

Title (Units): **COMP4106 E-Business Technology (3,3,0)**

Course Aims: To introduce the use of technology in many aspects of a business, with particular emphasis on concepts and practices for modeling, specifying and integrating within enterprise and B2B business processes. To explore the use of information technology for processes related to customer relationship management, enterprise resource planning, supply chain management, etc. To gain a heightened awareness of emerging technologies and trends in e-business.

Prerequisite: i) Year III Standing in Computer Science or Computing and Information Systems
or
ii) Any ITEC course at Level 2 or above

Course Intended Learning Outcomes (CILOs):

Upon successful completion of this course, students should be able to:

No.	Course Intended Learning Outcomes (CILOs)
	Knowledge
1	Illustrate the concepts and practices for e-business adoption to support enterprise integration
2	Describe application integration technologies and standards including middleware technologies
3	Identify emerging technologies in e-business for business processes including supply chain management, enterprise resource planning and customer relationship management
	Professional Skill
4	Apply the models of e-business for enterprise integration
5	Integrate the emerging technologies in e-business to support business processes
	Attitude
6	Identify appropriate emerging technologies for e-business based on the characteristics of business processes

Calendar Description: This course introduces the use of technology in many aspects of a business, with particular emphasis on concepts and practices for modeling, specifying and integrating within-enterprise and B2B business processes. Business processes related to customer relationship management, enterprise resource planning, supply chain management, etc. will be covered. Students gain a heightened awareness of emerging technologies and trends in e-business.

Teaching and Learning Activities (TLAs):

CILOs	Type of TLA
1 - 5	Students will learn the concepts and practice on e-business technology and its integration with business processes via lectures and other forms of continuous assessment
4 - 5	Students will acquire hand-on experience via laboratory sections, term paper and/or development projects
2 - 6	Students will participate in class discussions, group presentations, and problem-solving tasks for in-depth learning.

Assessment:

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Assignments	20%	1 - 6	Assessments focus on evaluating students' understanding on e-business concepts and the ability to integrate emerging technologies to the enterprises
2	Project	40%	4 - 6	Project focuses on evaluating students' understanding of business-IT goal alignment, and application of technologies for business digital transformation. The project assessments could be report (20%), and presentation (20%). Course

				instructor can determine the most appropriate percentage to assess his or her students.
3	Examination	40%	1-5	Final examination questions are designed to measure to what extent students understand the contents of the course and how students apply the e-business concepts and emerging technologies for business processes

Assessment Rubrics:

Excellent (A)	<ul style="list-style-type: none"> • Achieves the first five CILOs, demonstrating a good mastery of both the theoretical and practical aspects of the knowledge and skills associated with e-business • Able to develop and present sound arguments and correct solutions to problems in e-business, accompanied by in-depth analysis and insight • Demonstrates a thorough understanding and solid knowledge of e-business and associated emerging technologies • Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new e-business situations and problems
Good (B)	<ul style="list-style-type: none"> • Achieves the first five CILOs, demonstrating a good understanding of concepts and models of e-business • Able to develop solutions to problems in e-business, accompanied by adequate explanations • Demonstrates a competent level of knowledge of e-business and associated emerging technologies • Able to make use of appropriate techniques and knowledge and apply them to e-business situations and problems
Satisfactory (C)	<ul style="list-style-type: none"> • Achieves most of the first five CILOs, demonstrating a basic level of understanding of concepts and models of e-business • Able to provide acceptable solutions to problems in e-business • Demonstrates an adequate level of knowledge of e-business and associated emerging technologies • Able to make use of some techniques and knowledge and apply them to familiar situations
Marginal Pass (D)	<ul style="list-style-type: none"> • Achieves most of the first five CILOs, with minimal understanding of concepts and models of e-business • Able to provide solutions to simple problems in e-business • Demonstrates a basic level of knowledge of e-business and associated emerging technologies • Able to apply some techniques and knowledge to a limited number of typical situations
Fail (F)	<ul style="list-style-type: none"> • Achieves less than two of the first five CILOs, with little understanding of concepts and models of e-business

	<ul style="list-style-type: none"> • Unable to provide solutions to simple problems in e-business • Knowledge of concepts in e-business and associated emerging technologies falling below the basic minimum level • Unable to apply techniques and knowledge to situations or problems
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Course Content and CILOs Mapping:

Content		CILO No.
I	Introduction to Electronic Commerce, Business and Enterprise	1
II	Process/Application Integration Technologies and Standards	2, 5, 6
III	Business Process Modeling and Integration	3, 4, 5, 6

References:

- Efraim Turban, David King, Electronic Commerce 2012 Global Edition, 7th Edition, Pearson, 2012.
- Gary P. Schneider, Electronic Commerce, 11th edition. Australia: Course Technology, Cengage Learning, 2015.
- David S. Linthicum, Next Generation Application Integration: From Simple Information to Web Services, Addison-Wesley, 2004
- Deryn Graham, Ioannis Manikas, Dimitris Folinias, and Inc ebrary. E-logistics and e-supply chain management: Applications for evolving business. Hershey: Business Science Reference, 2013
- Kenneth C. Laudon, Carol Guercio Traver, E-Commerce 2016: Business, Technology, Society, Global Edition, 12th Edition, Pearson, 2016

Course Content:

Topic

- I. Introduction to Electronic Commerce, Business and Enterprise
- II. Process/Application Integration Technologies and Standards
 - A. Different approaches for integration such as information-oriented, process-oriented, and services- oriented
 - B. Middleware technologies
 - C. Integration standards such as using XML, XSLT, WSDL, UDDI, ebXML, BPEL4WS
- III. Business Process Modeling and Integration
 - A. Procurement
 - B. Supply chain management
 - C. Enterprise resource planning
 - D. Customer relationship management
 - E. Business intelligence
 - F. Others