RĪGAS TEHNISKĀ UNIVERSITĀTE

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Study programme "Digital Humanities"

Main attributes

Title	Digital Humanities
Identification code	HMD0
Education classification code	45482
Level and type	Academic Master (Second Cycle) Studies
Higher education study field	Information Technology, Computer Engineering, Electronics, Telecommunications, Computer Control and Computer Science
Head of the study field	Agris Ņikitenko
Deputy head of the study field	Jurģis Poriņš
Department responsible	Faculty of Computer Science, Information Technology and Energy
Head of the study programme	Marina Platonova
Professional classification code	
The type of study programme	Full time
Language	English
Accreditation	29.11.2023 - 30.11.2029; Accreditation certificate No 2023/44-A
Variant 1	
Volume (credit points)	120.0
Duration of studies (years)	Full time studies - 2,0
Degree or/and qualification to be obtained	Master degree of natural sciences in digital humanities
Qualification level to be obtained	The 7th level of European Qualifications Framework (EQF) and Latvian Qualifications Framework (LQF)
Programme prerequisites	First cycle higher education in computer control and computer science, computer systems, information technology, intelligent robotic systems, electrical science, mathematics, or comparable education and an entrance exam. English language skills equivalent to at least B2 level.
Variant 2	
Volume (credit points)	120.0
Duration of studies (years)	Full time studies - 2,0
Degree or/and qualification to be obtained	Master degree of natural sciences in digital humanities
Qualification level to be obtained	The 7th level of European Qualifications Framework (EQF) and Latvian Qualifications Framework (LQF)
Programme prerequisites	First cycle higher education in language studies, literature, linguistics, translation studies, history, philosophy, audiovisual arts, media arts, design, teacher education, information and communication sciences, social and human behaviour sciences, or comparable education and an entrance exam. English language skills equivalent to at least B2 level.

Description

Abstract	Digital humanities is an emerging interdisciplinary field of research that envisions close integration and interconnection between humanities and engineering at all levels. It is a new, but already successful approach to the analysis of interdisciplinary information that involves comprehensive research and application of the strategies and methods of data mining, digitization, representation and archiving, processing, visualization and analysis to effectively address cross-disciplinary challenges. Taking into consideration the fact that currently data can appear in a variety of modes - textual, non-textual, and multimodal (video recordings, sound recordings, images, photographs, and artefacts), efficient data management in any foundation, activity or project will contribute to development and growth in both short and long term, as well as will ensure efficient and effective operation. Graduates of the study programme acquire skills to deal with the ever-growing amount of information. They are able to analyse the obtained data masterfully, quickly and successfully; to study comprehensively and in detail the theories and methods of digital humanities and to implement them in practice for solving contextual tasks; to identify the interests of the stakeholders in interdisciplinary foundations and / or projects and contribute to improving the quality of their activities. The study programme provides training of the specialists in digital humanities that can seek employment in governmental institutions, mass media, IT companies, e-commerce enterprises, publishing houses, archives, libraries, marketing bureaus, institutions of higher education, life-long learning projects, state, municipal, and private enterprises. The concept of the interdisciplinary study programme considerably differs from the concept of a study programmes in either engineering or humanities, since the former envisions that student in parallel can obtain cross-disciplinary expertise, thus gaining a competitive advantage in the labour market. Special adjustment study courses are implemented to ensure that students not only acquire the necessary knowledge and competencies to obtain education in the interdisciplinary field, but also develop skills necessary for their further successful integration into the study process. The duration of studies is two full years. During this period, compulsory, specialization, and elective study courses are offered. The study courses provide students with the knowledge in digital humanities and develop their skills necessary for work in the chosen area of professional activity. The language of instruction is English.

