



MODULE HANDBOOK SOFTWARE ENGINEERING

**BACHELOR DEGREE PROGRAM
DEPARTMENT OF MATHEMATICS
FACULTY OF SCIENCE AND DATA ANALYTICS
INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

MODULE HANDBOOK

SOFTWARE ENGINEERING

Module name	Software Engineering	
Module level	Undergraduate	
Code	KM184827	
Course (if applicable)	Software Engineering	
Semester	Spring (Genap)	
Person responsible for the module	Dr. Imam Mukhlash, S.Si, MT	
Lecturer	Dr. Imam Mukhlash, S.Si, MT	
Language	Indonesia and English	
Relation to curriculum	Undergraduate degree program, elective , 8 th 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	Object Oriented Programming	
Learning outcomes and their corresponding PLOs	Course Learning Outcome (CLO) after completing this module, CLO-1 Mastering the concept and model of object-oriented software development, functional and combined both (UML) and create software development documentation. CLO-2 Be able to complete and provide alternative solutions in software development either with the approach being studied either independently or in teamwork.	
Content	This course discusses the concepts and models of object-oriented, functional and both functional and combined (UML) software development, accompanied by making development documentation. Broadly speaking, this course material includes the basic concepts of software development, the OT development stage, the concept of system analysis and modeling, the concept of system design and	

	<p>modeling, implementation and testing, an introduction to OT project management. The lecture method includes class tutorials and discussions. In addition, to train cooperation and communication, software development projects will be given which will be completed in groups and given in the middle to the end of the lecture.</p> <p>The assessment method consists of written evaluation and assessment of the process and documentation of the results of the analysis, design and modeling, and how to present them.</p>
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • In-class exercises • Assignment 1, 2 • Mid-term examination • Final examination
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading lists	<p>Main:</p> <ol style="list-style-type: none"> 1. Roger S Pressman, Software Engineering: A Practitioner's approach, 8th ed, McGraw Hill , 2012. <p>Supporting:</p> <ol style="list-style-type: none"> 1. Ian Sommerville: Software Engineering, 8th ed, McGraw Hill, 2010.

