1.	**Field of study**	**Materials Science and Engineering**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2019/2020 (winter term), 2020/2021 (winter term), 2021/2022 (winter term), 2022/2023 (winter term)
4.	Level of qualifications/degree	first-cycle studies (in engineering)
5.	Degree profile	general academic
6.	Mode of study	full-time

Module: Specialised subject 2

Module code: IM1A_PS2

1. Number of the ECTS credits: 2

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
IM1A_PS2_1	Students have basic knowledge about development trends in the field of the most recent materials for the development of fuel cells and hydrogen technology, materials analysis methods and problems of contemporary technology and ecology Students have basic knowledge about spectroscopic nuclear methods used in the analysis of engineering materials.	IM1A_W11	5
IM1A_PS2_2	The skill of self-education to expand the knowledge about materials engineering.	IM1A_K05 IM1A_U06	1 5
IM1A_PS2_3	Inspiration towards education on level two of studies.	IM1A_K01 IM1A_K05	5 1

3. Module description

Description	The Specialised subject 2 module shall enable students expanding the knowledge about new trends in the most recent materials for the development of fuel cells and hydrogen technology, problems of contemporary technology and ecology as well as spectroscopic nuclear methods used in the testing of engineering materials. Lectures are also aimed at preparing students to write the engineer thesis and to the diploma exam.
Prerequisites	Passing modules related to engineering materials groups.

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
IM1A_PS2_w_1	Test	Verification of knowledge based on the lectures content and recommended literature.	IM1A_PS2_1, IM1A_PS2_2, IM1A_PS2_3

5. Forms of teaching

code	form of teaching			required hours of student's own work		assessment of the learning outcomes of the module
	type	description (including teaching methods)	number of hours	description	number of hours	
IM1A_PS2_fs_1	lecture	The lecture shall enable understanding the new trends in engineering materials and also problems of contemporary technology and spectroscopic methods. The lecture is delivered with the use of multimedia.	30	The work with the recommended literature comprising independent acquisition of knowledge related to basic issues.	30	IM1A_PS2_w_1