Information System Analysis and Design

Course Title: Information System Analysis and Design					
Course Code: CIE62018	**Student Workload:** 8.50 Hours/ Weeks	**Credits:** 3 Credits (4.50 ECTS)	**Semester:** 4th Semester	**Frequency:** Even Semester	**Duration:** 16 Weeks/ Semester (*Lecture*: 14 weeks; *Midterm assessment*: 1 week; *Final assessment*: 1 week)

1	**Types of Courses:** Content Knowledge Course	**Contact Hours:** *Lecturing*: 2.50 Hours/ Week; *Practical Work*: 0.00 Hours/ Week	**Independent Study:** *Self-study:* 3.00 Hours/ Week; *Structured Assignment*: 3.00 Hours/ Week	**Class Size:** 40 Students
2	**Prerequisites for Participation** (If Applicable)**:** Information System and Business Process			
3	**Learning Outcomes:** 1. M1: Able to distinguish principles of information engineering, requirements engineering, and principles in software development initiatives (ILO-2)(0,4) 2. M2: Able to apply techniques, tools, and steps in the requirements engineering phase in the System Development Life Cycle (SDLC) aimed at defining problems so that they become requirements for software development initiatives in educational organizations or outside education (ILO-5) (0,4) 3. M3: Able to apply modeling techniques in analyzing and designing information systems both with structured and object-oriented approaches under appropriate methods (ILO-9) (0,2)			
4	**Subject aims/Content:** At the end of the course, students are expected: 1. L1: Able to define definitions, principles, objectives, and urgency of information engineering in Software development (M1) 2. L2: Able to distinguish the definitions, principles, and rules from the Analysis and Design phase in the System Development Life Cycle (SDLC) (M1) 3. L2: Able to distinguish the definitions, principles, and rules from the Requirement Engineering phase in the System Development Life Cycle (SDLC) (M2) 4. L3: Able to define and analyze software requirements and perform requirements modeling using a structured or object-oriented approach under the rules of writing requirements modeling language (M2) 5. L5: Able to define the components of the design model and perform modeling according to a structured or object-oriented approach (M3)			
5	**Teaching Methods:** Lecturing, Group Discussion, Case-Based Learning, Project-Based Learning			
6	**Assessment Methods:** Multiple-choice, essay, product assessment, project assessment, anecdotal record/logbook			
7	**This Course is Used in The Following Study Programme/s as Well:** -			
8	**Responsibility for Course:** 1. Aditya Rachmadi, S.ST., M.TI. 2. Faizatul Amalia, S.Pd., M.Pd.			
9	**Other Information:** Bibliography: 1. Ralph M. Stair, George W. Reynold , "Fundamentals of Information Systems (8th Ed) " 2. Pressman, Roger. S, "Software Engineering – A Practitioner's Approach". Edisi ke-7 tahun 2010. (The latest (8th) edition was published in 2015) 3. Sommerville, Ian, "Software Engineering". Edisi ke-9 tahun 2011. (The latest (10th) edition was published in April 2015)			