

## Universitas Negeri Surabaya Faculty of Mathematics and Natural Sciences Data Science Undergraduate Study Program

Document Code

## SEMESTER LEARNING PLAN

| Courses                        |   | CODE         | Course<br>Family | 0   | Credit Weight                 |     |          | SEMESTER   | Compilation<br>Date                  |  |  |
|--------------------------------|---|--------------|------------------|-----|-------------------------------|-----|----------|------------|--------------------------------------|--|--|
| Business Intelligence          |   | 4920203026   | -                | 1   | T=3                           | P=0 | ECTS=4.7 | <b>7</b> 7 | July 18, 2024                        |  |  |
| AUTHORIZATION                  |   | SP Developer |                  |     | Course Cluster<br>Coordinator |     |          |            | Study Program<br>Coordinator         |  |  |
|                                |   |              |                  |     |                               |     |          |            | Yuliani Puji Astuti, S.Si.,<br>M.Si. |  |  |
| Learning<br>model              | Project Base  | d Learning   |                  |     |                               |     |          |            |                                      |  |  |
| Program                        | PLO study program that is charged to the course   |              |                  |     |                               |     |          |            |                                      |  |  |
| Learning<br>Outcomes           | Program Objectives (PO)   |              |                  |     |                               |     |          |            |                                      |  |  |
| (PLO)                          | PLO-PO Matrix   |              |                  |     |                               |     |          |            |                                      |  |  |
|                                | P.0   |              |                  |     |                               |     |          |            |                                      |  |  |
|                                | PO Matrix at the end of each learning stage (Sub-PO)  |              |                  |     |                               |     |          |            |                                      |  |  |
|                                |   |              |                  |     |                               |     |          |            |                                      |  |  |
|                                |   | P.O Week     |                  |     |                               |     |          |            |                                      |  |  |
|                                |   | 1 2 3 4      | 1 5 6            | 6 7 | 8                             | 9   | 10 11    | 12 13 14   | 15 16                                |  |  |
|                                |   |              |                  |     | . 1                           |     | 1        | I          | ·1                                   |  |  |
| Short<br>Course<br>Description | This course studies the decision-making process from the perspective of professional workers and managerial people; The strait was also introduced to the tools and methods available in information technology to support this process. Additionally it explains when these methods are used and the reasons why so many executive support systems do not achieve their desired goals; and organizational culture and issues involved in the use of Information Technology tools and techniques. Students will also gain practical knowledge and experience in decision support and business intelligence systems through the use of BI software such as Tableu and Power BI.  |              |                  |     |                               |     |          |            |                                      |  |  |
| References                     | Main :  |              |                  |     |                               |     |          |            |                                      |  |  |
|                                | <ol> <li>Turban, E., Delen, D., Sharda, R. (2014). Business Intelligence and<br/>Analytics: Systems for Decision Support. United Kingdom: Pearson.</li> <li>Delen, D., Sharda, R., Liang, T., Turban, E. (2018). Business Intelligence,<br/>Analytics, and Data Science: A Managerial Perspective. United Kingdom:<br/>Pearson.</li> <li>Sauter, V. L. (2011). Decision Support Systems for Business Intelligence.<br/>United Kingdom: Wiley.</li> <li>Deckler, G. (2022). Learn Power BI: A Comprehensive, Step-by-step Guide<br/>for Beginners to Learn Real-world Business Intelligence. United Kingdom:<br/>Packt Publishing.</li> <li>Meier, M., Baldwin, D. (2021). Mastering Tableau 2021: Implement<br/>Advanced Business Intelligence Techniques and Analytics with Tableau, 3rd<br/>Edition. United Kingdom: Packt Publishing.</li> <li>Worlikar, S., Kawamoto, E., Arumugam, T., Patel, H. (2021). Amazon<br/>Redshift Cookbook: Recipes for Building Modern Data Warehousing<br/>Solutions. United Kingdom: Packt Publishing</li> </ol> |              |                  |     |                               |     |          |            |                                      |  |  |
|                                | Supporters:   |              |                  |     |                               |     |          |            |                                      |  |  |
|                                |   |              |                  |     |                               |     |          |            |                                      |  |  |
|                                |   |              |                  |     |                               |     |          |            |                                      |  |  |

| Support<br>lecturer | ing   |  |            |                 |                              |   |                    |            |
|---------------------|---|--|------------|-----------------|------------------------------|---|--------------------|------------|
| Week-               | Final<br>abilities of<br>each<br>learning<br>stage<br>(Sub-PO)<br>(2) |  | Evaluation |                 | Le<br>Stue<br>[              | Help Learning,<br>arning methods,<br>dent Assignments,<br>Estimated time] | Learning materials | Assessment |
|                     |   |  | Indicator  | Criteria & Form | Offline<br>(<br>offline<br>) | Online ( <i>online</i> )  | References         | Weight (%) |
| (1)                 |   |  | (3)        | (4)             | (5)                          | (6)   | (7)                | (8)        |
| 1                   |   |  |            |                 |                              |   |                    | 0%         |
| 2                   |   |  |            |                 |                              |   |                    | 0%         |
| 3                   |   |  |            |                 |                              |   |                    | 0%         |
| 4                   |   |  |            |                 |                              |   |                    | 0%         |
| 5                   |   |  |            |                 |                              |   |                    | 0%         |
| 6                   |   |  |            |                 |                              |   |                    | 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

- 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.