Hong Kong University of Science and Technology
School of Business and Management
Spring 2026

ISOM 2010 – INTRODUCTION TO INFORMATION SYSTEMS

Section L3, Tuesday and Thursday 03:00PM - 04:20PM
Section L4, Tuesday and Thursday 10:30AM - 11:50AM
G012, LSK Business Building

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Office Hours: By appointment only

Course website: http://canvas.ust.hk

Teaching Assistant: Chao Ieong
TA's E-mail: imcyeung@ust.hk Begin subject: [ISOM2010] …

TA's Office: LSK Room 4048
TA's Office Hours: By appointment only

Course Description

Across virtually all industries and organizations today, Information technology (IT) and artificial intelligence (AI) are fundamentally reshaping how organizations compete, innovate, and create value. Leaders who lack a deep understanding of information systems (IS) and the strategic potential of AI-enabled, data-driven decision-making will face significant competitive disadvantages. IS have evolved far beyond automating back-office functions to become central to business strategy, increasingly integrating AI, machine learning, and advanced analytics into core operations. IS now play critical roles in competitive positioning, business process design, and the responsible governance of digital and AI technologies in the contemporary business environment.

This course provides broad coverage of technology concepts and trends underlying current and emerging developments in IT and AI, as well as fundamental principles for the effective use of IS in business organizations. There will be a special emphasis on the digital economy, e-commerce, digital platforms, business analytics, AI and big data. In addition to fundamental concepts and propositions in the IS, a number of business applications, cases, and the latest trends in today's technology and AI domain will be discussed, with a focus on how organizations can leverage these technologies for innovation and competitive advantage.

Course Materials

All the materials (e.g., lecture slides, readings, guidance) that you need will be provided through Canvas (http://canvas.ust.hk).

Recommended, but NOT required, textbook:

> *Information Systems: A Manager's Guide to Harnessing Technology (ver. 11.0)*, by John Gallaugher, FlatWorld, 2025.

https://students.flatworldknowledge.com/engage/courses/2616817

Learning Outcomes

The goal of this course is to provide you with an introduction to IT-enabled approaches to information management in business contexts. (T-Taught, P-Practiced, M-Measured)

- Upon completion of the course, students will be able to
  1. Describe how a business organization's choice of strategy and process (what the firm does and how the firm does it) and their resulting effectiveness are closely related to the firm's information management and communications capabilities (T, P).
  2. Develop a foundation to develop quantitative and analytical techniques to solve business problems with innovative perspectives that extends beyond this course (T, P, M).
  3. Analyze the core technological and business issues and identify critical factors for business decision-making (T, P, M).
  4. Evaluate information systems; examine their relations with business strategy, process, and organization (T, P, M).

- This course will also provide students with:
  1. Skills in producing professional quality business documents, delivering professional quality presentations and communicating ideas persuasively (T, P, M).
  2. Ability to lead and work effectively in a team (T, P).
  3. Proficiency in using IT applications in business and management; tools for searching, organizing and processing information using appropriate information technology and systems (T, P, M).
  4. Preparation for future careers in business and social environments that are deeply permeated with and dependent upon IT (T, P).

- We believe that an understanding of the topics covered in this course will pay subtle and unexpected dividends throughout your careers (T, P).

Evaluations

Class Participation	10%
Labs	15%
Midterm Exam	24%
Group Project	25%
Final Exam	26%
Total	100%

Class Participation (10%):

- There are two aspects of your class participation. First, be prepared and participate in class activities (6%). All students are expected to contribute at least occasionally. Quality of contribution is much more important than quantity. We do **NOT** take class attendance for any lectures, while lab sessions and industry week sessions may have different requirements depending on your TA. Second, students are also expected to attend the invited speakers' sessions in the "Industry Week" (4%).

Labs (15%)

The lab sessions will be 50 minutes each, and will cover from basic to advanced skills and knowledge of various business analytics applications as well as other interesting topics. In almost every lab session,

there is a task that you need to complete during the lab session. You MUST attend the lab session to which you are assigned; lab instructors will ask unregistered students to leave. ***You will not get credit for work done during a session for which you are not registered.*** Also, content for lectures and lab sessions are non-overlapping – generally, the lecture emphasizes on managerial and strategic implications of information technology, whereas the lab sessions focus on specific technical knowledge. **Contact the TA of your lab section for all lab matters.**

Group Project (25%)

- Form a group to work on a project at the beginning of the semester. You may invite friends from another session, as long as the session is taught by the same lecturer.
- A group-based course project is intended to allow you to exercise your insights and analytical abilities to a real-life business/application.
- There are two deliverables for the group project: (1) the slides and report (15%), and (2) the presentation (10%).
- Slides: Submit a 35-45-page slides of your final project by Mar 6 (11:59PM) via Canvas.
- Report: Submit an 8-page report to support your opinions in your slides (including cover page (if any), references, tables, figures, and appendices) by May 6 (11:59 PM) via Canvas. Format: A4, 1-inch margin on all sides, double-spaced, 11pt, Times New Roman).
- Presentation: At the end of the semester, prepare a case presentation to the class.

