PUBLIC POLICY AND DATA ANALYTICS (PPD)

PPD 710. Quantitative Policy Analysis I: Foundations of Data Analytics for Public Policy. (3 h)
This course will introduce you to key elements of data analytics, including data preparation, analysis, visualization, and presentation. This course will also provide basic knowledge of public policy. Students will identify where data and analytics can be used to help create informative and compelling analyses that provide valuable evidence in public policy debates.

PPD 712. Quantitative Policy Analysis II: Statistics for Public Policy. (3 h)
This class covers the statistical tools students will encounter in the public sector. Students will be introduced to probability, statistical inference, and linear regression. Emphasis will be placed on analyzing data using Excel, which is widely used across both the public and private sectors.

PPD 714. Data Visualization & Storytelling for Public Policy. (3 h)
This course will provide students with fundamental principles of and practical experience in presenting data in a visual form for communication and analysis in public policy. Students will learn to become trusted advisers to decision-makers with refined abilities to inform and persuade with data.

PPD 720. Public Policy Design. (3 h)
This course will teach the core principles of policy-making, emphasizing evidence-based strategies informed by robust data analytics and grounded in public law. Students will discuss ethics in the public sector, focusing on legal frameworks and ethical considerations that guide decision-making processes.

PPD 722. Public Policy Implementation and Management. (3 h)
This course examines the practical challenges and opportunities involved in implementing and managing public policies. Students will learn how to translate policy goals into effective programs, analyze implementation processes, evaluate program performance, and adapt policies based on data-driven insights. The course emphasizes the use of data analytics to inform decision-making throughout the policy lifecycle, from design and implementation to evaluation and revision. Ethical considerations, data privacy, and community engagement are integral components of the course.

PPD 730. Data Ethics, Privacy, and Governance. (3 h)
This course will help students understand how data can be used to shed light on various policy issues. Students will examine ethical and legal considerations in data usage, privacy, and governance.

PPD 799. Capstone. (3 h)
Integrating and applying what is learned across a set of courses and experiences leads to deeper understanding and habits of practice that inform a career. The capstone project applies the data science and public policy knowledge and skills gained through the program to a real-world challenge. The specific project will vary depending on student interest and goals. Students will work with practicing professionals or industry partners in a relevant field to define and develop their capstone project. Students must complete all core courses prior to the capstone project.