



INFORMATICS

Programme type	Master's studies (university)
Field of study	Informatics
Study area	Computing
Degree	Master's Degree in Computing
Duration	2 years
Workload	120
Language of instruction	English
Location	Vilnius, Lithuania
Starting date	1 st of September

PROGRAMME DESCRIPTION

□ *The objective*

The aim of *Informatics* study programme is to prepare highly qualified IT specialists, able to carry out independent research work, continue Doctoral studies in Lithuanian and foreign universities as well as capable of developing software development and maintenance projects and successfully compete for IT jobs both in Lithuanian and foreign companies.

□ *Career opportunities*

A graduate can work as an analyst, designer and programmer, and after getting more experience as a team leader and project manager in the private or public sectors or manage maintenance of system software and applications.

□ *Access to further studies*

Graduate of Informatics programme can continue research at Doctoral degree programmes of Computer Science, Software Engineering, Information Systems and Information Technology.

KEY LEARNING OUTCOMES

After completion of *Informatics* study programme, a graduate acquire sufficient knowledge in the field, is able to understand the processes of computerized application area and create their informational models, acquire professional competence for performing complex works of computer systems' development. *Informatics* graduates are able to work as analysts, designers and programmers in large projects, to master new methods and technologies independently and apply them in practice.

COURSE INFORMATION

The programme has the following structure:

Course Type	1st Semester	2nd Semester	3rd Semester	4th Semester
Compulsory Courses	Artificial Neural Networks (10 ECTS)	Modelling and Verification of Software-based Systems (10 ECTS)	Professional Practice (15 ECTS)	Master's Thesis (30 ECTS)
	Data Mining (5 ECTS)	Research Work (5 ECTS)	Research Work (10 ECTS)	
	Research Work (5 ECTS)			
Elective Courses*	Intellectual Systems (5 ECTS)	Multidimensional Data Visualization (5 ECTS)	Graphics and Visualization (5 ECTS)	
	Heuristic Algorithms for NP-complete Problems (5 ECTS)	Advanced Topics in Coding Theory (5 ECTS)	Software Systems Architecture and Design (5 ECTS)	
	Methods of Cryptography (5 ECTS)	IT Projects Management (5 ECTS)	Programming in Cloud Computing (5 ECTS)	
	Object Databases (5 ECTS)	User Experience Engineering (5 ECTS)		
		Randomized Algorithms (5 ECTS)		
		Object Technologies (5 ECTS)		

*The supply of elective course might vary depending availability.

GRADUATION REQUIREMENTS

In order to earn Master's degree, candidates must successfully pass the exams and defend Master's Thesis.

ADMISSION REQUIREMENTS AND SELECTION CRITERIA

- At least first level studies leading with bachelor diploma are required. The general criterion for admission is to pass entry exam covering main topics of Informatics bachelor degree study program.
- English language proficiency: the level not lower than B2 (following the Common Framework of Reference for Language approved by the Council of Europe).
- Entrance examination is held by electronic means remotely.

EXAMINATION AND ASSESSMENT REGULATIONS

The main form of assessment is an examination. Every course unit is concluded with either a written or written-oral examination or pass/fail assessment. Student's knowledge and general performance during the examination are assessed by using the grading scale from 1 (very poor) to 10 (excellent). The final stage of studies will include research done and defense for master thesis.

Academic contact

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Admission contact

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