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|---|------------------------------------|
| Title<br><b>(Geologia)</b>  | Code<br><b>1010124151010120075</b> |
| Field<br><b>Civil Engineering Extramural First-cycle Studies</b>                      | Year / Semester<br><b>3 / 5</b>    |
| Specialty<br><b>Transportation Engineering</b>  | Course<br><b>core</b>              |
| Hours<br>Lectures: <b>2</b> Classes: -    Laboratory: <b>8</b> Projects / seminars: - | Number of credits<br><b>3</b>      |
|   | Language<br><b>polish</b>          |

**Lecturer:**

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**Status of the course in the study program:**

- Core course for students of Civil Engineering

**Assumptions and objectives of the course:**

- Knowledge assessment of stratygraphy and lithology the terrain. Ability to identify geological building, and predicting exogenetic processes. Ability of recognizing of main minerals and rocks.

**Contents of the course (course description):**

- Major concepts concerning internal of the Earth, stratygraphy and geologic age. Endogenetic processes: internal composition of the earth, volcanic and plutonic processes. Engineering geology, soil classification. Glacier and glacial processes. Fluvials, winds, lakes activity. Water in ground. Frost activity, infiltration deformations, floating earth (quicksand), mass motion. Geotechnical rules of designing of the embankments, their reconstruction and protection. Reading of geological maps, geological cross-sections on the basis geological maps. Recognizing minerals and rocks.

**Introductory courses and the required pre-knowledge:**

- Basic knowledge on geography, geodesy and physics. Basic knowledge on soil mechanics and mechanics.

**Courses form and teaching methods:**

- Lectures presented in Power Point with photos, movies and graphical animation.  
Excercises of macroscopic recognizing of rocks

**Form and terms of complete the course - requirements and assessment methods:**

- Written exam (written test), excercises: macroscopic recognizing of rocks

**Basic Bibliography:**

**Additional Bibliography:**