



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

Document Code

SEMESTER LEARNING PLAN

Courses	CODE	Course Family	Credit Weight	SEMESTER	Compilation Date																																											
Standards and Regulations on Power Systems	2020102227		T=2 P=0 ECTS=3.18	5	July 17, 2024																																											
AUTHORIZATION	SP Developer		Course Cluster Coordinator		Study Program Coordinator																																											
		Dr. Lusia Rakhmawati, S.T., M.T.																																											
Learning model	Project Based Learning																																															
Program Learning Outcomes (PLO)	PLO study program which is charged to the course																																															
	Program Objectives (PO)																																															
	PLO-PO Matrix																																															
		P.O																																														
	PO Matrix at the end of each learning stage (Sub-PO)																																															
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td rowspan="2" style="width: 5%;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 2%;">1</td> <td style="width: 2%;">2</td> <td style="width: 2%;">3</td> <td style="width: 2%;">4</td> <td style="width: 2%;">5</td> <td style="width: 2%;">6</td> <td style="width: 2%;">7</td> <td style="width: 2%;">8</td> <td style="width: 2%;">9</td> <td style="width: 2%;">10</td> <td style="width: 2%;">11</td> <td style="width: 2%;">12</td> <td style="width: 2%;">13</td> <td style="width: 2%;">14</td> <td style="width: 2%;">15</td> <td style="width: 2%;">16</td> </tr> </table>															P.O	Week																1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
P.O	Week																																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																																
Short Course Description	Understanding standards and regulations on electric power systems, network management rules, connection rules, operation rules, operation planning and implementation rules, settlement rules, measurement rules and data measurement rules																																															
References	Main :																																															
	1. Ditjen Ketenaga listrikan. 2014. PUIL 2014 (Persyaratan Umum Instalasi listrik). Ditjen Ketenaga listrikan 2. H. W Beaty, Donald G. Fink. 2013. Standard Handbook for electrical engineers. The McGraw-Hill Companies, Inc.																																															
	Supporters:																																															
Supporting lecturer	Prof.Dr. Tri Wrahatnolo, 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 basic understanding of electric power system standards and regulations	Explain the basic understanding of standards and regulations for electric power systems	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.Participation: carried out by observing student activities (weight 2) UTS: carried out with assessments during the middle of the semester (weight 2) UAS: carried out every semester to measure all indicators (weight 3) Assignments: carried out on each indicator (weight 3) Value Student End: 3.Participation Score (2) x Assignment Score (3) x UTS Score (2) x UAS Score (3) divided by 10.	Presentation, group discussion and reflection 2 X 50			0%
2	Able to understand the basic understanding of electric power system network management	Explain the basic understanding of the rules of the electric power system network	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.Participation: carried out by observing student activities (weight 2) UTS: carried out with assessments during the middle of the semester (weight 2) UAS: carried out every semester to measure all indicators (weight 3) Assignments: carried out on each indicator (weight 3) Value Student End: 3.Participation Score (2) x Assignment Score (3) x UTS Score (2) x UAS Score (3) divided by 10.	Presentation, group discussion and practice 2 X 50			0%

3	Able to understand the meaning of connection rules and procedures for connecting electric power systems	Explain the basic understanding of the rules and procedures for connecting electrical power systems	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.Participation: carried out by observing student activities (weight 2) UTS: carried out with assessments during the middle of the semester (weight 2) UAS: carried out every semester to measure all indicators (weight 3) Assignments: carried out on each indicator (weight 3) Value Student End: 3.Participation Score (2) x Assignment Score (3) x UTS Score (2) x UAS Score (3) divided by 10.	Presentation, group discussion and practice 2 X 50			0%
4	Able to understand the meaning of operating rules for electric power systems	Explain the basic understanding of the operating rules for electric power systems	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.Participation: carried out by observing student activities (weight 2) UTS: carried out with assessments during the middle of the semester (weight 2) UAS: carried out every semester to measure all indicators (weight 3) Assignments: carried out on each indicator (weight 3) Value Student End: 3.Participation Score (2) x Assignment Score (3) x UTS Score (2) x UAS Score (3) divided by 10.	Presentations, group discussions, 2 X 50 exercises			0%

5	Able to understand the basic understanding of the rules for planning and implementing electric power system operations	Explain the basic understanding of the rules for planning and implementing electric power system operations	Criteria: 1.The assessment criteria are carried out by looking at aspects: 2.Participation: carried out by observing student activities (weight 2) UTS: carried out with assessments during the middle of the semester (weight 2) UAS: carried out every semester to measure all indicators (weight 3) Assignments: carried out on each indicator (weight 3) Value Student End: 3.Participation Score (2) x Assignment Score (3) x UTS Score (2) x UAS Score (3) divided by 10.	Presentation, group discussion and practice 2 X 50			0%
6	UTS			2 X 50			0%
7							0%
8							0%
9							0%
10							0%
11							0%
12							0%
13							0%
14							0%
15							0%
16							0%

Evaluation Percentage Recap: Project Based Learning

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.