HANDBOOK

BACHELOR OF INFORMATICS PROGRAM
DEPARTMENT OF INFORMATICS
FACULTY OF INTELLIGENT ELECTRICAL AND INFORMATICS TECHNOLOGY
INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Module name	**Information System Design and Analysis**
Module level	Undergraduate
Code	IF184406
Courses (if applicable)	**Information System Design and Analysis**
Semester	4
Contact person	-
Lecturer	-
Language	Bahasa Indonesia and English
Relation to curriculum	1. Undergraduate degree program; mandatory; 4th semester. 2. International undergraduate program; mandatory; 4th semester.
Type of teaching, contact hours	1. Undergraduate degree program: lectures, < 60 students, 2. International undergraduate program: lectures, < 40 students
Workload	1. Lectures: 3 x 50 = 150 minutes (2 hours 30 minutes) per week. 2. Exercises and Assignments: 3 x 60 = 180 minutes (3 hours) per week. 3. Private study: 3 x 60 = 180 minutes (3 hours) per week.
Credit points	3 credit points (sks).
Requirements according to the examination	A student must have attended at least 80% of the lectures to sit in the exams.

regulations		
Mandatory prerequisites	Data Structures	
	After completing this module, a student is expected to:	

Learning outcomes and their corresponding PLOs	**CO1** Students understand the role of the Systems Analyst.	
	CO2 Students know the development of Information Systems.	
	CO3 Students are able to understand business processes and determine users needs	
	CO4 Students are able to model needs with process modeling, data and objects	
	CO5 Students understand and apply Information Systems development strategies	
	CO6 Students are able to translate the results of analysis modeling into designs that include architectural design, user interfaces and reports, programs and data storage.	
Content	Knowledge: • Mastering the concepts and principles: designing and building software with standard and scientific planning, requirements engineering, designing, implementing, testing, and launching methods, and producing software products that meet various technical and managerial quality parameters, and are efficient and mastering the concepts and principles: making simple programs in general programming languages and object-oriented programming languages, creating web applications and desktop applications, creating simple databases to solve problems in the context of software development in general. • Mastering the concepts and principles of capturing, processing and storing information in various forms. Specific Skill: • Able to analyze, design and build software using software engineering process principles to produce software that meets both technical and managerial quality. • Able to collect, digitize, and process data into new useful information using effective and efficient data storage and modeling.	
Study and examination requirements and forms of examination	Mid-terms examination and Final examination.	
Media employed	LCD, whiteboard, websites, books (as references), etc.	
Assessments and Evaluation		

Reading List	Dennis Wixom Roth, System Analysis & Design, 5 th, Wiley, 2009 Shelly Rosenblatt, Systems Analysis and Design, 8 th, Course Technology, 2010 Ian. Sommerville, Software Engineering, 9th ed., Addison-Wesley, 2011. M. Page-Jones, Fundamentals of Object-Oriented Design in UML, 1st ed., Addison-Wesley, 1999