



**MODULE HANDBOOK
CAPITA SELECTA OF MODELING,
SYSTEM, AND SIMULATION**

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

MODULE HANDBOOK

CAPITA SELECTA OF MODELING, SYSTEM, AND SIMULATION

Module name	Capita Selecta of Modeling, System, and Simulation	
Module level	Undergraduate	
Code	KM184819	
Course (if applicable)	Capita Selecta of Modeling, System, and Simulation	
Semester	Spring (Genap)	
Person responsible for the module	Dr. Tahiyatul Asfihani, S.Si., M.Si.	
Lecturer	Dr. Tahiyatul Asfihani, S.Si., M.Si.	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, elective , 8 th semester.	
Type of teaching, contact hours	Lectures, <60 students Tuesdays, 11.00-12.50 (GMT+7)	
Workload	<ol style="list-style-type: none"> 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 75% of the lectures to sit in the exams.	
Mandatory prerequisites	-	
Learning outcomes and their corresponding ILOs	<p>Course Learning Outcome (CLO) after completing this module,</p> <p>Students who are able to study new topics of analysis and algebra.</p> <p>Students are able to understand and relay material from paper / related papers in the form of presentation</p>	<p>CLO-01</p> <p>CLO-02</p>
Content	In this lecture, new topics regarding modeling, optimization and other applications are examined. The study of papers / papers on these topics is presented in the form of discussions and presentations. It is expected that the topics of the final project will emerge.	

Study and examination requirements and forms of examination	<ul style="list-style-type: none"> • In-class exercises • Assignment 1, 2, 3 • Mid-term examination • Final examination
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading list	Main : 1. Books and papers for related topics Supporting :