in education / tourism/international relation". • Development of a training module using AI tools (e.g., generation of tasks, texts, illustrations). • Research into the ethical aspects of AI application in a specific area (e.g. data protection, plagiarism, transparency of decisions).

	2. Group projects : • Create a chatbot for educational or informational purposes (e.g. "College Assistant" or "Syllabus Assistant"). • Developing a plan for implementing digital assistants in an organization (school, office, travel agency, etc.). • Analysis and comparison of digital assistants (Siri , Alexa , ChatGPT , Copilot , etc.) by functionality and applicability. • Preparing a video presentation or infographic "How AI is changing the profession of the 21st century" 3. Independent Job includes : • Preparation of short essays, analytical reviews and presentations on the chosen topic; • Studying online courses or interactive materials on the application of AI; • Carrying out tasks on setting up and testing digital assistants; • Reflection (report) on one's own experience of interacting with AI and Digital tools. • Organizing an electronic portfolio of a professor.
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