

## GEOLOGY AND GEOMORPHOLOGY OF LITHUANIA

Title of Study Programme and Code		Type (compulsory/optional)	Cycle	Year of study when the component is delivered (if applicable)
Environment Protection Engineering, 6531EX042		Optional	1 <sup>st</sup>	
Semester/trimester when the component is delivered		Number of ECTS credits allocated	Language of instruction	Mode of delivery (face-to-face/e-learning/...)
		3	EN, LT, RU	face-to-face
Learning outcomes			Study methods	Assessment methods
After completion of the study subject, a student should be able:			Lecture; An interactive lecture; Practical exercises; Individual work; Work in groups; Individual work in preparation for practical classes; Consultation; Problem-based learning; A case study.	Practical work - case study; Self-employment written work and presentation; Control work.
LO 1	To know the natural and anthropogenic environmental processes, of the principles of pollution reduction and formation, and concepts of environmental engineering.			
LO 2	To understand the moral responsibility for their activities and their impact on the results of social, economic, cultural development, welfare,the natural and anthropogenic environment.			
Prerequisites (these courses must be sucessfully completed prior to taking this particular course)				
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Course content				
1. Earth's structure. Lithosphere. 2. Earth's crust and the crystalline basement structure and composition of the development.. 3. Evolution of sedimentary cover in the Lithuanian territory. 4. Properties of paleogeographic conditions change. Geologic time scale. 5. Quaternary strata formation and mineral resources. 6. Deep layers of the lithosphere Lithuania. Mineral reserves/resources. 7. Underground hydrosphere development and subsurface water resources in Lithuania. 8. Geodynamic processes and relief. 9. The underground composition and development paleogeography in Lithuania. 10. Lithuanian landscape formation and evolution. Geomorphological features of the relief of the territory of Lithuania. Land (relief) forms. 11. Geomorphologic and physical geographical regionalization of Lithuania. 12. Geological and geomorphological monuments and nature reserves. 13. Tectonic evolution and its features in Lithuania. Current earth crust movements in Lithuania, especially in the area of INPP.				
Recommended or required reading and other learning resources/tools				
1. Kadūnas V. ir kt. (1999) Lietuvos geocheminis atlasas (Geochemical atlas of Lithuania). 2. Bloom A. (1998) Geomorphology..				

3. Klavinš M. et al (2010) Environment and sustainable development.
4. G. Tyler Miller, Jr. (2007) Living in the Environment.
5. Ministry of Environment website [www.am.lt](http://www.am.lt)
6. VU Faculty of Natural Sciences [www.ausis.gf.vu.lt](http://www.ausis.gf.vu.lt)