INSTITUT TEKNOLOGI SEPULUH NOPEMBER
FACULTY OF SCIENCE AND DATA ANALYTICS
DEPARTMENT OF STATISTICS
STATISTICS UNDERGRADUATE PROGRAM

Course	Course Name	:	**Operations Management**
	Course Code	:	SS234631
	Credit	:	3 SKS
	Semester	:	VI

COURSE DESCRIPTION

Operations Management (OM) is one of the main courses in the field of industry. By studying Operations Management, the application of Statistical Methods in the industry becomes more specific. In OM will be studied 10 decisions that are often done in the factory, namely product design, process design, quality management, capacity planning, location management, facility layout planning, human resource management, supply chain management, inventory management, scheduling and maintenance. To achieve this, the learning strategy used is discussion, training, and training that is equipped with field lecture activities, namely visiting the factory to find out the implementation of Operations Management in the company.

PROGRAM LEARNING OUTCOME

PLO-7	Able to use modern computing devices to solve statistical problems
PLO-9	Able to apply statistical methods to analyze theoretical and real problems
PLO-10	Able to apply business, industrial, economic, social, environmental or health statistical methods to real problems

COURSE LEARNING OUTCOME

CLO.1	Can explain 10 decision areas in Operations Management
CLO.2	Able to formulate solutions to Operations Management problems
CLO.3	Able to apply statistical methods in Operations Management to perform data analysis
CLO.4	Able to identify, formulate, and solve statistical problems using Operations Management techniques
CLO.5	Able to use computational techniques and modern computer devices needed to solve Operations Management problems

MAIN SUBJECT

1. MO and Productivity
2. Global Strategy
3. Quality Controlling
4. Product and Services Design
5. Location Strategy
6. Process Strategy and Capacity Planning
7. Human Resources
8. Supply Chain Management

9. Inventory Management
10. Aggregate Planning
11. Material Requirement Planning
12. Scheduling
13. Maintenance Management

PREREQUISITE

Mathematics Statistics

REFERENCES

1. Dhillon, B. S., 2006. Maintainability, maintenance, and reliability for engineers. CRC Press Taylor dan Francis Group.
2. Ebeling, C., 2010. An Introduction to Reliability and Maintainability Engineering. 2nd edition. Canada : Waveland Press, Inc.