Aim	Aims of the study programme: - to educate specialists in digital humanities whose knowledge and skills meet the demands of the contemporary labour market and research-intensive economy and who are able to work in state and municipal institutions of Latvia and after acquiring additional qualification in the institutions of the EU, as well as in private enterprises in Latvia and abroad; - to implement an open and flexible student-cantered study process that would ensure the integration of the latest information technologies in humanities (in the broadest sense of this term) and advanced mastering of the theoretical basis of the chosen scientific and technical field; - to expand and develop students' engineering, natural sciences, linguistic, socio-cultural, technical, creative, and research skills for independent work in the interdisciplinary framework in the field of digital humanities; - to develop students' academic and research skills to ensure they develop the necessary level of competence and skills that would give them an opportunity to continue their studies at the PhD study programs and to motivate them to conduct research in digital humanities; - to develop students' independence, initiative, as well as an ability to adapt to the constantly changing environment.
Tasks	Tasks of the study programme: - to provide students with competitive master level education in the field of digital humanities in compliance with the national and international standards; - to provide students with the necessary theoretical knowledge as well as the body of practical skills and competences required in order to perform high-level programming, multimodal data processing, development and application of applied software, interdisciplinary semiotics, e-content design and management, Big Data processing, content development, processing, and management for independent performance in the field of digital humanities; - to provide students with comprehensive knowledge in digital humanities, developing their specific competences and skills necessary to work in the multidisciplinary environment; - to develop students' logical and cognitive skills, enhance their creative abilities, engaging them in the life-long learning and promoting their development as a full-fledged personality capable to act independently, successfully assess professional risks, and make efficient decisions; - to develop students' critical, strategic, divergent and convergent thinking and analytical skills; - to develop competences and skills in digital cultural heritage preservation and management, e-model management and design, language technologies, coding of information in humanities/cultural contexts and maps, application design; - to develop students' oral and written communication skills in the multicultural environment, promoting the development of students' accuracy of expression in the English for special purposes in the field of digital humanities; - to implement the study process adopting student-cantered approach to education, to timely update the resource base, to adapt the curriculum of the program and teaching methods in line with the changing requirements of the labour market, adopting newest developments in the field of digital humanities; - to promote cooperation among academic staff and students in conducting scientific research and practical application of research results in accordance with international standards and tendencies in the field of digital humanities, facilitating their international mobility and participation in interdisciplinary projects.
Learning outcomes	The graduate of the study programme: - is able to demonstrate advanced knowledge and understanding in the field of digital humanities; - is able to recognize and compare different digital humanities theories, sociological macro and micro theories, and apply these theories in empirical data analysis; - is able to use a range of knowledge management technologies: information transmission, storage and processing technologies, to identify and structure elements of e-content and knowledge management; - is able to work across various disciplines performing a range of multidisciplinary tasks (information mining, information architecture, content management, contextualization, web document creation, teleworking, business applications of social networks, terminotics, internet marketing, culture studies, etc.); - is able to develop and improve different types of e-models for resolving context-based tasks, including e-commerce, e-project management, e-learning content; employ and manage technologies and applications, as well as evaluate e-model application possibilities and mechanisms for their quality assessment and improvement; - is able to use methods of natural language processing and heuristically informed search algorithms; - is able to develop and manage interdisciplinary projects according to the provided guidelines; - is able to design, improve and assess multimedia models through interdisciplinary prism of humanities, engineering, social, cultural and natural science processes; - is able to digitalize different types of textual data; - is able to process audio and video data, conduct research considering data representation, visualization, archiving, and transfer operations; - is able to use the acquired technical skills in solving interlingual communication related problems in general and professional contexts; - is able to efficiently apply text formation theory skills and demonstrate basic skills of proofreading and copyediting; - is able to independently use digital humanities theoretical concepts, methods and problem-solving skills to conduct research in the field of IT, e-learning content development, language technologies, gamification, edutainment, interdisciplinary andragogy, cognitive linguistics, etc.; - is able to conduct scientific research and compile research reports within the framework of the chosen module; - is able to independently make decisions within own scope of responsibilities; - is able to evaluate the relevance of one's own professional competences and skills to the occupational standard and the requirements of the international labour market; - is able to work according to the principles of professional ethics.

