

Full-Time Studies Semester 1, 2 WINTER SCHOOL

Module 5 European Studies through Digital Political Science

Practical workshop No. 1

Topic 1: EU Policy Simulations Through Digital Tools

Part 1: The Impact of Big Data on Political Strategy and Governance

- 1. Defining Big Data in the Context of EU Governance
 - How large-scale data analytics informs policy decisions.
 - The role of structured and unstructured data sources in EU political analysis.
- 2. Big Data in Policy-Making and Public Administration
 - AI-driven real-time monitoring of economic, social, and political trends.
 - How **predictive analytics** helps forecast policy outcomes.
 - Case study: Big data use in climate policy and migration crisis management.
- 3. Big Data in EU Elections and Political Campaigns
 - $\circ~$ The role of data-driven voter profiling and targeted campaigning.
 - Social media sentiment analysis in **measuring political engagement**.
 - Ethical concerns in microtargeting and algorithmic manipulation of voters.
- 4. Challenges of Using Big Data in Political Decision-Making
 - Data privacy concerns under GDPR and ethical issues in political analytics.
 - Risks of algorithmic bias and misinformation in data-driven governance.
 - Transparency and accountability in AI-based political decisions.

Part 2: The Future of Big Data in EU Political Decision-Making

- 1. AI and Machine Learning for Policy Development
 - AI-driven policy simulations and scenario modeling.
 - The role of big data in EU crisis response and security intelligence.
 - Using automated legal analysis to assess legislative impacts.
- 2. Big Data and Citizen Engagement in the EU
 - Open data initiatives for public transparency and participatory governance.
 - AI-powered public consultations and e-democracy platforms.
 - Blockchain for secure and tamper-proof citizen voting records.
- 3. Regulating Big Data in Political Processes
 - The role of EU regulations (e.g., Digital Services Act, AI Act) in data-driven governance.
 - Ethical AI frameworks to prevent bias and protect democracy.
 - The impact of **cross-border data sharing and international governance**.
- 4. The Future of Big Data in EU Politics
 - Integration of real-time analytics in legislative processes.
 - Expanding data-driven diplomacy and global policy coordination.
 - How quantum computing could revolutionize big data processing in politics.

