Information System Implementation and Testing

Course Title: Information System Implementation and Testing					
Course Code: CIE61021	**Student Workload:** 8.50 Hours/ Weeks	**Credits:** 3 Credits (4.50 ECTS)	**Semester:** 5th Semester	**Frequency:** Odd Semester	**Duration:** 16 Weeks/ Semester (*Lecture and practical work*: 14 weeks; *Midterm assessment*: 1 week; *Final assessment*: 1 week)

1	**Types of Courses:** Technological Content Knowledge Course	**Contact Hours:** *Lecturing*: 1.67 Hours/ Week; *Practical Work*: 2.83 Hours/ Week	**Independent Study:** *Self-study:* 2.00 Hours/ Week; *Structured Assignment*: 2.00 Hours/ Week	**Class Size:** 40 Students

2 **Prerequisites for Participation** (If Applicable)**:**
Information System Analysis and Design

3 **Learning Outcomes:**

1. M1: Able to transform the model that has been compiled in the design phase into software code and algorithms under the educational problem context (ILO-2) (0,4)
2. M2: Able to carry out testing on software using a white box and black box testing approach as part of efforts to help improve the quality of the instructional, learning, or educational process under the proper information technology implementation (ILO-5) (0,4)
3. M3: Able to develop software testing documents as a deliverable or milestone in the educational domain problem-solving process (ILO-9) (0,2)

4 **Subject aims/Content:**
At the end of the course, students are expected:

1. L1: Able to understand, explain and implement the coding phase in software development (M1)
2. L2: Able to transform software models, both object-based and structured, into codes and algorithms needed to meet software requirements (M1)
3. L3: Able to apply software testing techniques, both white box and black box, on software produced in the coding phase (M2)
4. L4: Able to develop and implement software testing documents (M3)

5 **Teaching Methods:**
Lecturing, Group Discussion, Case-Based Learning, Project-Based Learning

6 **Assessment Methods:**
Essay, performance test, anecdotal record/logbook, case assessment, project assessment

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. Vliet, Hans van, Software Engineering: Principles and Practice
2. Homesauth, Bernard. Fundamentals of Software Testing
3. Myers, Glenford J. The art of Software Testing