Objective(s) of a Study Programme:

To prepare information technology masters with a comprehensive knowledge and skills, necessary to design IT tools for learning and apply them in distance studies, using modern teaching, learning theories and methods; who are able to create a virtual teaching and learning tools and content, organize and carry out high-quality distance learning studies.

Access to Professional Activity

The graduate can do research, design, programming and training/teaching work in the system of distance learning, adult teaching centres and regional distance learning centres.
### Information Technologies of Distance Education

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<th>Module code</th>
<th>Module title and description</th>
<th>ECTS credits</th>
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<td>Basics of Virtual Learning</td>
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<td>T120M052</td>
<td>Distance Learning Systems and Theory</td>
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<td>Final Degree Project</td>
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#### Learning outcomes:

**Knowledge and Understanding**

A1  Knowledge in computers, their architecture, hardware and software, operational principles, control and operating systems.

A2  Knowledge in computer networks, distributed systems, their architecture, possibilities of their use and application.

A3  Knowledge in information sources, data structures, databases, design, development and application of software and information systems, data processing algorithms and their realization.

A4  Knowledge in multimedia, their development, integration, introduction and application in distance learning.

A5  Knowledge in information communication and web realization technologies, methods, tools, purpose and application.

A6  Knowledge in artificial intelligence, smart learning technologies and their design.

**Engineering Analysis**

B1  Comprehensive knowledge in distance studies, their development, organization and implementation, design and application of support systems, organization of distance learning courses development and conduction, quality assurance methods and systems.

B2  Ability to analyse and assess pedagogic process, select teaching and learning methods, design flexible and adaptive learning environments.

B3  Ability to analyse and investigate possibilities and methods of information technologies and their tools application in teaching and learning, to select technological measures and implement pedagogic models for learning.

B4  Ability to analyse and investigate the needs of distance studies participants, organize and implement support systems and measures, assess and organize distance learning courses.

**Engineering Design**

C1  Ability to design, implement and apply software and information systems, analyse and investigate their functional and practical possibilities in distance learning.

C2  Ability to analyse and specify the users’ needs, design and implement data structures, databases and data processing and task realization algorithms.

C3  Ability to analyse, Design and use curriculum and learning process control systems and tools, prepare online teaching and learning environments.
Information Technologies of Distance Education

Learning outcomes:

C4 Ability to assess, design, develop and apply online curriculum and means of assessment.

Investigations

D1 Ability to find necessary information, to analyse, process, classify, store and use it.

D2 Ability to investigate, prepare, realise scientific and applied research and projects by precisely formulating and grounding scientific and applied problems, aims and tasks, making work schedules and presenting conclusions on the obtained results.

Engineering Practice

E1 Knowledge in up-to-date teaching and learning approaches, systems and methods, principles of didactic method, educational technologies and their application for teaching and learning.

E2 Comprehensive knowledge in electronic and distance teaching and learning methods, systems, environments and tools, their development and application.

E3 Comprehensive knowledge in distance education infrastructure, participants, e-learning standards, methods of information technologies and their tools application for teaching and learning process as well as distance studies.

E4 Comprehensive knowledge in the preparation and introduction of electronic curriculum, copyright protection, software tools and systems.

E5 Ability and capability to develop, integrate and use multimedia for electronic curriculum and distance learning.

E6 Ability to effectively apply e-learning standards, information technologies tools and systems for teaching and learning process as well as distance studies.

E7 Ability to make and implement innovative decisions on the basis of research and analysis results, alternative solutions, personal skills and knowledge.

Engineering Practice

F1 Ability to communicate and cooperate using information technologies.

F2 Ability to work in a group, to plan time, to select effective work methods.