

21B33C403 – Information Systems Design Analysis

Module designation	Information Systems Design Analysis (Undergraduate)
Semester(s) in which the module is taught	4 th
Person responsible for the module	M. Miftach Fakhri, M.Pd. Dewi Fatmarani Surianto, S.Kom., M.Kom.
Language	Indonesia – English
Relation to curriculum	This course is a compulsory course
Teaching methods	Lecture, Presentation
Workload (incl. contact hours, self-study hours)	CH: 09.00-17.00 Face to face: 3x50 minutes / week Independent Study: 3x50 minutes / week Structured assignment: 3x50 minutes / week
Credit points	3 SKS (equivalent 5.1 ECTS)
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	Program Learning Outcomes (PLO) PLO 2: Work together and have social sensitivity and concern for society and the environment PLO 3: Demonstrate a responsible attitude towards work in their field of expertise independently PLO 6: Mastering the basics of data analysis for research and development in Informatics and Computer Engineering Education PLO 7: Able to read information data and make appropriate decisions in the context of solving problems in the ICT field PLO 11: Able to apply mathematics, science and engineering principles to solve complex engineering problems in the field of informatics and computer engineering Course Learning Objectives (CLO) The Information System Design Analysis course is a course that explains in detail each stage of information system analysis and design starting from analyzing organizational needs to the design stage of a system based on the organization's needs.

	Sub CLO: Sub-CLO 1: Able to understand and mention and explain the concept of information system design analysis Sub-CLO 2: Able to understand organizational forms and their environments, management levels and organization culture that influence a system Sub-CLO 3: Able to conduct feasibility studies and carry out analyzes and be able to express them in depth form a project proposal to become a frame of reference in system development Sub-CLO 4: Able to understand data and information collection techniques Sub-CLO 5: Able to explain the form of a system in a data flow diagram Sub-CLO 6 Able to explain the details of the system described in DAD using a data dictionary Sub-CLO 7 Able to design systems according to analysis results Sub-CLO 8 Able to design the interface according to interface design rules Sub-CLO 9 Able to design good data entry procedures for end users of information systems Sub-CLO 10 Able to analyze and design information systems according to company needs
Content	Students will learn about: • Assuming the Role of the Systems Analyst • Understanding Organizational Style and Its Impact on Information Systems • Determining Feasibility and Managing Analysis and Design Activities • Information Gathering: Interactive Methods • Using Data Flow Diagrams • Analyzing Systems Using Data Dictionaries • Designing Effective Output • Designing Effective Input • Designing Databases • Designing User Interfaces • Accurate Designing • Data-Entry Procedures • Inventory information system
Examination forms	Assessment Techniques: Exam, Presentation, Case Based Learning Assessment Forms: Assignment, Presentation Assessment
Study and examination requirements	• Students have to inform the lecturer when they are not able to attend the class due to sickness etc • Active in making projects by showing participation in making projects in class • Able to present and answer questions that exist during project presentations
Reading List	• Systems Analysis and Design Kendall & Kendall Sixth Edition • Dennis, Alan., System Analysis and Design with UML, An object-oriented approach, 3rd Edition., WILEY, 2010

