

## Universitas Negeri Surabaya Faculty of Engineering Civil Engineering Undergraduate Study Program

Document Code

| SEMESTER LEARNING PLAN                                    |             |  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|---|-------------|--|---|--|---|---|---|--|--|---|-----------------------------------|------------------------|--|----------------|---------------|------------------------|-----------------|------------|-------|------|--|----------|------------------------------|-----------|-------------------------|-------|-----|--|
| Courses   |             |  |   | CODE   |   |   |   | Cou  | Course Family                                |   |                                   |                        |  |                | Credit Weight |                        |                 |            |       | SE   | ME                                       | ST       | ER                           | Co<br>Dat |                         | ation |     |  |
| Project Control Techniques                                |             |  |   | 2220102126   |   |   |   |  |  |   |                                   |                        |  |                |               | T=2                    | 2 P=0 ECTS=3.18 |            |       |      | -  | 7        |                              | Jul       | / 18,                   | 2024  |     |  |
| AUTHORIZATION   |             |  |   | SP Dev   | elopei  | r   |   |  |  | Course Clu                              |                                   |                        |  |                | Clu           | ster                   | Co              | ord        | nat   | or   |  | St<br>Co | Study Program<br>Coordinator |           |                         |       |     |  |
|   |             |  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      | Yogie Risdianto, S.T., M.T.              |          |                              |           | M.T.                    |       |     |  |
| Learning<br>model   |             | Case Studies   |   |  |   |   |   |  |  |   |                                   | I                      |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
| Program   |             | PLO study prog   | gram ti   | hat is cł  | narge   | d to th   | e cou   | rse  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
| Learning<br>Outcom  | )<br>es     | Program Objectives (PO)  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
| (PLO)   |             | PLO-PO Matrix  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             |  | P.0   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             | PO Matrix at the   | e end o   | of each  | learni  | ng sta  | age (S  | ub-P   | 0)   |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             |  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             |  | P.  | .0   |   |   |   |  |  |   |                                   |                        | Wee  |                | ۰k            |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             |  |   | 1  | 2   | 3   | 4   | 5  | 6  | ô                                       | 7                                 | 8                      |  | 9              |               | 10                     |                 | 11         |       | 12   | 1  | 3        | 14                           | 4         | 1                       | 5     | 16  |  |
| Short<br>Course<br>Description                            |             | This course discu<br>include cost contr<br>subject matter wit  | ol, time  | e control,   | resou   | rce co  | ntrol (la   | abor a   | nd m   | nater                                   | ials).                            | İmp                    | lem  | entir          | ng d          | cour                   | se l            | earr       | ning  | as o | ptim                                     |          |                              |           |                         |       |     |  |
| Reference   | ces         | Main :   |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             | <ol> <li>Suryanto</li> <li>Nugraha</li> <li>Soeharto</li> <li>Widiasan</li> <li>Husen Al</li> <li>Ervianto</li> <li>Mubarak</li> </ol> | Paulus<br>Iman.<br>ti Irika,<br>orar. 20<br>I. W. 20  | , Natan Is<br>2001. Ma<br>Lenggog<br>11. Mana<br>004. Teor | shak, S<br>anajem<br>jeni. 20<br>ajemer<br>i 13Ap | Sutjipto<br>en Pro<br>013. M<br>n Proye<br>likasi N | 9 R. 19<br>vyek da<br>anajen<br>ek . Yo<br>Manaje | 85. Ma<br>ari Kon<br>nen Ko<br>gyaka<br>men F  | anaje<br>isepti<br>onstru<br>rta: A<br>Proye | emer<br>ual S<br>uksi<br>Andi.<br>ek Ko | n Prog<br>Samp<br>. Bar<br>onstru | yek k<br>ai O<br>Idung | Kon<br>per<br>g: F                               | struł<br>asioi | ksi 2<br>nal  | 2 . S<br>Jilid         | ural<br>2.      | bay<br>Jak | arta: |      |  |          |                              |           |                         |       |     |  |
| Supporters:   |             |  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
|   |             |  |   |  |   |   |   |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
| Supporti<br>lecturer                                      | ing         | Ir. Mas Suryanto<br>Dr. Gde Agus Yu  |   |  | stana,  | S.T., N   | 1.T.  |  |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          |                              |           |                         |       |     |  |
| Week-   | eac<br>stag | nal abilities of<br>the learning<br>age  |   | Evaluation   |   |   |   |  |  |   |                                   | s                      | Help Lea<br>Learning r<br>Student Ass<br>Estimat |                |               | methods,<br>signments, |                 |            |       | n    | Learning<br>materials<br>[<br>References |          | s                            |           | Assessmen<br>Weight (%) |       |     |  |
|   |             |  |   | ndicator   |   | Criteria &  |   | Form   | m C  |   | offline                           | •                      | fflin  | ne)            |               | (                      | Onli            |            |       | ine  | )  |          |                              | ]         |                         |       |     |  |
| (1)   | Ma          | (2)  |   | (3)  |   | <b>•</b> · ·  | . (4)   |  |  |   |                                   | (5)                    |  |                | _             |                        |                 | (          | 6)    |      |  |          | (                            | 7)        |                         |       | (8) |  |
| 1 Mastering the basic<br>principles of project<br>control |             | n<br>p<br>2.E<br>p<br>c<br>3.F<br>c<br>c<br>v<br>a   | Describe the<br>nature of<br>project control<br>Explain the<br>project<br>planning and<br>control cycle<br>Provide<br>examples of<br>control over<br>various<br>aspects or<br>objects |  |   | %   |   | Learning Model:<br>Cooperative Learning<br>Learning Method:<br>Lecture, Discussion &<br>Assignment Approach:<br>Scientific<br>2 X 50 |  |   |                                   |                        |  |                |               |                        |                 |            |       |      |  |          | 0%                           | )         |                         |       |     |  |

