



**INSTITUT TEKNOLOGI SEPULUH NOPEMBER
FACULTY OF CIVIL, PLANNING AND GEO ENGINEERING
DEPARTMENT OF GEOMATICS ENGINEERING
UNDERGRADUATE STUDY PROGRAM**

**Document
Code**

SEMESTER LEARNING PLAN (SLP)

COURSE NAME		CODE	COURSE GROUP	CREDITS (SKS)		SEMESTER	Date of Preparation
Final Project		CM234835	-	T=6	P=0	7	-
AUTHORIZATION		SLP Developer		Course Group Coordinator		Head of Study Program	
		Hepi Hapsari Handayani, S.T., M.Sc., Ph.D.		-		Danar Guruh Pratomo, S.T., M.T., Ph.D.	
Learning Outcomes (LO)	Expected Learning Outcomes (ELO) that Imposed in the Course						
	ELO-4	Able to apply mathematics, science, and engineering in the fields of Geodesy and Surveying, Hydrography, Photogrammetry and Remote Sensing also Geographic Information Systems and Cadastral to gain a thorough understanding of the principles of engineering.					
	ELO-5	Able to design survey and mapping activities using the latest technology in the fields of Geodesy and Surveying, Hydrography, Photogrammetry and Remote Sensing also Geographic Information Systems and Cadastral.					
	ELO-6	Able to identify, formulate, analyze and solve problems in the fields of Geodesy and Surveying, Hydrography, Photogrammetry and Remote Sensing also Geographic Information Systems and Cadastral.					
	ELO-8	Able to compile scientific reports and provide solutions based on leadership, creativity and communication skills as well as being responsible for the work done.					
	ELO-11	Able to be responsible to the community and adhere to professional ethics in solving technical problems in the fields of Geodesy and Surveying, Hydrography, Photogrammetry and Remote Sensing also Geographic Information Systems and Cadastral.					
	Course Learning Outcomes (CLO)						
CLO-1	Able to formulate Final Project research problems and make designs in survey and mapping activities based on certain standards of the Indonesian National Standard (SNI) from the National Standardization Agency (BSN) and the International Organization for Standardization (ISO).						

	CLO-2	Able to evaluate quantitatively and qualitatively, draw clear conclusions and recommend the results of their research to interested parties from various sectors and fields with the solution of these problems.				
	CLO-3	Able to make research reports starting from the preparation of research designs, research implementation to studies and evaluations.				
	CLO-4	Able to present the results of final project research responsibly in the seminar forum and defend it in an oral examination in front of a team of examining lecturers.				
	CLO-5	Able to carry out research by applying information & communication technology in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, geographic information systems, and cadastre.				
	Matrix ELO-CLO					
	CLO	ELO-4	ELO-5	ELO-6	ELO-8	ELO-11
	CLO-1	V				
	CLO-2		V			
	CLO-3			V		
	CLO-4				V	
	CLO-5					V
Course Description	The Final Project is a scientific work based on a research or design activity, prepared within a semester, under the guidance of a supervisor and can be assisted by an assistant supervisor. The supervisor here acts as a facilitator, director, and determines the idea of implementing the Final Project. The team of examining lecturers conducted an assessment in terms of report writing, scientific field material, attitude in maintaining ideas and final project presentation. By compiling the Final Project, students are expected to be able to summarize, apply, pour, solve all knowledge, skills, ideas and problems in certain fields of expertise / fields of study systematically and logically, critically and creatively, based on accurate data / information and supported by accurate data / information with appropriate analysis.					
Course Materials	<ol style="list-style-type: none"> 1. Standards for surveying and mapping both Indonesian National Standards (SNI) from the National Standardization Agency (BSN) and the International Organization for Standardization (ISO) for example SNI 8473: 2018 concerning Semidetailed Land Survey and Mapping scale 1: 50,000, SNI ISO 19111_2011 concerning Geographical Information - Spatial Reference with Coordinates, SNI Surta Number RSNI3 7657: 2010 concerning Hydrographic Surveys, SNI Surta Number SNI_19-7149 of 2005 concerning Heavy Force Control Networks, and others. 2. Application of information & communication technology in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, geographic information systems, and cadastral in the implementation of research. 3. Application of calculation methods related to the topic of the final project, study and evaluation of results and research processes to solve problems. 4. Making research reports starting from the preparation of research designs, research implementation to studies and evaluations. 5. Presentation of final project research results responsibly in seminar forums and sessions. 					

References		Main:					
				1. Department of Geomatics Engineering. 2013. Final Project Preparation Rules. Sepuluh Nopember Institute of Technology. Surabaya 2. Sepuluh Nopember Institute of Technology Quality Assurance Office. 2017. Final Project Guide. Surabaya.			
		Additional:					
Lecturer		Lecturer					
Prerequisite		Research Methodology					
Class/ Week	Lesson Learning Outcome (Sub-CLO)	Valuation		Learning Forms, Learning Methods, Student Assignments /Task, [Estimated Time]		Learning Materials [References]	Weight (%)
		Indicators	Criteria	Offline	Online		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Able to formulate research problems and make designs in survey and mapping activities based on certain standards of the Indonesian National Standard (SNI) from the National Standardization Agency (BSN) and the International Organization for Standardization (ISO).		1. Completeness of the material 2. Depth of explanation and effectiveness of communication	Formulation of research problems and design design		Indonesian National Standard (SNI) from the National Standardization Agency (BSN) and the International Organization for Standardization (ISO) for surbei and mapping activities	20
2	Able to apply information & communication technology in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, geographic information systems, and cadastral in the implementation of final project research.		1. Completeness of the material 2. Depth of explanation and effectiveness of communication	Conduct of research		Information & communication technology in the fields of geodesy, surveying, hydrography, remote sensing, photogrammetry, geographic information systems, and cadastral	20

3	Able to evaluate quantitatively and qualitatively, draw clear conclusions and recommend the results of their research to interested parties from various sectors and fields with the solution of these problems.		1. Completeness of the material 2. Depth of explanation and effectiveness of communication	Quantitative and qualitative evaluation and conclusion drawing		Application of calculations and theories for quantitative and qualitative evaluation and in drawing clear conclusions.	20
4	Able to make research reports starting from the preparation of research designs, research implementation to studies and evaluations.		1. Completeness of the material 2. Depth of explanation and effectiveness of communication	Report preparation		Final project research report	20
5	Able to present the results of final project research responsibly in the seminar forum and defend it in an oral examination in front of a team of examining lecturers.		1. Completeness of the material 2. Depth of explanation and effectiveness of communication	Presentation		Presentation of research results	20
TOTAL							100