



MODULE HANDBOOK

Analytic Geometry

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

MODULE HANDBOOK

ANALYTIC GEOMETRY

Module name	Analytic Geometry	
Module level	Undergraduate	
Code	KM184103	
Course (if applicable)	Analytic Geometry	
Semester	Fall(Gasal)	
Person responsible for the module	Drs. I Gst Ngr Rai usadha, M.Si	
Lecturer	Drs. I Gst Ngr Rai usadha, M.Si Drs.lis Herisman, M.Si Dra. Wahyu Fistia Doctorina, M.Si Muhammad Luthfi Shahab, S.Si, M.Si	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, mandatory , 1 st semester.	
Type of teaching, contact hours	Lectures, <60 students Tuesdays, 11.00-12.50 (GMT+7)	
Workload	1. Lectures : 3 x 50 = 150 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	3 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to join the exams.	
Mandatory prerequisites	-	
Learning outcomes and their	Course Learning Outcome (CLO) after completing this module,	

corresponding ILOs	<p>1. Mahasiswa mampu menjelaskan prinsip-prinsip dasar dari Teori yang dipahaminya khususnya berkaitan dengan bangun pada bidang datar.</p> <p><i>Students able to explain basic principles of theory related to objects in plane geometry.</i></p> <p>2. Mahasiswa mampu memvisualkan topik-topik Geometri ke dalam Software Aplikasi Geogebra.</p> <p><i>Students are able to visualize Geometry topics into Geogebra Application Software.</i></p> <p>3. Mahasiswa mampu mengaitkan konsep dasar geometri datar dan beberapa aplikasinya.</p> <p><i>Students able to relate basic concepts of plane geometry to some applications.</i></p>	
Content	<p>Pada mata kuliah ini mahasiswa akan belajar tentang Koordinat Kartesius, tempat kedudukan titik-titik dan persamaannya, Geometry magnitute; Jenis-jenis Irisan kerucut, Persamaan garis singgung dan garis normal, Tansformasi koordinat. Mahasiswa akan belajar untuk memahami dan bisa menjelaskan materi geometri analitik khususnya geometri datar.</p> <p><i>In this course students will learn about Cartesian coordinates, the locus of points and their equations, Geometry magnitude; Types of conic sections, Equations of tangents and normal lines, Coordinate transformation. Students will learn to understand and be able to explain analytic geometry material, especially flat geometry.</i></p>	
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	<p>Main :</p> <p>Riddle D. F., "Analytic Geometry", PWS Publishing Company, Boston, 1995</p> <p>Supporting :</p> <p>Parker, L., George Wentwoprth, David Eugene Smith; Analitic Geometry; Ginn and Company; Boston; 1922</p>	

