



# MODULE HANDBOOK ANALYSIS II

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

Module name	<b>Analysis II</b>	
Module level	Undergraduate	
Code	KM184601	
Course (if applicable)	Analysis II	
Semester	Spring (Genap)	
Person responsible for the module	<b>Drs. Sadjidon, M.Si</b>	
Lecturer	<b>Drs. Sadjidon, M.Si</b>	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, <b>mandatory</b> , 6 <sup>th</sup> semester.	
Type of teaching, contact hours	Lectures, <60 students	
Workload	<ol style="list-style-type: none"> <li>1. Lectures : 4 x 50 = 200 minutes per week.</li> <li>2. Exercises and Assignments : 4 x 60 = 240 minutes (4 hours) per week.</li> <li>3. Private learning : 4 x 60 = 240 minutes (4 hours) per week.</li> </ol>	
Credit points	4 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	Analysis I	
Learning outcomes and their corresponding PLOs	<p>Course Learning Outcome (CLO) after completing this module,</p> <p>CLO 1: Students are able to explain the definition of forecasting and quantitative forecasting methods</p> <p>CLO 2: Students are able to determine data patterns and trends</p> <p>CLO 3: Students are able to compare several forecasting models for time series data, and determine the best suitable model</p>	

Content	In this course, students will be given an explanation of Riemann's integrated functions and the convergence of function sequences and function series as well as an understanding of topology in real space and continuous linear operators.
Study and examination requirements and forms of examination	<ul style="list-style-type: none"> <li>● In-class exercises</li> <li>● Assignment 1, 2, 3</li> <li>● Mid-term examination</li> <li>● Final examination</li> </ul>
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading list	<p>Main:</p> <ol style="list-style-type: none"> <li>1. Bartle, R.G., Sherbert, 2010, " Introduction to Real Analysis, Fourth Edition</li> <li>2. Bryan P. Rynne and Martin A Youngson, 2001, Linear Functional Analysis</li> </ol> <p>Supporting:</p> <p>-</p>