Department of Mathematics
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Course	**Course Name**	**: Statistical Methods**
	Course Code	**: KM184305**
	Credit	**: 3**
	Semester	**: 3**

Description of Course
This course is a basic course that is a prerequisite for taking some further courses in the department of Mathematics. This course deals with basic concepts of statistics, descriptive statistics, random variable distributions, special opportunity distributions, average sampling distributions, hose estimates of parameters, hypothesis tests, and simple linear regression. The introduction of the Minitab program is done as a tool to solve simple problems related to data processing and analysis.

Learning Outcome	
PLO 1	[C2] Students are able to identify and explain foundations of mathematics that include pure, applied, and the basic of computing
PLO 2	[C3] Students are able to solve simple and practical problems by applying basic mathematical statements, methods and computations
PLO 3	[C4] Students are able to analyze simple and practical problems in at least one field of analysis, algebra, modeling, system optimizations and computing sciences

Course Learning Outcome
1. Students are able to understand simple statistical problems, analyze with statistical basic methods, and solve them. 2. Students are able to identify data, analyze it using appropriate basic statistical methods, present it orally and written in academic way.

3. Students are able to be responsible for the conclusions drawn based on data and methods which have learnt during the course.

Main Subject

Basic concepts of statistics, descriptive statistics, random variable distribution, special opportunity distributions, average sampling distributions, hose estimates of parameters, hypothesis testing, and simple linear regression

Prerequisites

Mathematics II

Reference

1. Walpole, R.E, Pengantar statistika, edisi 3, Gramedia, Jakarta, 2002
2. Walpole, R.E, Ilmu Peluang dan Statistika untuk Insinyur dan Ilmuwan, edisi 3, ITB, Bandung, 2000
3. Gouri, BC., Johnson RA, Statistical Concepts and Methods, John Wiley and Sons, New York, 1977
4. Walpole, RE, Probability and Statistics for Engineer and Scientis, , 2016

Supporting Reference

1. Draper NR, Smith H., Analisis Regresi Terapan, Gramedia, Jakarta, 1992
2. Spiegel RM, Probability and Statistics, Kin Keong Print, Singapore, 1985