

Advanced Geoinformatics 1					
Course Code CIS62037	Student Workload 90 hours	Credits (according to ECTS) 4.5	Semester 6	Frequency each even-semester	Duration 16 meetings
1	Types of courses <i>Elective</i>	contact hours 63 hours	independent study 27 hours	class size 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.				
4	Subject aims <ul style="list-style-type: none"> ● Students are able to understand the various of observations techniques requirements of geoinformatics system ● Students are able to understand the design and the planning of GI system ● Students are able to understand the design and the GI system algorithm implementation ● Students are able to understand the concept of GI system testing ● Students are able to understand the concept of GI data system testing ● Students are able to understand the GI system development framework ● Students are able to understand the various type of developed GI system ● Students are able to understand the automation concept of GI software ● Students are able to understand the intermediate level of spatial analytics concept ● Students are able to understand the concept of network analysis in GI system ● Students are able to understand the Synthetic Aperture Radar data concept and its application ● Students are able to understand the concept of LIDAR data ● Students are able to understand the concept of programming using Python and QGIS ● Students are able to make based on real problems in the field 				
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. 2018. Ilmu Geoinformatika: Observasi Hingga Validasi. UB Press. Malang 2 Smith, Richard. 2015. Mastering QGIS. Packt Publishing. Birmingham, UK				