Module code	AW-2312		
Module Title	Introduction to Geomatics		
Degree/Diploma	Bachelor of Arts (Geography, Environment and Development Studies)		
Type of Module	Major Option/ Breadth		
Modular Credits	4	**Total student workload**	8 hours/week
		Contact hours	4 hours/week
Prerequisite	None		
Anti-requisite	None		

Aims

To introduce students to the sources, methods and techniques of acquisition of spatially related data and information. It is designed to improve student's awareness and skills, allowing them to identify suitable spatially related data sources and successfully perform data acquisition procedures using surveying equipment and photogrammetric and image processing software.

Learning Outcomes:

On successful completion of this module, a student will be expected to be able to:

Lower order :	30%	- Understand the basic principles and theories and descriptive approaches on Geomatics
Middle order :	40%	- Analyse various data based examples, image analysis, GIS Lab works and practices
Higher order:	30%	- Interpret data based scenario analysis, work independently and collaborate in groups with other students

Module Contents

- Introduction to Geomatics
- Surveying instruments and methods
- Global navigation satellite system (GNSS)
- Aerial and satellite images
- Satellite image analysis
- Photogemmetry & Remote Sensing
- Internet based data sources/ Exercise in GIS Lab
- Raster-to-Vector conversion / Exercise
- Optical character recognition (OCR)
- Horizontal/ Vertical datum / Data accuracy and quality
- Digital terrain models

Assessment	Formative assessment	Class lecture feedback MCQ Test/ Case Study Analysis Online Discussion/ Focus Group Discussion (FGD) Field Expedition
	Summative assessment	Examination: 50%
		Coursework: 50% 2 Individual Assignments (20 %) Practical Exercises (20 %) Group Project Presentation (10 %)