

Pengenalan Sistem Informasi

Course Brief Description:	This course introduces students to information system and its application in agricultural engineering field. Topics that will be covered include introduction to information systems, basic concepts, components and types of information system, database development, development of information system based applications, and application of information system for Geographical Information System.
Course Learning Objectives:	[1] Explain the concept of information systems. [2] Provide examples of the application of information systems in various fields.
Related Expected Learning Outcomes (ELOs):	<ul style="list-style-type: none"> • ELO-5: Manage and utilize agricultural resources effectively, efficiently, and sustainably.
Teaching Method	<ul style="list-style-type: none"> • Lecture and in-depth discussion • Tutorial • Independent assignment
Grading Policy	<ul style="list-style-type: none"> • Quiz and Assignment : 20% • Exam : 80%
Reference	<ul style="list-style-type: none"> • O'Brien, J. A. and G. M. Marakas. 2010. Introduction to Information Systems 5th Ed. McGraw-Hill Companies, Inc., New York. • Stair, R. M. and G. W. Reynolds. 2012. Fundamentals of Information Systems 6th Ed. Course Technology, Cengage Learning, Boston.
Lecturer Name	<ul style="list-style-type: none"> • Dr. Ir. Supratomo, DEA • Prof. Dr. Ir. Ahmad Munir, M.Eng • Samsuar, STP., M.Si.

Course Outline

Lecture	Topic
1	INTRODUCTION
	Information Concepts
	Data, Information, and Knowledge
	The Characteristics of Valuable Information
2	WHAT IS AN INFORMATION SYSTEM?
	Input, Processing, Output, Feedback
	Manual and Computerized Information Systems
	Computer-Based Information Systems
3 - 4	COMPUTER HARDWARE
	Computer Systems
	Hardware Components
	Processing and Memory Devices
	Secondary Storage and Input and Output Devices

Lecture	Topic
	Computer System Types
5	COMPUTER SOFTWARE
	Overview of Software
	Systems Software
	Utility Programs
	Application Software
	Programming Languages
6	Exam 1
7 – 10	DATABASE SYSTEMS
	Data Management
	Data Modeling and Database Char
	Database Management Systems
	Database Applications
11	Exam 2
12 – 15	TELECOMMUNICATIONS AND NETWORKS
	An Overview of Telecommunications
	Networks and Distributed Processing
	Use and Functioning of the Internet
	The World Wide Web
	Internet and Web Applications
	Intranets and Extranets
16	Final Exam