

		Universitas Negeri Surabaya Faculty of Engineering, Mechanical Engineering Education Undergraduate Study Program					Document Code																																																	
SEMESTER LEARNING PLAN																																																								
Courses		CODE	Course Family		Credit Weight		SEMESTER	Compilation Date																																																
Basic Drawing		8320302073			T=2	P=1	ECTS=4.77	1 July 18, 2024																																																
AUTHORIZATION		SP Developer		Course Cluster Coordinator		Study Program Coordinator																																																		
			Ir. Wahyu Dwi Kurniawan, S.Pd., M.Pd.																																																		
Learning model	Case Studies																																																							
Program Learning Outcomes (PLO)	PLO study program that is charged to the course																																																							
	Program Objectives (PO)																																																							
	PLO-PO Matrix																																																							
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 100px; height: 30px;">P.O</td> </tr> </table>							P.O																																															
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	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="16" style="text-align: center;">PO Matrix at the end of each learning stage (Sub-PO)</td> </tr> <tr> <td rowspan="2" style="width: 100px; height: 30px;">P.O</td> <td colspan="15" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 20px;">1</td> <td style="width: 20px;">2</td> <td style="width: 20px;">3</td> <td style="width: 20px;">4</td> <td style="width: 20px;">5</td> <td style="width: 20px;">6</td> <td style="width: 20px;">7</td> <td style="width: 20px;">8</td> <td style="width: 20px;">9</td> <td style="width: 20px;">10</td> <td style="width: 20px;">11</td> <td style="width: 20px;">12</td> <td style="width: 20px;">13</td> <td style="width: 20px;">14</td> <td style="width: 20px;">15</td> <td style="width: 20px;">16</td> </tr> </table>								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
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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																								
Short Course Description	Students can understand how to use drawing tools, understand projection and cutting systems																																																							
References	Main :																																																							
	<ol style="list-style-type: none"> 1. Anwari. 1978. Menggambar Teknik Mesin 2. Jakarta: Departemen Pendidikan dan kebudayaan. 2. Baharudin Yakob. 1979. Menggambar Mesin 3. Jakarta: Departemen Pendidikan dan Kebudayaan. 3. Juhana Ohan, Suratman. M. 2000. Menggambar Teknik Mesin. Bandung: Pustaka Grafika. 4. Marbun, Moyn. 1993. Menggambar Teknik Mesin. Bandung: Penerbit M2S. 5. Sato Takhesi, Sugiarto. 1986. Menggambar Mesin. Jakarta: Pradnya Paramita. 6. Yogaswara, Eka. 2004. Membaca Gambar Teknik SMK. Bandung: Armico 																																																							
	Supporters:																																																							
Supporting lecturer	Agung Prijo Budijono, S.T., M.T. Akhmad Hafizh Ainur Rasyid, S.T., M.T.																																																							
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	Able to mention various technical drawing tools and draw lines and letters	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
2	Able to draw pictorials	Skilled at drawing pictorials using various rules	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
3							0%
4	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
5							0%
6							0%
7	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%

8	UTS	UTS	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments		0%
9	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments		0%
10	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments		0%
11	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments		0%
12	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments		0%

13	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
14	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
15	Understand various technical drawing tools	Identifying drawing tools that suit your needs. Determining drawing tools that suit your needs	Criteria: Compliance with the answer key gets a score of 100	Approach: Contextual based learning Method: Question and answer lecture Model: Direct learning Strategy: 2 X 50 exercises and assignments			0%
16							0%

Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
		0%

Notes

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.