

**Specification of subjects in undergraduate studies**

<b>Subject code:</b> EI32418
<b>Study program:</b> Ecological engineering for soil and water resources protection
<b>Type and level of studies:</b> undergraduate studies
<b>Subject name:</b> Fundamentals of geotechnics in torrent control
<b>Teacher (s):</b> Grozdana D. Gajić,DSc; Nikola Živanović
<b>Subject type:</b> compulsory
<b>ECTS:</b> 7
<b>Condition:</b> Matematics, mechanics, geodesy, torrential flows and erosion.
<b>Subject aim:</b> Teaching from the subject Fundamentals of geotechnics in torrent control is aimed at acquiring basic knowledge in the field of geotechnics. The teaching program includes: methods of geotechnical research work and field study; basic physical and mechanical characteristics of the soil on which the structures for the regulation of torrential flows will be built or which will serve as the building material; elements of slope instability; methods for calculating the stability factor of slopes and slopes to sliding; the stability of small dams; Funding, methods and calculations aimed at geotechnical dimensioning of erosion protection and torrent control.
<b>Subject outcomes:</b> Acquired knowledge of the physical and mechanical characteristics of the soil and their influence on the formation and development of erosion processes, as well as on the construction, stability and durability of the facilities in torrent and erosion control.