



**Universitas Negeri Surabaya  
Faculty of Engineering  
, Electrical Engineering Education Undergraduate Study Program**

**Document  
Code**

## SEMESTER LEARNING PLAN

<b>Courses</b>	<b>CODE</b>	<b>Course Family</b>	<b>Credit Weight</b>			<b>SEMESTER</b>	<b>Compilation Date</b>																																																	
Evaluation of Learning and Learning	8320102254		T=2	P=0	ECTS=3.18	5	August 4, 2023																																																	
<b>AUTHORIZATION</b>		<b>SP Developer</b>	<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>																																																		
		Prof. Dr. Joko, M.Pd. MT.	.....			Dr. Nur Kholis, S.T., M.T.																																																		
<b>Learning model</b>	<b>Case Studies</b>																																																							
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program that is charged to the course</b>																																																							
	<b>PLO-5</b>	Able to align the electrical and electronics engineering training curriculum in vocational education that is relevant to the demands of global industrial development (Education).																																																						
	<b>PLO-6</b>	Able to plan, implement, and evaluate effective and efficient innovative learning programs in electrical engineering vocational education that are relevant to global industrial developments (Education).																																																						
	<b>PLO-8</b>	Have extensive knowledge in the fields of general knowledge, social and humanities (General).																																																						
	<b>PLO-11</b>	Have extensive knowledge in the fields of mathematics, science and electrical engineering so that you can solve complex problems typical of electrical engineering and electronics engineering skills programs by following the rules of scientific writing (SSC2.2).																																																						
	<b>PLO-15</b>	Have project management skills and business practices in entrepreneurship as a form of lifelong learning through formal and non-formal education/training (SSC5.3).																																																						
	<b>Program Objectives (PO)</b>																																																							
	<b>PO - 1</b>	Students understand evaluation, measurement and assessment; assessment system (PAN and PAP); development of assessment instruments; conducting surveys and processing the results to draw conclusions.																																																						
	<b>PLO-PO Matrix</b>																																																							
		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>P.O</td> <td>PLO-5</td> <td>PLO-6</td> <td>PLO-8</td> <td>PLO-11</td> <td>PLO-15</td> </tr> <tr> <td>PO-1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						P.O	PLO-5	PLO-6	PLO-8	PLO-11	PLO-15	PO-1																																										
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PO-1																																																								
<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																																																								
	<table border="1" style="width: 100%; text-align: center;"> <tr> <td rowspan="2">P.O</td> <td colspan="16">Week</td> </tr> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td> </tr> <tr> <td>PO-1</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>						P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	PO-1																
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PO-1																																																								
<b>Short Course Description</b>	This course discusses the basic concepts of evaluation, measurement and assessment; assessment system (PAN and PAP); development of assessment instruments; conducting surveys and processing the results to draw conclusions.																																																							
<b>References</b>	<b>Main :</b>																																																							
	<ol style="list-style-type: none"> <li>1. Anderson, Lorin W. 2008. Classroom Assessment Enhancing the Quality of Teacher Decision Making . London: Lawrence Erlbaum Associates,</li> <li>2. Brookhart, Susan M. 2008. How to Give Effective Feedback to Your Students . USA: ASCD</li> <li>3. Brookhart, Susan M. 2013. How to Create and Use Rubrics for Formative Assessment and Grading. USA: ASCD</li> <li>4. Griffin, Patric and Esther Care. 2015. A sssessment and Teaching of 21st Century Skills. New York: Springer</li> <li>5. Joughin, Gordon. 2009. Assessment, Learning and Judgement in Higher Education . New York: Springer</li> <li>6. Samuel, Andrew. 2006. Make and Test Projects in Engineering Design Creativity, Engagement and Learning . London: Springer</li> <li>7. Van Blerkom, Malcolm L. 2009. Measurement and Statistics for Teachers. London: Routledge</li> </ol>																																																							
	<b>Supporters:</b>																																																							

