



PROSPECTUS

SHORT COURSE

**Big Data Framework for Governance
and Policy Innovation**

Department of Government Studies

Faculty of Social and Political Sciences
Universitas Muhammadiyah Makassar

About Program

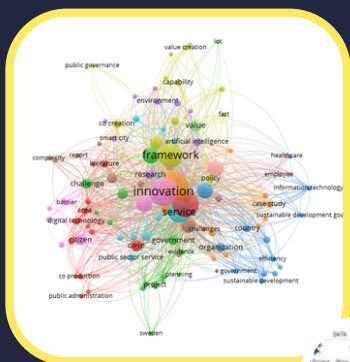
Big data refers to the large volumes of data that can be collected, stored, and analyzed with modern technology. It can be a powerful tool for governance and public policy innovation, as it provides an evidence base that can drive more informed and effective decision-making.

This course aims to facilitate discussions around how big data technologies and data from citizens can be used to assist public administration and policy making to improve social life. This program discussed the opportunities and challenges of big data strategy for the government, society, and decision makers in solving various problems that exist in society.

This course explores many practical examples from different parts of the world, where public service delivery has undergone transformation and where initiatives have been taken that have revolutionized the way governments at various levels engage with citizens, and how governments and civil society have adopted evidence-based policy-making through innovative and efficient use of big data analytics.



Course Outcomes



Understand how to analyze and interpret big data, leading to more informed and effective policies.

Develop valuable skills in areas like data analysis, data management, and data visualization.

Understanding the potential applications of big data could enable students to identify opportunities for improvement in public sectors.

The course provide students with tools and strategies to promote good governance principles in public sector.

Students could learn how to use predictive analytics and other big data tools for public policy. The use of big data in governance raises important ethical and privacy concerns. The course on this topic could help students navigate these complex issues and develop responsible data practices.



Participants

This short course program is designed for those who are interested in socio-political studies, especially issues of government, public administration, and public policy. This course combines several disciplines, including data science, public administration, and policy studies. This can make for a more well-rounded education and enable students to solve complex, real-world problems. Furthermore, this course demonstrates a new paradigm in the study and research of governance in the digital era using big data analysis. In other words, the use of big data in government political studies can increase government effectiveness, improve public service innovation.



Course Format

This short course program lasts for 14 days. In addition to providing material in class, students will also explore innovative models of governance in responding to global issues. Participants are also invited to conduct research on issues of governance and public policy, which will later be published as papers in reputable journals.



During the training, participants are taught to use research applications or software that can be very helpful in collecting, managing and analyzing data, as well as in various other aspects of the research process, especially those conducting big data analysis. This class combines the exploration of new theories and paradigms in research and assessment of contemporary social issues such as energy governance, agriculture, food security and food sovereignty, as well as environmental governance, etc.



Course Contents



INTRODUCTION TO BIG DATA



**DATA GOVERNANCE AND
MANAGEMENT**



**STATISTICS AND
DATA ANALYSIS**



**DATA MINING AND
MACHINE LEARNING**



BIG DATA TECHNOLOGIES



BIG DATA IN PUBLIC POLICY



**DATA
VISUALIZATION**



**CAPSTONE
PROJECT**

