

COURSE TITLE:

**BIG DATA METHODS IN PUBLIC POLICIES**

The number of classes: 30/20

Value expressed in ECTS points: 3/2

## **Description:**

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The aim of the course is to develop a set of skills for working with data sets that are available in the modern world. It is designed according to the principle of "hands-on" training on real micro-data. The main goal is to apply new techniques to policy analysis by using and combining large sets of heterogeneous data from a variety of sources. The course consists of lectures and real-world examples, with appropriate technical details of machine learning, visualization and data analysis. During the course, participants will also be introduced to the Python programming language. The way of working will be largely harmonized with the previous knowledge that the participants have, as well as their interests and needs.





## Course content:

- Introduction to data analysis in public policies;
- Python;
- Big data sets;
- Data and public policies;
- Machine learning;
- Text analysis;
- Bias in machine learning;
- Data visualization techniques;
- Errors and methods for evaluating machine learning models;
- Ethics and privacy in data collection and analysis processes.

## Who is it for?

Students, employees in the public sector (government organizations), other stakeholders in the implementation of environmental policy: members of non-governmental organizations and citizens' associations, representatives of the business and industrial sector, employees of scientific and technological institutions.

## Prerequisites required:

Basics of statistical reasoning.

## Implementers:

**Course leaders:** dr. Nataša Krejić, dr. Miloš Savić

