

### Specification of subjects in doctoral studies

<b>Subject code:</b> ДМ4.0121В
<b>Study program:</b> Ecological engineering for soil and water resources protection
<b>Type and level of studies:</b> Doctoral studies
<b>Subject name:</b> Optimization of works in natural resources protection
<b>Teacher (s):</b> Nada Dragović, DSc
<b>Associates:</b>
<b>Subject type:</b> elective
<b>ECTS:</b> 8
<b>Condition:</b>
<b>Subject aim:</b> Acquiring knowledge about the application of modern methods of operational research that optimize the execution of works on the protection of natural resources. Introducing students to the theoretical basics of operational research methods and their application to optimize time and resources in carrying out projects for the protection of soil and water resources
<b>Subject outcomes:</b> Acquired knowledge of methods of operational research that can be applied for optimization of works on protection of land and water resources. Knowledge on the application of methods for optimizing the time of project development (methods of linear programming, network programming, dynamic programming) and methods for resource optimization (labor, materials, mechanics and financial resources), such as modified heuristic type algorithms.