

Matematika Teknik I

Course Brief Description:	This course is designed to develop and expand students' critical thinking skills by implementing strategies that will help them interpret, analyze, evaluate, conclude, and synthesize the concepts learned in this course and develop greater knowledge and understanding of mathematics and to achieve skills that necessary for success in studies (Mathematical Engineering II).
Course Learning Objectives:	The course is designed to challenge students to further develop and extend their critical thinking skills by applying strategies which will help them interpret, analyze, evaluate, infer, and synthesize concepts studied in this course and develop greater knowledge and understanding of mathematics and to attain the skills necessary for success in the study of subsequent mathematics (Mathematical Engineering II).
Related Expected Learning Outcomes (ELOs):	<ul style="list-style-type: none">• ELO-3: Apply knowledge of mathematics, sciences, and engineering principles in agricultural fields.• ELO-4: Use quantitative analysis, information technology and critical thinking in agricultural engineering profession.• ELO-7: Ability to design simple equipment, components, or processes needed in agricultural engineering operations.• ELO-10: Explore and develop effective solutions related to agricultural engineering issues.
Teaching Method	<ul style="list-style-type: none">• Lecture• Tutorial• Independent assignment.
Grading Policy	<ul style="list-style-type: none">• Quiz and Assignment: 20%• Mid Test: 40%• Final Test: 40%
Reference	Stroud, K.A., 1987. Engineering Mathematics, 3-ed. The Macmillan Press, Ltd.
Lecturer Name	<ul style="list-style-type: none">• Dr. Ir. Sitti Nur Faridah, MP• Dr. Ir. Mahmud Achmad, MP• Ir. Helmi A. Koto, M.Si• Dr. Suhardi, STP., MP

Course Outline

Lecture	Topic:
1	Pendahuluan

Lecture	Topic:	
2	Limit dan Fungsi	Quiz 1
3	Fungsi transenden	
4	Turunan (derivative)	Assignment 1
5	Derivative fungsi transenden	
6	Aplikasi sederhana deferensiasi	
7	Deret Sederhana	Assignment 2
8	Mid Test	
9	Integral infinite	Assignment 3
10	Integral terbatas	
11	Aplikasi Integral terbatas I	Quiz 2
12	Intergral Berganda	
13	Teori Himpunan	Assignment 4
14	Aljabar Bolle	
15	Penerapan Aljabar Bolle	
16	Final Exam	