

Vilnius University



MATERIALS AND TECHNOLOGY OF OPTOELECTRONICS PROGRAMME

Programme type Field of study Study area Degree Duration Workload Language of instruction Location Starting date Tuition fee EU students Tuition fee Non-EU students Master's studies Technological Sciences Materials Technology Master in Technological Sciences 2 years 120 ECTS English Vilnius, Lithuania 1st of September

3900 EUR/per year

PROGRAMME DESCRIPTION

• The objective

Training of highly qualified, international standards meeting experts in optoelectronic materials and technologies, which could create and implement modern technologies, generate and use innovative ideas for their work in the field of science, industry, economy in order to increase competitive ability of industry.

Training of highly qualified experts capable to continue post graduate studies in physics, chemistry, materials science and similar study fields.

• Career opportunities

Graduates are able to work as researchers at universities, institutes, companies working in the field of applied sciences, innovations, electronic technologies.

• Access to further studies

Faculty of Physics of Vilnius University offers both Materials engineering (08T) and Physics (02P) third-level (PhD) studies.

KEY LEARNING OUTCOMES

Mastering of the most prospective fabrication technologies of organic and inorganic solid-state light sources, solar cells, and other hybrid technologies. Ability to implement optoelectronic technologies in industry, perform experimental and fundamental investigations, create novel devices, implement innovative high technology projects.

COURSE INFORMATION

The programme has the following structure:

Course Type	1st Semester	2nd Semester	3rd Semester	4th Semester
Compulsory Courses	Methods of Advanced Microscopy (5 ECTS)	Energy-Saving Semiconductor Technologies (5 ECTS)	Solid-State Lighting Technology (10 ECTS)	MA Final Thesis (30 ECTS)
	New Materials and Technologies (10 ECTS)	Nanostructures and Material Engineering (5 ECTS)	Management of Technology (5 ECTS)	
	Technologies of Organic Optoelectronics (5 ECTS)	Physics and Technology of Inorganic Optoelectronics Devices (10 ECTS)	Scientific Research Practice (10 ECTS)	
	Modern Semiconductor Devices – Physics and Technology (5 ECTS)	Physics and Technology of Disordered Materials (5 ECTS)		
	Perception of Light and Color (5 ECTS)	Scientific Research Work (5 ECTS)		
Elective Courses			Photonics and Adaptive Optics (5 ECTS)	
			Production Technologies of Silicon Solar Cells (5 ECTS)	

GRADUATION REQUIREMENTS

All the subjects of the programme should be passed and positive assessment of the Master's Thesis public defense is required.

EXAMINATION AND ASSESSMENT REGULATIONS

The main form of assessment is an examination. Every course unit is concluded with either a written or writtenoral 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).

APPLICATION AND SELECTION REQUIREMENTS

- Bachelor degree in Physics, Engineering or Technologies
- English language proficiency the level not lower than B2 (following the Common European Framework of Reference for Languages (CEFR) (Internationally recognized certificate or *Skype* interview).
- The selection criterion is based on the weighted average of all grades recorded in the transcript of your Bachelor diploma.

Additional points could be obtained for scientific publications and scientific conference presentations

Academic contact	Admission contact
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