

Data Warehouse

Course Title: Data Warehouse						
Course Code: CIE60046		Student Workload: 8.50 Hours/ Weeks	Credits: 3 Credits (4.50 ECTS)	Semester: 6 th Semester	Frequency: Even Semester	Duration: 16 Weeks/ Semester <i>(Lecture: 14 weeks; Midterm assessment: 1 week; Final assessment: 1 week)</i>
1	Types of Courses: Technological Knowledge Course	Contact Hours: <i>Lecturing: 1.67 Hours/ Week; Practical Work: 2.83 Hours/ Week</i>	Independent Study: <i>Self-study: 2.00 Hours/ Week; Structured Assignment: 2.00 Hours/ Week</i>		Class Size: 40 Students	
2	Prerequisites for Participation (If Applicable): Database Design and SQL					
3	Learning Outcomes: <div>1. M1: Able to explain concepts and understand the characteristics of a data warehouse that focuses on the stages of extraction, transformation, and load in meeting specific data analytics (ILO-2) (0,25)</div> <div>2. M2: Able to identify problems and data analytic needs of an organization and develop a stage plan for project development (ILO-5) (0,35)</div> <div>3. M3: Able to design logical and physical models for data warehouse and implement Extract, Transform, Load (ETL) process independently using data integration tools (ILO-9) (0,2)</div> <div>4. M4: Able to demonstrate the ability to develop data warehouse projects, operate data integration tools capable of fulfilling specific data queries and analytics (ILO-12) (0,2)</div>					
4	Subject aims/Content: At the end of the course, students are expected: <div>1. L1: Able to master theoretical concepts related to the definition, characteristics, components and architecture of a data warehouse (M1)</div> <div>2. L2: Able to design a conceptual model of the ETL stage to be carried out (M2)</div> <div>3. L3: Able to plan data warehouse project development (M3)</div> <div>4. L4: Able to demonstrate the ability to develop ETL and operate it periodically to meet specific organizational data analytics (M4)</div> <div>5. L5: Able to demonstrate the ability to develop OLAP that provides visualization or reporting of data specific to the organization (M4)</div>					
5	Teaching Methods: Lecturing, Group Discussion, Discovery Learning, Case-Based Learning					
6	Assessment Methods: Performance test, essay, portfolio					
7	This Course is Used in The Following Study Programme/s as Well: -					
8	Responsibility for Course: Satrio Agung Wicaksono, S.Kom., M.Kom.					
9	Other Information: Bibliography: <div>1. Inmon, William H. 2005. Building the Data Warehouse. 4th Edition. Wiley Publishing, Inc.</div> <div>2. Kimball, Ralph and Ross, Margy. 2013. The Data Warehouse Toolkit. 3rd Edition. John Wiley and Son, Inc</div> <div>3. Lane, Paul and Potineni, Padmaja. 2014. Oracle Database Data Warehousing Guide, 12c Release 1 (12.1). Oracle.</div> <div>4. Ponniah, Paulraj. 2010. Data Warehousing Fundamentals For IT Professionals. 2nd Edition. John Wiley and Son, Inc</div>					