| , |   | :  |                                |   |  | 1  |
|---|---|--|--------------------------------|---|--|----|
| 2 | Mastering the<br>principles of<br>conceptual stage<br>project control                               | Explaining the<br>control process<br>carried out at the<br>conceptual stage<br>Formulating<br>activities at the<br>conceptual stage<br>Explaining control<br>benchmarks at the<br>conceptual stage   | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>2 X 50 |  | 0% |
| 3 | Mastering the<br>principles of project<br>control in the<br>planning and<br>consolidation<br>stages | Explain the control<br>process carried<br>out at the planning<br>and stabilization<br>stage. Formulate<br>activities at the<br>planning and<br>consolidation<br>stage. Explain<br>control<br>benchmarks at the<br>planning and<br>consolidation<br>stage.                      | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative Learning<br>Learning Method:<br>Lecture, Discussion &<br>Assignment Approach:<br>Scientific<br>2 X 50  |  | 0% |
| 4 | Mastering the<br>principles of<br>implementation<br>stage project<br>control                        | <ol> <li>Explain the<br/>control process<br/>carried out at<br/>the<br/>implementation<br/>stage</li> <li>Formulate<br/>activities at the<br/>implementation<br/>stage</li> <li>Explain control<br/>benchmarks at<br/>the<br/>implementation<br/>stage</li> </ol>              | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>2 X 50 |  | 0% |
| 5 | Mastering the<br>principles of project<br>cost control  | <ol> <li>Explain the<br/>meaning of<br/>project cost<br/>control</li> <li>Explain the<br/>objectives of<br/>project cost<br/>control</li> <li>Identify project<br/>cost control<br/>methods</li> <li>Find ways to<br/>control project<br/>costs</li> </ol>                     | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>2 X 50 |  | 0% |
| 6 | Mastering the<br>principles of project<br>time control  | <ol> <li>Explain the<br/>meaning of<br/>project time<br/>control</li> <li>Explain the<br/>purpose of<br/>project time<br/>control</li> <li>Identify project<br/>time control<br/>methods</li> <li>Find ways to<br/>control project<br/>time</li> </ol>                         | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>2 X 50 |  | 0% |
| 7 | Mastering the<br>principles of project<br>workforce control   | <ol> <li>Explain the<br/>meaning of<br/>project<br/>workforce<br/>control</li> <li>Explain the<br/>purpose of<br/>project labor<br/>control</li> <li>Identify project<br/>labor control<br/>methods</li> <li>Find ways to<br/>control the<br/>project<br/>workforce</li> </ol> | Criteria:<br>Essay 100%        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>2 X 50 |  | 0% |
| 8 | Meeting 01-07   | Meeting 01-07  | <b>Criteria:</b><br>Essay 100% | Sub Summative Exam<br>3 X 50  |  | 0% |

