



**Universitas Negeri Surabaya**  
**Faculty of Engineering**  
**Civil Engineering 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>																																																																																													
Capita Selecta Residential Houses	2220104154	Study Program Elective Courses	T=2	P=2	ECTS=6.36	5	July 17, 2024																																																																																													
<b>AUTHORIZATION</b>	<b>SP Developer</b>		<b>Course Cluster Coordinator</b>			<b>Study Program Coordinator</b>																																																																																														
	.....		.....			Yogie Risdianto, S.T., M.T.																																																																																														
<b>Learning model</b>	Project Based Learning																																																																																																			
<b>Program Learning Outcomes (PLO)</b>	<b>PLO study program which is charged to the course</b>																																																																																																			
	<b>Program Objectives (PO)</b>																																																																																																			
	<b>PO - 1</b>	Students are able to have general knowledge about construction projects																																																																																																		
	<b>PO - 2</b>	Students are able to understand and make construction drawings																																																																																																		
	<b>PO - 3</b>	Students are able to understand the process and estimate the cost of building a residence																																																																																																		
	<b>PLO-PO Matrix</b>																																																																																																			
		<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td>P.O</td></tr> <tr><td>PO-1</td></tr> <tr><td>PO-2</td></tr> <tr><td>PO-3</td></tr> </table>						P.O	PO-1	PO-2	PO-3																																																																																									
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<b>PO Matrix at the end of each learning stage (Sub-PO)</b>																																																																																																				
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<b>Short Course Description</b>																																																																																																				
<b>References</b>	<b>Main :</b>																																																																																																			
		1. Wideasanti Irika, Lenggogeni. 2013. Manajemen Konstruksi. Bandung: Remaja Rosdakarya. 2. Husen Abrar. 2011. Manajemen Proyek. Yogyakarta: Andi. 3. Wideasanti Irika, Lenggogeni. 2013. Manajemen Konstruksi. Bandung: Remaja Rosdakarya.																																																																																																		
	<b>Supporters:</b>																																																																																																			

Supporting lecturer		Krisna Dwi Handayani, S.T., M.MT., M.T. Muhammad Imaduddin, S.T., M.T. Yogie Risdianto, S.T., M.T. Dr. Gde Agus Yudha Prawira Adistana, S.T., M.T. Abdiah Amudi, S.T., M.T. Lynda Refnitasari, S.Si., M.URP					
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	Drawing Architectural Plans for the 1st and 2nd Floors of Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Architectural Plans of 1st and 2nd Floors Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i>	4%
2	Drawing Foundation Plans and Architectural Roof Plans for Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Foundation Plans and Architectural Roof Plans for Residential Building Construction <b>Library:</b> <i>Husen Abrar. 2011. Project Management. Yogyakarta: Andi.</i>	3%
3	1.Drawing Architectural Longitudinal and Transverse Sections of Residential Building Construction 2.Drawing Front and Side Views of Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Architectural Longitudinal and Cross Sections of Residential Building Construction; Front and Side View of Residential Building Construction <b>Library:</b> <i>Husen Abrar. 2011. Project Management. Yogyakarta: Andi.</i>	4%

4	Drawing Structural Plans for Laying Foundations, Sloofs and Columns for the 1st Floor of Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Structural Plan for Laying Foundations, Sloofs and Columns for 1st Floor Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i>	3%
5	1. Structural drawing of plans for laying beams and columns for the 2nd floor of residential building construction 2. Drawing Structural Plans for Laying Ring Beams and Ring Gevels for Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Structural Plan for Laying Beam and Column for 2nd Floor Residential Building Construction; Structural Plans for Laying Ring Beams and Ring Gevels for Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i>	3%
6	Drawing of Door and Window Frame Details for Residential Building Construction		<b>Form of Assessment :</b> Project Results Assessment / Product Assessment	Discussion and Case Study 4 x 50		<b>Material:</b> Door and Window Frame Details Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i>	3%

7	<p>1.Drawing Clean Water Installation Plans for Residential Building Construction</p> <p>2.Drawing a Water Installation Plan for Used Residential Building Construction</p>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> Clean Water Installation Plan for Residential Building Construction; Water Installation Plans from Used Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	3%
8	<p>1.Drawing Residential Building Construction Floor Pattern Plans</p> <p>2.Drawing Ceiling Plans for Residential Building Construction</p>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> Residential Building Construction Floor Pattern Plans; Residential Building Construction Ceiling Plan <b>Library :</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	4%
9	<p>1.Drawing Electrical Installation Plans for Residential Building Construction</p> <p>2.Drawing Wiring Diagrams</p>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> Residential Building Construction Electrical Installation Plans; Wiring Diagram <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	3%

10	<p>1.Drawing Structural Details of Foundations and Sloofs for Residential Building Construction</p> <p>2.Create Reinforcement Tables for Beams, Columns and Floor Plates for Residential Building Construction</p> <p>3.Drawing of Structural Details of Reinforcement Connections for Residential Building Construction</p>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> Structural Details of Foundations and Sloofs for Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p> <hr/> <p><b>Material:</b> Table of Reinforcement of Beams, Columns and Floor Plates for Residential Building Construction <b>Library:</b> <i>Husen Abrar. 2011. Project Management. Yogyakarta: Andi.</i></p> <hr/> <p><b>Material:</b> Structural Details of Reinforcing Joints in Residential Building Construction <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	4%
11	<p>1.Students can calculate the RAB for Structural Work for Residential Building Construction</p> <p>2.Students can calculate the RAB for Architectural Work for Residential Building Construction</p> <p>3.Students can calculate the RAB for MEP Work for Residential Building Construction</p> <p>4.Students can calculate the material requirements for each Residential Building Work</p>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> RAB Structural Work for Residential Building Construction; RAB Architectural Work for Residential Building Construction; RAB MEP Work for Residential Building Construction; material requirements for each Residential Building Work <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	3%

12	<ol style="list-style-type: none"> <li>1. Students can calculate the RAB for Structural Work for Residential Building Construction</li> <li>2. Students can calculate the RAB for Architectural Work for Residential Building Construction</li> <li>3. Students can calculate the RAB for MEP Work for Residential Building Construction</li> <li>4. Students can calculate the material requirements for each Residential Building Work</li> </ol>		<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment</p>	<p>Discussion and Case Study 4 x 50</p>		<p><b>Material:</b> RAB Structural Work for Residential Building Construction; RAB Architectural Work for Residential Building Construction; RAB MEP Work for Residential Building Construction; material requirements for each Residential Building Work <b>Library:</b> <i>Widiasanti Irika, Lenggogeni. 2013. Construction Management. Bandung: Rosdakarya Youth.</i></p>	4%
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16			<p><b>Form of Assessment :</b> Project Results Assessment / Product Assessment, Test</p>				50%

**Evaluation Percentage Recap: Project Based Learning**

No	Evaluation	Percentage
1.	Project Results Assessment / Product Assessment	75%
2.	Test	25%
		100%

## 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.