



**DEPARTMENT OF GEOMATICS ENGINEERING**  
**UNDERGRADUATE PROGRAM IN GEOMATICS ENGINEERING**  
**COURSE SYLLABUS**

<b>COURSE</b>	Name	Land Information System
	Code	RM184955
	Credits	3 (three)
	Semester	Elective Course

**COURSE DESCRIPTION**

In this course students will be introduced to information system about land (SIP). SIP as per the definition of FIG (Federation de Geometres / The International Federation of Surveyors) is a means / tool for decision making both legal, administrative and economic and helps for planning and development. In this lecture, we will also learn about databases in land parcels that are spatially referenced (having locations) for a particular area, and on the other hand, procedures and techniques for systematic data collection, renewal, processing and distribution. It is expected that students can understand the land information system is the same spatial reference system for all data in the system that allows the relationship between data in the system with other data that is still related to land.

**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.

**COURSE LEARNING OUTCOME**

1	Students have knowledge of information systems concepts
2	Students have knowledge of the basic theories and methods of information systems for land
3	Students have the ability to design simple land cadastre applications
4	Students have experience to make land cadastre applications with GIS
5	Students are able to present and analyze land information systems

**COURSE MATERIALS**

1	Land Information System Concepts
2	Land Information System Equipment and Legal Foundation
3	Land Cadastre Data and Information Requirement
4	Basics of php/html, CMS and Map Service
5	Compilation Component of Land Information System
6	Land Information System Design
7	Information Systems Application for Land Cadastre
8	Analysis of Land System Design

**PREREQUISITE**

Geographic Information Systems, Land Administration

**REFERENCES**

A.	Main References
1	Dale, R.F. and J.D. McLaughlin, 1988. Land Information Management. Clarendon Press, Oxford
2	Dueker, K.J. 1987. Multipurpose Land Information Systems: Technical, Economic, and Institutional Issues. PE&RS, 53(10): 1361-1366.
3	Tuladhar, A.M. 2004. Parcel-based Geo-Information System, ITC-Enchede.
B.	Additional References
1	Suharno dan Wahyuni, 2015. Sistem Informasi Pertanahan - STPN, Jogjakarta
2	Sistem Informasi Pertanahan, Land Edisi 12, Agustus - Oktober 2009