DEPARTMENT OF GEOMATICS ENGINEERING
UNDERGRADUATE PROGRAM IN GEOMATICS ENGINEERING
COURSE SYLLABUS

COURSE	Name	Advanced Remote Sensing
	Code	RM184948
	Credits	3 (three)
	Semester	Elective Course

COURSE DESCRIPTION

This course contains the processing and utilization of the advanced stages of spatial data recorded using extra-terrestrial through satellite

EXPECTED LEARNING OUTCOME

D	Able to perform spatial data acquisition using modern measurement methods, geospatial data processing, using industry standard software, and making standard designs and analyzes in the fields of geodesy, surveying,
E	Able to apply information & communication technology and the latest technological developments in the fields of geodesy, surveying, hydrographic, remote sensing, photogrammetry, geographic information systems, and cadastral.
H	Able to work in inter-disciplinary and inter-cultural teams so they can compete at national and international levels.

COURSE LEARNING OUTCOME

1	Students can understand the concept of atmospheric correction and practice it using several methods
2	Students can extract parameter information in water, land and atmosphere from spectral data

COURSE MATERIALS

1	Radiometric Correction
2	Remote Sensing Water Monitoring
3	Remote Sensing For Land Monitoring
4	Remote Sensing For Atmospheric Studies

PREREQUISITE

Remote Sensing

REFERENCES

A.	Main References
1	Weng, Qihao, ed. Remote Sensing for Sustainability. CRC Press, 2016.
2	Lillesand, Thomas, Ralph W. Kiefer, and Jonathan Chipman. Remote sensing and image interpretation. John Wiley & S
3	Martin, Seelye. An introduction to ocean remote sensing. Cambridge University Press, 2014.
4	Canty, Morton J. Image analysis, classification and change detection in remote sensing: with algorithms for ENVI/IDL
5	Barrett, Eric C. Introduction to environmental remote sensing. Routledge, 2013.
B.	Additional References
1	Weng, Qihao, ed. Remote sensing of impervious surfaces. CRC Press, 2007.
2	Stephens, Graeme L. Remote sensing of the lower atmosphere. Vol. 1994. New York: Oxford University Press, 1994.