MODULE HANDBOOK
QUALITY CONTROL

BACHELOR DEGREE PROGRAM
DEPARTMENT OF MATHEMATICS
FACULTY OF SCIENCE AND DATA ANALYTICS

INSTITUT TEKNOLOGI SEPULUH NOPEMBER

MODULE HANDBOOK
QUALITY CONTROL

Module name	**Quality Control**
Module level	Undergraduate
Code	KM184720
Course (if applicable)	Quality Control
Semester	Fall (Ganjil)
Person responsible for the module	Dra. Laksmi Prita Wardhani, M.Si
Lecturer	Dra. Laksmi Prita Wardhani, M.Si
Language	Indonesia and English
Relation to curriculum	Undergraduate degree program, **elective**, 7th semester.
Type of teaching, contact hours	Lectures, <60 students
Workload	1. Lectures : 2 x 50 = 100 minutes per week. 2. Exercises and Assignments : 2 x 60 = 120 minutes (2 hours) per week. 3. Private learning : 2 x 60 = 120 minutes (2 hours) per week.
Credit points	2 credit points (sks)
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.
Mandatory prerequisites	Statistical Methods Probability Theory
Learning outcomes and their corresponding PLOs	Course Learning Outcome (CLO) after completing this module, CLO-1 Be able to understand the concept of statistical quality control and improvement of a process and analyze it. CLO-2 Be able to identify and analyze quality data in a process to draw conclusions about the quality and capability of the process and present it scientifically. CLO-3 Be able to complete and provide alternative solutions in quality improvement with an approach that is studied both independently and in teamwork.
Content	This course introduces the concept of control and statistical quality improvement. Furthermore, it discusses methods of control and quality improvement based on statistics, including control charts,

	process capability, acceptance sampling and operating characteristic curves.
Study and examination requirements and forms of examination	• In-class exercises • Assignment 1, 2 • Mid-term examination • Final examination
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading lists	Main: 1. Mitra A, "Fundamentals of Quality Control and Improvement", Jon Wiley and Sons Inc, 2008. 2. Montgomery C. Douglas, Statistical Quality Control, Wiley, 2009 Supporting: -