

**Title (Units):** **COMP7580 Electronic Transformation in Business (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 how information technology transforms the business processes related to customer relationship management, enterprise resource planning, supply chain management, etc. Students after taking this subject should be able to 1) understand how e-technologies can facilitate process/application integration with and across enterprise, and 2) evaluate the cost and benefit that e-transformation can bring to different business processes of an enterprise.

**Prerequisite:** Nil

**Course Intended Learning Outcomes (CILOs):**

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

No.	Course Intended Learning Outcomes (CILOs)
	<b>Knowledge</b>
1	Explain the concepts and practices for e-business adoption to support enterprise integration
2	Explain 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
	<b>Professional Skill</b>
4	Apply the models of e-business for enterprise integration
5	Integrate the emerging technologies in e-business to support business processes
6	Apply emerging technologies to real-life business cases such as in banking, healthcare, etc.

**Calendar Description:** This course covers 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. How the business process related to customer relationship management, enterprise resource planning, supply chain management, etc. could be transformed in the Internet era will be covered. Some case studies related to e-transformation in Business will also be discussed. Students after taking this course should be able to 1) understand how e-technologies can facilitate process/application integration with and across enterprise, and 2) evaluate the cost and benefit that e-transformation can bring to different business processes of an enterprise.

**Teaching and Learning Activities (TLAs):**

CILOs	Type of TLA
1-5	Students will attend lectures to learn the basic principles and practices of IT management.
2-6	Students will participate in class discussions, group presentations, and problem-solving tasks for in-depth learning.
3-6	Students will attend guest lectures to appreciate current practices of IT management.

**Assessment:**

No.	Assessment Methods	Weighting	CILOs to be addressed	Description of Assessment Tasks
1	Assessments	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%	1-6	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"> <li>Achieve all the six CILOs, demonstrating an excellent mastery of both the theoretical and practical aspects of the knowledge and skills in the selected topics</li> <li>Able to develop correct solutions to problems for electronic transformation in business, accompanied by in-depth analysis and insight</li> <li>Demonstrate a thorough understanding and solid knowledge of the principles and techniques of electronic transformation in business</li> <li>Able to draw on a variety of techniques and relevant knowledge and appropriately apply them to new technical situations and real-life problems</li> </ul>
Good (B)	<ul style="list-style-type: none"> <li>Achieve all the six CILOs, demonstrating a good understanding of the associated concepts and underlying methodologies in the selected topics</li> <li>Able to develop correct solutions to problems for electronic transformation in business, accompanied by adequate explanations</li> <li>Demonstrate a competent level of knowledge of the principles and techniques of electronic transformation in business</li> <li>Ability to make use of appropriate techniques and knowledge and apply them to familiar situations and problems</li> </ul>
Satisfactory (C)	<ul style="list-style-type: none"> <li>Achieve most of the six CILOs, demonstrating a basic level of understanding of the associated concepts and underlying methodologies in the selected topics</li> <li>Able to provide acceptable solutions to problems for electronic transformation in business</li> <li>Demonstrate an adequate level of knowledge of the principles and techniques of electronic transformation in business</li> <li>Ability to make use of some techniques and knowledge and apply them to familiar situations and problems</li> </ul>
Fail (F)	<ul style="list-style-type: none"> <li>Achieve less than three of the six CILOs, with little understanding of the associated concepts and underlying methodologies in the selected topics</li> <li>Unable to provide solutions to simple problems for electronic transformation in business</li> <li>Knowledge of the principles and techniques of electronic transformation in business falling below the basic minimum level</li> <li>Unable to apply techniques or knowledge to familiar situations or problems</li> </ul>

#### Course Content and CILOs Mapping:

Content		CILO No.
I	Introduction to Electronic Commerce, Business and Enterprise	1
II	Emerging Technology for Business Digital Transformation	3,5,6
III	Process/Application Integration Technologies and Standards	2,5
IV	Business Process Modeling and Integration	3,4,5
V	Case Studies (conduct throughout the course)	3,4,5,6

#### References:

- Thomas Erl and Roger Stoffers, Field Guide to Digital Transformation, A (The Pearson Digital Enterprise Series from Thomas Erl), 1st edition, Addison-Wesley Professional, 2021.

- K.C. Laudon and C.G. Traver, E-Commerce: Business, Technology, Society. 16th Edition, Pearson, 2021.
- D.L. Rogers, The Digital Transformation Playbook: Rethink Your Business for the Digital Age, Columbia Business School Publishing, 2016.
- T.M. Siebel, Digital Transformation: Survive and Thrive in an Era of Mass Extinction, RosettaBooks, 2019.
- N. Perkin and P. Abraham, Building the Agile Business through Digital Transformation: How to Lead Digital Transformation in Your Workplace Paperback, Kogan Page, 2017.
- E. Turban, D. King, J. K. Lee, T. P. Liang, D. C. Turban, Electronic Commerce: A Managerial and Social Networks Perspective, 8th Edition., Springer, 2015.

**Course Content:**

**Topic**

- I. Introduction to Electronic Commerce, Business and Enterprise
- II. Emerging Technology for Business Digital Transformation
- III. Process/Application Integration Technologies and Standards
  - A. Different approaches for integration
  - B. Middleware technologies
  - C. Introducing integration standards
- IV. Business Process Modeling and Integration
  - A. Procurement
  - B. Supply chain management
  - C. Enterprise resource planning
  - D. Customer relationship management
- V. Case Studies (conduct throughout the course)