
SYLLABUS

Date/ Revision	September 28, 2016
Faculty	Engineering
Approval	Dean Faculty of Engineering

SUBJECT : DATABASE, E-COMMERCE & DOCUMENTS

1 Identification of Subject:

Name of Subject	: Database, E-Commerce & Documents
Code of Subject	: ECOM-4100
SKS/ECTS	: 2/3
Semester	: 7
Study Program	: B-AVE/B-ELE/B-INE/B-MEE/B-MTE
Lecturer	: • To be appointed

2 Competency (Learning Outcome)

- At the end of the course students will have an overview of the most important methodological approaches and concepts of database to support e-commerce and ICT Business.
- After completing the course, students will be able to describe the core aspects of database & e-commerce and able to illustrate, contrast, and apply the main concepts and theories of database & e-commerce
- Through the successful participation in this course students are able to recognize the basics of e-business and e-commerce in the ICT Industry landscape.
- Through this course, students are able to create a simple database to support e-business and e-commerce.

3 Description of Subject:

The course is twofold. First, it will discussed about building database, and Secondly, is about E-Commerce and E-Documents (shortly, it called E-Commerce). This Course connects theory with practice, incorporating the latest research findings to make e-commerce relevant and exciting to aspiring studentss. To make the connection between relevance and rigor more direct for students, It includes focused examples of a **e-business challenge** faced by a real e-business designed to help students understand and relate the course content to managerial practice.

An exploration of the issues facing global e-commerce ecosystem today.*E-Business and E-Commerce* explores the dynamic global environment of Information Communication and Technology Industry by exploring the political, legal, technological, competitive, and cultural factors that shape the ICT industry worldwide.

The course contains current research, events, and global developments while exposing students to the recent trends that are affecting global leaders in today's hypercompetitive global environment.

4 Learning Approach

Approach : Combination of Expository - inquiry and collaborative
 Method : Discussions, Questions/answers, Video , Sample problems/cases, Group works
 Student Task : Home work, Presentation
 Media : LCD projector , Speaker

5 Evaluation

Maximum absences : 25%
 Paper (Personal) : 20 points
 Presentation (Group) : 20 points
 Quizzes (Personal) : 20 points
 Final Examination : 40 points
 Total : 100 points

1. Contents/ Topics of Lecturing:

Week	Topics	Content	Remark
1,2,3	Database background	<ul style="list-style-type: none"> • Introduction • The relational modeling • SQL and QBE • The database system development lifecycle • Database administration and security 	Chapter 1-5 [a]
4,5	Database analysis & design technique	<ul style="list-style-type: none"> • Fact finding techniques • Entity-Relationship modeling • A Concept of Normalization 	Chapter 6-8[a]
6,7	Logical database design	<ul style="list-style-type: none"> • Logical database design, step-1 and step-2 • Enhancing Entity Relationship modeling techniques 	Chapter 7-11[a]
8	Semester break	•	
9	Physical database design	<ul style="list-style-type: none"> • 8 steps of physical database design • Introduction to Group 	Chapter 12-13[a] Project start

Week	Topics	Content	Remark
		Project for Digital E-commerce	
10	Introduction to E- Business and E- Commerce	<ul style="list-style-type: none"> • The impact of electronic communications on traditional businesses • What is the difference between digital business and e-commerce? • Digital business opportunities • Business adoption of digital technologies for e-commerce and digital business • Digital business risks and barriers to business adoption 	Chapter 1 [b]
11	E-Commerce Fundamentals	<ul style="list-style-type: none"> • Online marketplace analysis • Location of trading in the marketplace • Business models for e-commerce 	Chapter 2 [b]
12	E-Business Infrastructure	<ul style="list-style-type: none"> • A short introduction to Internet technology • Management issues in creating a new customer-facing digital service • Web presentation and data exchange standards 	Chapter 3 [b]
13	Supply Chain Management	<ul style="list-style-type: none"> • What is supply chain management? • Options for restructuring the supply chain • Using digital business to restructure the supply chain • Supply chain management 	Chapter 6 [b]

Week	Topics	Content	Remark
		implementation	
13	Customer Relations Management Implementation	<ul style="list-style-type: none"> • What is e-CRM? • Conversion marketing • The online buying process • Customer acquisition management • Customer retention management • Customer extension • Technology solutions for CRM 	Chapter 9 [b]
14	Guest Lecturer on Digital Business	The Students will have an entrepreneurial start up as a Guest Lecture where they will learn Digital Business implementation based on diverse perspective of Big Company and Start Up Company.	From : Tiket.Com/Carmudi.com/ olx.co.id
	Presentation	The Students will presents a selected Digital Business Case study where they will provide an insight and solution on the case.	Digital Business Case Study
16	Silent Week: make-up classes only		
17	Final Examination	Project Presentation of Database design for Digital E-Commerce	Group work, Project finalizing

Reference:

Main Reference:

- Connolly, Thomas M. & Carolyn E. Begg, *Database Solutions – A step-by-step guide to building databases*, 2nd edition, Pearson, 2004
- Chaffey, Dave, *Digital Business and E-Commerce Management*, 6th edition © Marketing Insights Limited 2015

Additional Reference:

- Scientific Journal
- Business Case Study
- Magazine / Newspaper
- Video