The grade for the group project will be determined based on the average score given by two graders and the peer evaluation results. Each group's work will be independently assessed by two graders to ensure fairness and consistency. In addition, the peer evaluation will reflect each member's contribution to the project and may influence individual grades within the group.

Mid-term (24%) and Final (26%):

- There are two exams: one mid-term (24%) and one final exam (26%). The exams will be based on the topics and related concepts taught during class.
- The midterm exam will test issues covered in the first half of the course. The final exam will cover the classes in the second half of the course.
- If time allows, review sessions will be scheduled to help you prepare for these examinations.
- All examinations will be closed book, closed notes, and no devices.
- If you have to miss the mid-term exam due to extraordinary circumstances such as unexpected hospitalization or loss of a direct family member, please contact your TA with related medical documents or other valid evidence. In this case, you can have the final exam grade count for both the missed midterm and the final. That one exam will thus constitute a greater portion of your course grade. This extreme emergency must be approved by the instructor before the exam date, and counting one exam twice is not a good idea!
- Time conflicts with job interviews, other tests, travel plans, social obligations or any other, domestic, social, financial situation, etc. will **NOT** be considered.

Instructor-Student Communication Policy

- If you have any course logistics or lab-related questions, please seek help from the TA first.
- When you send me an email, please always start your email subject line with "[ISOM 2010]"

Class Policies

- Be on time: better still, be ahead of time by at least 1 minute.
- Be professional: do not do things that you should/would not do in a professional/work setting (e.g., do not eat, do not talk on mobile phones, chat with others)
- Any type of cross section activities/participation is not allowed (e.g. attendance, group project, exams, etc.)

Grading

Exams and assignments will be graded by the TA. If you have a question about your grade or you believe that you were graded incorrectly, please email the TA (within 1 week of receiving the grade). If the problem is not resolved with the TA, contact the professor by writing an email (cc TA and always start your email subject line with "[ISOM 2010]") and describing the situation and the reasons that justify your request for re-grading. In this case, the professor will re-grade the exam or assignment, and the grade may go up or down. This grade will be final. Students have one week from the date an assignment or test is returned to submit an email request for re-grading. After one week, no changes will be considered.

Late Policy

If you are 1-day late in submission, you or your group will be graded on 80% of your points for the submission. If you are 2-day late in submission, you or your group will be graded on 50% of your points for the submission. No submissions will be accepted more than 48 hours after the deadline. Please prepare in advance so that you will not encounter technical difficulties that will result in your work receiving a late penalty. If you have a conflict with the due date, assignments can always be submitted early.

Academic Integrity

Academic integrity entails absolute honesty in one's intellectual efforts. UST places a strong emphasis on academic integrity and has introduced new regulations to back this up. In addition to the course content related to business ethics related to IS/IT, special attention will be put on academic integrity demonstrated when you take this course. You should be especially aware of the policies on cheating and plagiarism. Cheating is any action that violates University norms or an instructor's guidelines for the preparation and submission of assignments. Such actions may include using or providing unauthorized assistance or materials on course assignments, or possessing unauthorized materials during an examination. Plagiarism involves the representation of another's work as your own, for example: (a) submitting as one's own any material that is copied from published or unpublished sources such as the Internet, print, computer files, audio disks, video programs or musical scores without proper acknowledgement that it is someone else's; (b) paraphrasing another's views, opinions or insights without proper acknowledgement or copying of any source in whole or in part with only minor changes in wording or syntax even with acknowledgement; (c) submitting as one's own work a report, examination, paper, computer file, lab report or other assignment which has been prepared by someone else. If you are unsure about what constitutes unauthorized help on an exam or assignment, or what information requires citation and/or attribution, please ask your professor. **Violations may result in the failure of the assignment, failure of the course, and/or additional disciplinary actions.**

For more information, please visit the website at https://registry.hkust.edu.hk/resource-library/academic-integrity.

Class Schedule

Week	Date	Topic
1	Feb 3	Course Overview
	Feb 5	Digital Economy (I)
2	Feb 10	Digital Economy (II)
	Feb 12	Digital Economy (III)
3	Feb 17	No Class (Lunar New Year)
	Feb 19	No Class (Lunar New Year)
4	Feb 24	E-Commerce (I)
	Feb 26	E-Commerce (II)
5	Mar 3	E-Commerce (III)
	Mar 5	E-Commerce (IV)
6	Mar 10	Midterm Exam Review
	Mar 12	Midterm Exam
7	Mar 17	Digital Platforms (I)
	Mar 19	Digital Platforms (II)
8	Mar 24	Digital Platforms (III)
	Mar 26	Business Analytics (I)
9	Mar 31	Business Analytics (II)
	Apr 2	AI & Big Data (I)
10	Apr 7	No Class (Mid-Term Break)
	Apr 9	AI & Big Data (II)
11	Apr 14	Industry Week
	Apr 16	Industry Week
12	Apr 21	Emerging Technology – FinTech and Blockchain Technology
	Apr 23	Group Project Presentation (I)
13	Apr 28	Group Project Presentation (II)
	Apr 30	Group Project Presentation (III)
14	May 5	Group Project Presentation (IV)
	May 7	Course Recap & Final Exam Review

*Note: Please refer to Canvas for the Lab schedule and syllabus. Contact the TA of your lab section for all lab matters.