	Universitas Negeri Surabaya **Faculty of Engineering,** **Undergraduate Study Program in Informatics Engineering**	**Document Code**

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight			SEMESTER	Compilation Date
Apprenticeship	5520220113		T=0	P=20	ECTS=31.8	5	July 18, 2024

AUTHORIZATION	SP Developer	Course Cluster Coordinator	Study Program Coordinator
	.....	.....	Aditya Prapanca, S.T., M.Kom.

Learning model	**Case Studies**	
Program Learning Outcomes (PLO)	**PLO study program that is charged to the course**	
	PLO-1	Able to analyze complex computing problems to identify technology project management solutions in the field of informatics/computer science by considering insights into the development of transdisciplinary science (KNO-01)
	PLO-3	Able to implement knowledge of how computer systems work to solve information technology problems (KNO-03)
	PLO-4	Have the ability to work in a team (SKI-01)
	PLO-5	Able to communicate the results of studies on the implications of developing or implementing information technology science (SKI-02)
	PLO-7	Ability to design, implement, and evaluate multi-platform computing-based solutions that meet organizational needs (COM-02)
	Program Objectives (PO)	
	PLO-PO Matrix	

P.O	PLO-1	PLO-3	PLO-4	PLO-5	PLO-7

PO Matrix at the end of each learning stage (Sub-PO)

P.O	Week															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Short Course Description	This course provides an introduction to the world of real construction work with internships at construction service providers including: buildings, roads, bridges, docks, airports, irrigation, drainage, weirs, reservoirs, waste processing agencies (IPAL), ready-mix concrete industry.), ready-made concrete materials industry, and ready-to-use asphalt mix industry (asphalt mixing plant). The internship is carried out for 400 hours, and ends with the preparation of a report in accordance with daily activities at the construction service provider.	
References	**Main :**	

1. [1] Tim Penyusun, 2014,*Buku panduan PraktikKerja Industri / Praktek Kerja Lapangan Fakultas Teknik UNESA*, Surabaya:Fakultas Teknik Universitas Negeri Surabaya.
   [2]. Anonimous, 2012,*Tata caraperencanaan ketahanan gempa untuk struktur bangunan gedung dan non gedung (SNI1726:2012)*, Jakarta: Badan Standar Nasional
   [3]. Andang Widjaja, 2010,*Gempa*,Surabaya: Jurusan Teknik Sipil FT UNESA
   [4]. Himawan Indarto, Hanggoro Tri Cahyo, A, Kukuh C. Adi Putra, 2013,Aplikasi SNI Gempa 1726-2012 for Dummies, Semarang,http://filebambangdewasa.wordpress.com

Supporters:	

Supporting lecturer	

Week-	Final abilities of each learning stage (Sub-PO)	Evaluation		Help Learning, Learning methods, Student Assignments, [Estimated time]		Learning materials [References]	Assessment Weight (%)
		Indicator	Criteria & Form	Offline (*offline*)	Online (*online*)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
2	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
3	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
4	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
5	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
6	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%

7	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
8	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
9	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
10	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
11	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
12	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
13	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%

14	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
15	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%
16	Students gain a comprehensive understanding of industrial internships on construction projects.	1. Able to read working drawings 2. Able to schedule construction projects 3. able to calculate volume and RAB		PBL and Case Study 1 X 50			0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
5. **Indicators for assessing** ability in the process and student learning outcomes are specific and measurable statements that identify the ability or performance of student learning outcomes accompanied by evidence.
6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
7. **Forms of assessment:** test and non-test.
8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
12. TM=Face to face, PT=Structured assignments, BM=Independent study.