

# MAKERERE UNIVERSITY BUSINESS SCHOOL

FACULTY OF ECONOMICS, ENERGY & MANAGEMENT SCIENCE

DEPARTMENT OF APPLIED ECONOMICS

## MASTER OF ENERGY ECONOMIC AND GOVERNANCE(MEEG)

OF MAKERERE UNIVERSITY ACADEMIC YEAR 2025/2026

**COURSE:** APPLIED RESEARCH AND PRACTICE  
**CODE:** EEG7106  
**SEMESTER:** ONE  
**YEAR:** ONE  
**TIME:** FRIDAYS 5:30PM - 8:30PM  
**VENUE:** MUBS Annex & Zoom Via MUBSEP <https://mubsep.mubs.ac.ug/>

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### Facilitators

Prof. Laura Orobia [lorobia@mubs.ac.ug](mailto:lorobia@mubs.ac.ug)

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Dr. Benard Musekese Wabukala ([bwabukala@mubs.ac.ug](mailto:bwabukala@mubs.ac.ug))



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### 1. Course Description

This course enhances students' understanding of applied research and its practical relevance in the fields of energy economics and governance. It offers a critical examination of research terminology, ethical standards, and methodological approaches, including quantitative, qualitative, and mixed-methods techniques. Students will apply these foundational concepts to critically analyze literature pertinent to their areas of interest and evaluate how research findings inform their professional practice and contribute to addressing challenges in social, local, and global energy contexts.

### 2. Course Objectives

- i. Develop a comprehensive understanding of key research concepts, terminology, and ethical principles relevant to applied research in energy economics and governance.
- ii. Critically evaluate and differentiate between quantitative, qualitative, and mixed-methods research approaches, and apply them appropriately in energy sector studies.
- iii. Analyze and synthesize existing literature to identify knowledge gaps and assess the relevance of research findings to professional practice and policymaking in energy economics and governance.
- iv. Apply research insights to real-world social, local, and global energy challenges, enhancing the ability to make evidence-based decisions in their field of work.

### 3. Learning Outcomes

By the end of this course, students should be able to:

- i. Demonstrate mastery of research terminology and ethical principles applicable to energy economics and governance research.
- ii. Design and critically assess research proposals employing quantitative, qualitative, or mixed-methods approaches suitable for energy sector analysis.
- iii. Conduct a systematic literature review that identifies research gaps and evaluates the applicability of findings to energy policy and practice.
- iv. Integrate research evidence to formulate practical solutions addressing social, local, and global challenges in energy economics and governance.

### 4. Detailed Course Outline

No	Topic	Content	Hours
1	Introduction to advanced research methods	<ul style="list-style-type: none"><li>• Taxonomy of research types</li><li>• Research at graduate level</li><li>• Types and characteristics of research plans approved by Makerere University (Plan A &amp; B)</li><li>• Research process</li></ul>	02
2	Identifying and defining the research problem	<ul style="list-style-type: none"><li>• Meaning of a research problem</li><li>• How are research problems identified</li><li>• Typical research problems problem definition steps as applied in the energy sector</li></ul>	01
3	Literature Review	<ul style="list-style-type: none"><li>• Introduction to Literature Review: Purpose, scope, and importance in academic research; differentiating between types of literature and sources.</li><li>• Techniques for Conducting a Literature Review: Strategies for searching, organizing, synthesizing, and critically evaluating academic sources and empirical studies.</li><li>• Writing the Literature Review: Structuring the review, identifying research gaps, and integrating literature cohesively to build a foundation for the research study</li></ul>	03
3	The theoretical /Conceptual framework	<ul style="list-style-type: none"><li>• Theoretical and conceptual framework</li><li>• Understanding the variables</li><li>• Measurement in research</li></ul>	01
4	Research design approaches	<ul style="list-style-type: none"><li>• Meaning and importance of research designs</li><li>• Classification of research designs</li><li>• Exploratory study, descriptive study or hypothesis testing)</li><li>• By type of investigation (causal or correlation)</li><li>• Study setting (contrived or non-contrived)</li></ul>	03

		<ul style="list-style-type: none"> <li>• By unit of analysis (individuals, dyads, groups)</li> <li>• By time horizon (cross sectional study or longitudinal study)</li> <li>• Data collection- questionnaires</li> <li>• Data analysis- data entry, cleaning, analysis</li> </ul>	
5	Introduction to STATA / PYTHON for data analysis	<ul style="list-style-type: none"> <li>• Students will choose between learning STATA or Python for data analysis</li> </ul>	35
	Term paper	The students will be guided through writing a term paper using data analysis software	
	<b>Total</b>		<b>45</b>

### Method of Delivery

- Interactive Lecture
- Student Presentations
- Blended Learning
- Group Discussions

### Mode of Assessment

Course work will include tests, essays, presentations, term papers/

Assignments 50%

Final write-up/ term paper 50%

**Total 100%**

Pass Mark **60%**

### Reading References

1. Baum, C. F. (2006). An Introduction to Modern Econometrics Using Stata. Boston College Department of Economics.
2. Devkota, N., & Mahapatra, S. K. (2025). Quantitative and Applied Research Methodology in Economics: Researching, Reporting and Publishing. Routledge.
3. Creswell, J. W., & Poth, C. N. (2018). Qualitative Inquiry and Research Design: Choosing Among Five Approaches (4th ed.). Sage Publications.
4. Mishi, S. (2023). Research Methods for Economics. Van Schaik Publisher