



Mzuzu University

CURRICULUM FRAMEWORK

Outline of courses offered throughout the programme

MSc –Geoinformatics (GIS)

Programme	Courses Semester 1 Compulsory	Courses Semester 1 Optional
<i>MSc - Geoinformatics (GIS)</i>	GIS Science & Earth Observation: a systems-based approach	Monitoring of Natural Resources
	Seminars	Geo visualization and Web Dissemination
	System Analysis for NRM	
	Geo information for NRM	
	Research – Proposal development	

Programme	Courses Semester 2 Compulsory	Courses Semester 2 Optional
<i>MSc - Geoinformatics (GIS)</i>	Remote Sensing	Monitoring of Natural Resources
	Environmental Modeling: Causes and Impacts of Changing Resources	Geo visualization and Web Dissemination
	Environmental Modeling: Societal Response and Reflection on NRM	
	Seminar	
	Research – Proposal development and defense	

GIS and Spatial Analysis: Aims to provide an introduction to fundamental principles of GIS. Students also have the opportunity to develop their use of GIS. The taught delivery of the module focuses on the fundamental principles using relevant theories. The indicative content includes cartography, entity definition, and spatial data modeling and so on. This enables the students to appreciate the theories that underpin the application of GIS. Students have the opportunity to apply the principles using an appropriate GIS package. Also aims to enable students to explore the concept of spatial analysis and the differences and commonalities of spatial and non-spatial analysis. The module also enables students to explore a range of spatial analysis techniques and to understand the situations in which they should be used.

Remote Sensing: The aim of this course is to introduce students to the theory, principles and physics of remote sensing. The module will also enable students to explore the application of these techniques to a range of applied situations, both conceptually, and through practical experience of using image analysis software to process, interpret and analyse a range of remote sensing imagery.

Research Methods: This course is designed to give students a theoretical knowledge on research problem identification, various methods of data collection, analysis and presentation of the results in scholarly manner. Focus is given to appropriate data analytical tools with respect to research set objectives. Specific example mainly geared towards environmental management.