| 9  | Mastering the<br>application<br>principles of the<br>Time Cost Trade<br>Off (TCTO) method  | <ol> <li>Explain the<br/>terminology of<br/>the relationship<br/>between cost<br/>and time</li> <li>Explain the<br/>purpose of the<br/>TCTO method</li> <li>Explains the<br/>procedure for<br/>accelerating<br/>duration with<br/>TCTO</li> <li>Applying the<br/>TCTO method</li> </ol> | Criteria:<br>Essay 100%                        | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Lecture,<br>Discussion &<br>AssignmentApproach:<br>Scientific<br>4 X 50     | 0% |  |
|----|--|---|--|---|----|--|
| 10 |  |   |  |   | 0% |  |
| 11 | Mastering the<br>principles of project<br>control reporting  | 1.Examining the<br>components of<br>daily, weekly<br>and monthly<br>report formats<br>2.Create daily,<br>weekly and<br>monthly project<br>report formats  | Criteria:<br>Check list 100%                   | Learning Model:<br>Project Based<br>LearningLearning<br>Method: Experiment,<br>discussion,<br>AssignmentApproach:<br>Scientific<br>2 X 50 | 0% |  |
| 12 | Mastering the<br>principles of<br>construction project<br>control techniques<br>(waterworks,<br>buildings, roads<br>and bridges) | Explain the<br>implementation of<br>construction<br>project control<br>techniques<br>(waterworks,<br>buildings, roads<br>and bridges)   | Criteria:<br>Presentations and<br>Reports 100% | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Discussion &<br>Assignment<br>PresentationApproach:<br>Scientific<br>8 X 50 | 0% |  |
| 13 | Mastering the<br>principles of<br>construction project<br>control techniques<br>(waterworks,<br>buildings, roads<br>and bridges) | Explain the<br>implementation of<br>construction<br>project control<br>techniques<br>(waterworks,<br>buildings, roads<br>and bridges)   | Criteria:<br>Presentations and<br>Reports 100% | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Discussion &<br>Assignment<br>PresentationApproach:<br>Scientific<br>8 X 50 | 0% |  |
| 14 | Mastering the<br>principles of<br>construction project<br>control techniques<br>(waterworks,<br>buildings, roads<br>and bridges) | Explain the<br>implementation of<br>construction<br>project control<br>techniques<br>(waterworks,<br>buildings, roads<br>and bridges)   | Criteria:<br>Presentations and<br>Reports 100% | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Discussion &<br>Assignment<br>PresentationApproach:<br>Scientific<br>8 X 50 | 0% |  |
| 15 | Mastering the<br>principles of<br>construction project<br>control techniques<br>(waterworks,<br>buildings, roads<br>and bridges) | Explain the<br>implementation of<br>construction<br>project control<br>techniques<br>(waterworks,<br>buildings, roads<br>and bridges)   | Criteria:<br>Presentations and<br>Reports 100% | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Discussion &<br>Assignment<br>PresentationApproach:<br>Scientific<br>8 X 50 | 0% |  |
| 16 | Mastering the<br>principles of<br>construction project<br>control techniques<br>(waterworks,<br>buildings, roads<br>and bridges) | Explain the<br>implementation of<br>construction<br>project control<br>techniques<br>(waterworks,<br>buildings, roads<br>and bridges)   | Criteria:<br>Presentations and<br>reports 100% | Learning Model:<br>Cooperative<br>LearningLearning<br>Method: Discussion &<br>Assignment<br>PresentationApproach:<br>Scientific<br>2 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.
- 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. 4.

- 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. Learning Methods: Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative
- 9. 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.