Supporting lecturer		Prof. Dr. Ismet Basuki, M.Pd. Dr. Tri Rijanto, M.Pd., M.T. Prof. Dr. Joko, M.Pd., 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 understand the concept and understanding of assessment, process evaluation and evaluation of learning outcomes	<ol style="list-style-type: none"> <li>1.Explain the meaning of assessment, process evaluation and learning outcome evaluation</li> <li>2.Discuss examples of implementation, process evaluation and evaluation of learning outcomes</li> <li>3.Discuss problems that are often found in exam implementation</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.1. Students' ability to answer questions</li> <li>2.2. Student activity in asking questions and responding</li> </ol> <p><b>Form of Assessment :</b> Participatory Activities</p>	Discussion and assignment 2 X 50		<p><b>Material:</b> Concept and understanding of assessment, process evaluation and evaluation of learning outcomes. <b>Reference:</b> <i>Griffin, Patric and Esther Care. 2015. Assessment and Teaching of 21st Century Skills. New York: Springer</i></p>	5%
2	Students are able to understand assessment techniques	<ol style="list-style-type: none"> <li>1.Explain the basic principles of assessment</li> <li>2.Explain the characteristics of the assessment</li> <li>3.Explains the cognitive domain as an object for assessing learning outcomes</li> <li>4.Explaining the affective domain as an assessment of learning outcomes</li> <li>5.Explaining the psychomotor domain as an object for assessing learning outcomes</li> <li>6.Explains techniques in evaluating learning outcomes</li> <li>7.Create test indicators</li> <li>8.Create a test grid</li> </ol>	<p><b>Criteria:</b> Answer correctly, the score is max. 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>	Presentations, discussions, reflections and assignments create indicators and are presented at the next meeting 2 X 50		<p><b>Material:</b> Assessment techniques <b>References:</b> <i>Anderson, Lorin W. 2008. Classroom Assessment Enhancing the Quality of Teacher Decision Making. London: Lawrence Erlbaum Associates,</i></p>	5%

3	Students are able to understand assessment techniques	<ol style="list-style-type: none"> <li>1.Explain the basic principles of assessment</li> <li>2.Explain the characteristics of the assessment</li> <li>3.Explains the cognitive domain as an object for assessing learning outcomes</li> <li>4.Explaining the affective domain as an assessment of learning outcomes</li> <li>5.Explaining the psychomotor domain as an object for assessing learning outcomes</li> <li>6.Explains techniques in evaluating learning outcomes</li> <li>7.Create test indicators</li> <li>8.Create a test grid</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.Summarizing correctly, max score 20</li> <li>2.Create indicators, max score. 25</li> <li>3.Create grids, max score 25</li> <li>4.Presentation, max score 30</li> </ol> <p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment</p>		Group presentations, discussions, reflections (Zoom Meet) 2 X 50		4%
4	Students are able to understand & make types of tests	<ol style="list-style-type: none"> <li>1.Explain the meaning of the test</li> <li>2.Explain the function of the test</li> <li>3.Explain the types of tests</li> <li>4.Develop Multiple Choice tests</li> </ol>	<p><b>Criteria:</b></p> <p>Test preparation equipment includes Syllabus, RPP, Question Grid, Questions, Answer Key</p> <p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment</p>	Discussions, exercises, searching for library sources and other references, group work discussions, and 2 X 50 assignments			4%
5	Students are able to develop multiple choice questions for certain KD	Make a minimum of 20 Multiple Choice, Test and Non-Test questions according to the indicators (ATP) in the selected RPP and present them at meeting 6	<p><b>Criteria:</b></p> <p>Test preparation equipment includes Syllabus, RPP, Question Grid, Questions, Answer Key, multiple choice question assessment criteria</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>		Discussions, assignments, exercises, searching for library sources and other references independently as a group 11 X 50		4%

6	Students are able to understand & make tests and non-tests as evaluation of learning outcomes	<ol style="list-style-type: none"> <li>1.Explain the meaning of the test</li> <li>2.Explain the function of the test</li> <li>3.Create an RB test</li> <li>4.Explaining the observation sheet</li> <li>5.Explaining the interview</li> <li>6.Explaining the questionnaire</li> <li>7.Explain document checking</li> <li>8.Explain portfolio assessment</li> <li>9.Make product assessments</li> <li>10.Make an attitude assessment</li> <li>11.Make a skills assessment</li> <li>12.Make project assessments</li> </ol>	<p><b>Criteria:</b></p> <ol style="list-style-type: none"> <li>1.Describe correctly, max score 50</li> <li>2.Presentation, max score 50</li> </ol> <p><b>Forms of Assessment :</b> Participatory Activities, Project Results Assessment / Product Assessment, Portfolio Assessment, Practice / Performance</p>		Discussions, assignments, exercises, searching for library sources and other references and group presentations (Zoom Meet) 2 X 50		6%
7	Students are able to process learning test results	<ul style="list-style-type: none"> <li>- Explain PAN and PAP. - Explain the central tendency figures (mean, mode &amp; mid) - Explain the variance and standard deviation.</li> <li>- Explain the techniques for implementing learning outcomes tests</li> </ul>	<p><b>Criteria:</b> Answering correctly gets a score of 100</p> <p><b>Form of Assessment :</b> Participatory Activities</p>	Presence, Discussion, exercises and assignments 3 X 50			4%
8	Students are able to process learning test results	<ol style="list-style-type: none"> <li>1.Explaining PAN and PAP</li> <li>2.. Explaining central tendency numbers (mean, mode &amp; mid)</li> <li>3.Explain variance and standard deviation</li> <li>4.Explain the techniques for implementing learning outcomes tests</li> </ol>	<p><b>Criteria:</b> Answering correctly gets a score of 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>		Presentations, discussions, exercises and assignments (Zoom Meet) 2 X 50		4%
9	UTS 1st to 8th meeting	meetings 1 to 8	<p><b>Criteria:</b> Students who answer correctly get a score of 100</p> <p><b>Form of Assessment :</b> Test</p>	exam or written test 3 X 50			15%