Final/state examination procedure, assessment	The study programme, students shall pass a state examination, which is assessed according to a 10-grade scale. viva voce of the Master Thesis makes part of the state examination. The Master Thesis amounting to 30 credit points consists of the theoretical and empirical/analytical parts (project). In the theoretical part of the Master Thesis, students investigate a selected issue in the field of digital humanities and provide an overview of the relevant theoretical literature, substantiate the topicality of the chosen theme and analyse its impact on the development of the field. The empirical/analytical (project) part of the Master Thesis presents a case study on: 1) the challenges of meaning representation exploiting, tailoring, approbating and developing a technology, web applications or model; 2) the challenges associated with preservation, management and digitization of cultural heritage; 3) the development, analysis, practical application and approbation of a technology, web application, mobile app or various models, e.g., a description of a developed e-learning course, applied software, web page development project, etc.; 4) the challenges in representation, processing and transfer of multimodal and intersemiotic information; 5) storage and archiving of multimedia information; 6) graphical analysis and visualization of data; 7) introduction and incorporation of edutainment principles into modern educational models and social activities, etc. The process of development, the content, range of themes, volume, supervision, reviewing and viva voce procedures of the Master Thesis are regulated by internal RTU regulatory documents, “Academic Research Student Handbook”, “Formatting and Style Guidelines for Study and Graduate Papers” and “Regulation on the Development of the Graduate Papers”. The student submits an application for the topic of the Master Thesis, which is approved by the supervisor, the head of the study program, Head of the Institute and the Dean who issues an appropriate order. Students develop their Master Theses independently in accordance with the study plan during the last semester of their studies consulting both the supervisor and, if necessary, a specialist in the respective field.
Description of the future employment	A specialist in digital humanities is a multi-competent professional who organizes, administers, implements, and / or controls comprehensive research and application of the strategies and methods of interdisciplinary data mining, digitization, representation, and archiving, processing, visualization, and analysis to effectively address cross-disciplinary challenges. The usefulness of the academic master study programme “Digital Humanities” is evidenced by the growing demand for hybrid competent specialists with a degree in an interdisciplinary field in the Latvian and international labour markets. Graduates of the study programme evaluate and practically introduce the theories and methods of digital humanities in order to successfully and efficiently solve current contextual tasks and challenges, which can be overcome only by adopting a cross-disciplinary perspective. Specialists in digital humanities are in high demand at state and municipal institutions, IT companies, media centres, e-commerce enterprises, publishing houses, museums, archives, libraries, marketing bureaus, higher education institutions, life-long learning projects, private companies (especially joint ventures), representative offices of foreign companies in Latvia, as well as any other enterprise seeking for specialists with very good engineering, IT, network design skills, knowledge of foreign languages, presentation skills and creative approach to work. Within the framework of the developed study programme, students are provided with an opportunity to acquire the above-mentioned competencies at an advanced level. Specialists in digital humanities are in high demand and successfully work in such areas as digital curation, data science, digital media, metadata analysis, cross-disciplinary text production, cultural heritage preservation, e-knowledge management, technical editing, terminology, gaming industry, language technology, digital andragogy, museology, information architecture, e-modeling, digital marketing, e-learning and many more.
Special enrollment requirements	
Opportunity to continue studies	Having completed academic master studies, one can continue education at the doctoral study programmes in Latvia and abroad.

