

Introduction to Geoinformatics					
Course Code CSD60014	Student Workload 90 hours	Credits (according to ECTS) 4.5 (3 for theory and 1.5 for practical work)	Semester 5 or 7	Frequency each odd-semester	Duration 16 meetings
1	Types of courses Elective	contact hours 63 hours	independent study 27 hours	class size 20 - 40 students	
2	Prerequisites for participation -				
3	Learning outcomes IS-ILO-1 Graduates are expected to be able to design, build, operate, and evaluate information systems in organizations to align with organizational needs and to produce technological solutions for organizations. IS-ILO-3 Graduates can apply computational and design thinking, conduct scientific analysis and writing and apply the values of Technopreneurship in creating product innovations in the Systems or Information Technology domain.				
4	Subject aims <ul style="list-style-type: none"> • Students are able to understand the spatial problems. • Students are able to understand basic concepts of geoinformatics. • Students are able to understand data concepts and geospatial information. • Students are able to understand the various references of coordinate systems and projections. • Students are able to understand the various geospatial data acquisition and their characteristics. • Students are able to understand vector data structures and attributes. • Students are able to understand raster data structures and attributes. • Students are able to understand the geospatial data storage techniques and management strategies. • Students are able to understand the geospatial flow of thought and analysis. • Students are able to understand the data presentation theory and cartographic rules. • Students are able to understand the Geospatial Cyberinfrastructure concept. • Students are able to understand the various kinds of Geoinformatics Software. • Students are able to create a final project based on real problems. • Students are able to create a final project based on real problems and their documentation. 				
5	Teaching methods Lectures, case study, class discussion, presentation				
6	Assessment methods Assignment, mid-term examination, end-term examination, project evaluation, practical-skill assessment				

7	This module is used in the following degree programs as well
8	Responsibility for module
9	Other information 1. Ramdani, Fatwa. 2017. Pengantar Ilmu Geoinformatika. UB Press. Malang