10	Students are able to search for and determine the validity of learning outcome test items	<ol style="list-style-type: none"> <li>1.Explains techniques for testing the validity of learning outcomes tests</li> <li>2.Explain test testing rationally</li> <li>3.Explains empirical test testing</li> <li>4.Testing the analysis of choice response test items</li> <li>5.Determining test items for good learning outcomes</li> <li>6.Determining distractors that function on choice response test items</li> </ol>	<p><b>Criteria:</b> Students who do it correctly get a score of 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>	Discussion, assignments and exercises 2 X 50		4%
11	Students are able to search for and determine the validity of learning outcome test items	<ul style="list-style-type: none"> <li>- Explaining techniques for testing the validity of learning outcome tests -</li> <li>- Explaining test testing rationally -</li> <li>- Explaining test testing empirically -</li> <li>- Testing analysis of selected response test items -</li> <li>- Determining good learning outcome test items -</li> <li>- Determining distractors that function on selected response test items</li> </ul>	<p><b>Criteria:</b> 1.Students do it correctly, maximum score is 50 2.Presentation, max score 50</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>		Discussions, assignments and exercises as well as presentations (Zoom) 2 X 50	5%
12	Students are able to determine the reliability of learning outcomes tests	<ol style="list-style-type: none"> <li>1.Explains techniques for testing the reliability of essay learning tests</li> <li>2.Explain reliability testing techniques for choice response learning tests</li> <li>3.Explains the technique for testing the reliability of learning outcomes tests using a single test-single trial approach</li> <li>4.Explain the technique for testing the reliability of learning outcomes tests using a test-test approach</li> <li>5.Explains techniques for testing the reliability of learning outcomes tests using alternative form approaches</li> </ol>	<p><b>Criteria:</b> Students do it correctly, maximum score is 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>	Discussion, assignments and exercises 3 X 50		5%

13	Able to determine the value or grade from the test results	<ol style="list-style-type: none"> <li>1.Explain the meaning of grade from the learning outcomes test</li> <li>2.Explain the consideration of individual differences in determining grade</li> <li>3.Explain the various systems - Determine the final assessment system</li> </ol>	<p><b>Criteria:</b> Students do it correctly, maximum score is 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>	Discussion, assignments and exercises 3 X 50			5%
14	Able to explain techniques for determining final grades, KKM, ranking and loading learning achievement profiles	<ol style="list-style-type: none"> <li>1.Explain the meaning of final value</li> <li>2.Explain the final value function</li> <li>3.Explain the factors that need to be considered in determining the final grade</li> <li>4.Explain the techniques for arranging rankings.</li> <li>5.Explain the meaning of rankin. Types and procedures for preparing rankings</li> <li>6.Explains techniques for creating learning achievement profiles</li> <li>7.Explain the meaning of learning achievement profile</li> <li>8.Explain the forms of learning achievement profiles</li> <li>9.Explain the use of a learning achievement profile</li> </ol>	<p><b>Criteria:</b> Do it correctly and don't plagiarize, max score 100</p> <p><b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment</p>	Create a concept map regarding the overall assessment 2 X 50			5%

15	Able to explain techniques for determining final grades, KKM, ranking and loading learning achievement profiles	<ol style="list-style-type: none"> <li>1.Explain the meaning of final value</li> <li>2.Explain the final value function</li> <li>3.Explain the factors that need to be considered in determining the final grade</li> <li>4.Explain the techniques for arranging rankings.</li> <li>5.Explain the meaning of rankin. Types and procedures for preparing rankings</li> <li>6.Explains techniques for creating learning achievement profiles</li> <li>7.Explain the meaning of learning achievement profile</li> <li>8.Explain the forms of learning achievement profiles</li> <li>9.Explain the use of a learning achievement profile</li> </ol>	<b>Criteria:</b> Do it correctly and don't plagiarize, max score 100  <b>Form of Assessment :</b> Participatory Activities, Portfolio Assessment	Create a concept map regarding the overall assessment 2 X 50			5%
16	UAS		<b>Criteria:</b>  <b>Form of Assessment :</b> Participatory Activities, Tests	9 X 50			20%

#### Evaluation Percentage Recap: Case Study

No	Evaluation	Percentage
1.	Participatory Activities	44.83%
2.	Project Results Assessment / Product Assessment	4.83%
3.	Portfolio Assessment	23.83%
4.	Practice / Performance	1.5%
5.	Test	25%
		99.99%

#### 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** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities 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.