Courses

No	Code	Name	C.p. [1]	C.p. [2]
A		**Compulsory Study Courses**	**54.0**	**54.0**
1	DE0802	Introduction to Digital Humanities	6.0	6.0
2	DE0717	Artificial Intelligence in Humanities	3.0	3.0
3	DE0815	Study Design and Implementation	3.0	3.0
4	DE0823	Digital Discourse Studies	3.0	3.0
5	DE0811	Rhetorical Skills and Strategies	3.0	3.0
6	DE0714	Interdisciplinary Semiotics	3.0	3.0
7	DE0806	Introduction to Big Data Analytics	6.0	6.0
8	DE0820	Introduction to Humanities and Social Science	3.0	
9	DE0709	Cognition: Meaning Representation	3.0	
10	DE0805	Interlingual Information Transfer	3.0	
11	DE0809	Digital Textuality: Interdisciplinary Approach	6.0	
12	DE0804	Computer-Assisted Text Analysis	6.0	
13	DE0819	Digital Language Learning Paradigm	6.0	
14	DE0817	Software Metrology and Planning Models		6.0
15	DE0807	Fundamentals of Computer Science and Programming		6.0
16	DE0813	Applied Software		3.0
17	DE0810	Introduction to Knowledge Society Technology		6.0
18	DE0824	Development of Web-Applications for the Internet		3.0
19	DE0825	Introduction to Engineering Sciences		3.0
B		**Compulsory Elective Study Courses**	**24.0**	**24.0**
B1		**Field-Specific Study Courses**	**18.0**	**18.0**
1	DE0826	Digital Editing and Publishing	3.0	3.0
2	DE0729	Communication and Presentation Skills	3.0	3.0
3	DE0827	Research Strategies and Writing for Academic Publishing	3.0	3.0
4	DE0816	Graphic Design Technologies	3.0	3.0
5	DE0814	Audio and Video Data Processing	3.0	3.0
6	IV0623	Marketing and Digital Transformation	6.0	6.0
7	DE0645	Portfolio Management Technologies	6.0	6.0
8	DE0751	e-Business Solutions	6.0	6.0
9	DE0739	Knowledge Management Systems	6.0	6.0
10	IV0652	Product Design and Development	3.0	3.0
11	DE0322	Fundamentals of 3D Graphics Modeling and Animation	3.0	3.0
12	AD0188	Architectural Morphology in Digital Humanities	3.0	3.0
13	DE0822	Introduction to Programming, Design of E-learning Materials and Education Technologies	6.0	6.0
14	DE0801	Scientific Modelling	3.0	3.0
15	DE0800	Python Programming Language	3.0	3.0
16	DE1002	Theory and Practice of Natural Language Processing	6.0	6.0
17	DE0803	Terminology and Terminography	3.0	3.0
18	BM0758	Technologies for Digitisation of Culture Heritage objects	3.0	3.0
19	DE0812	Linguistic Analysis of Visual Culture	3.0	3.0
20	DE0704	Digital Rhetoric	3.0	3.0
21	DE0724	Introduction to Data Corpus Analysis in Humanities	3.0	3.0
22	DE0818	Research of Culture, Language and Technology Synergy in Latvia	6.0	6.0
23	DE0807	Fundamentals of Computer Science and Programming	6.0	
24	DE0813	Applied Software	3.0	
25	DE0824	Development of Web-Applications for the Internet	3.0	
26	DE0817	Software Metrology and Planning Models	6.0	
27	DE0810	Introduction to Knowledge Society Technology	6.0	
28	DE0804	Computer-Assisted Text Analysis		6.0
29	DE0809	Digital Textuality: Interdisciplinary Approach		6.0
30	DE0819	Digital Language Learning Paradigm		6.0
31	DE0709	Cognition: Meaning Representation		3.0
32	DE0805	Interlingual Information Transfer		3.0
B.2		**Humanities and Social Sciences Study Courses**	**6.0**	**6.0**
1	DE0703	E-pedagogy and e-didactics	3.0	3.0
2	DE0706	Media and Society	3.0	3.0
3	DE0710	Cognitive and Social Psychology	3.0	3.0

C		**Free Elective Study Courses**	**6.0**	**6.0**
D		**Practical Placement**	**6.0**	**6.0**
1	DE0808	Internship	6.0	6.0
E		**Final Examination**	**30.0**	**30.0**
1	DE0821	Master Thesis	30.0	30.0
K.p.[*] kredītpunkti studiju programmas variantā				