

| <b>COURSE</b>  |               | <b>ENGINEERING GEOLOGY</b>          |                                  |             |
|--|---------------|-------------------------------------|----------------------------------|-------------|
| <b>LECTURER</b>  |               | Assoc. Prof. Đenari Čerimagić Ph.D. |                                  |             |
| <b>STUDY</b>   | <b>STATUS</b> | <b>SEMESTER</b>                     | <b>NUMBER OF LESSONS<br/>L+E</b> | <b>ECTS</b> |
| B - CE   | Compulsory    | 2                                   | 2+1                              | 4           |
| <b>OBJECTIVES</b>  |               |                                     |                                  |             |
| <p>As most of the building activities are placed in geological area, for example, the buildings are built „on“ , „in“ and are „made of“ geological materials and so on, that is way the the abilities of building are associated with geological characteristics of building area. The knowledge in geological engineering area, are necessary for solving foundation problems of structures, underground structures, as well as using rock materials in building. Those are the reasons why the „geological area“ should be considered as „building area“, what is the objective of this subject</p>  |               |                                     |                                  |             |
| <b>COURSE CONTENT</b>  |               |                                     |                                  |             |
| <p>Main tasks, objectives and methods of Engineering Geology research. The Earth assembly. The Rock groups: Igneous, Sediments and methamorphic. Endodynamic proceses: tectonics, seizmics, volcanism. Egzodynamic processes: erosion, denudation, karstification. Products of surface decomposition, types and kinds of cover layer. Engineering geology characteristics of rocks: physical, mechanical and technological properties, homogeneity, heterogenity, isotropy, anizotropy, structure, texture. Geodynamic processes and occurrences: landslides, screes, landslides in rock masses definitions, causes of appearance, elements and classification, hazard and risks. Engineering geology rock and soil classification, maps and profiles. Rocks as a foundation material. Engineering geology investigation works for building purposes. Engineering geology foundation soll and rock characteristics from aspects of building suitability.</p> |               |                                     |                                  |             |
| <b>RECOMMENDED LITERATURE</b>  |               |                                     |                                  |             |
| <ol style="list-style-type: none"> <li>1. Čerimagić, Đ. (2009): Inženjerska geologija, Građevinski fakultet, Sarajevo.</li> <li>2. Grupa autora; Osnove geologije i inženjerske geologije</li> </ol>   |               |                                     |                                  |             |
| <p>Examination:<br/>test and seminar works during course, as well as final exam.</p>   |               |                                     |                                  |             |