



**FACULTY OF BUSINESS**  
**BACHELOR OF BUSINESS ADMINISTRATION IN MARKETING**  
**LEARNING MODULE OUTLINE**

|                       |                                |               |                  |
|-----------------------|--------------------------------|---------------|------------------|
| Academic Year         | 2025/26                        | Semester      | 1                |
| Module Code           | MMIS0140-311                   |               |                  |
| Learning Module       | Management Information Systems |               |                  |
| Pre-requisite(s)      | Nil                            |               |                  |
| Medium of Instruction | English                        |               |                  |
| Credits               | 3                              | Contact Hours | 45               |
| Instructor            | Dr. LUK Kwai Wing              | Email         | t1790@mpu.edu.mo |
| Office                | B110                           | Office Phone  | ----             |

**MODULE DESCRIPTION**

This module introduces the basics of information systems with emphasis on real world applications. Students will learn the basics of information systems, IT infrastructure, and the Internet, appreciate the state-of-the-art IT technology as well as to understand how IT can be applied to businesses, and its capabilities and limitations.

**MODULE INTENDED LEARNING OUTCOMES (ILOS)**

On completion of this learning module, students will be able to:

|     |  |
|-----|--|
| M1. | demonstrate an understanding of key concepts, components, and functions of a management information system (MIS)   |
| M2. | analyze how MIS supports organizations in enhancing decision making, operational efficiency and providing competitive advantage  |
| M3. | evaluate the impacts of emerging information technologies (e.g., big data, artificial intelligence, cloud computing and blockchain) on MIS, and cybersecurity within MIS |
| M4. | assess the impact of internet and e-commerce on traditional business operations  |
| M5. | describe how organizations develop, acquire and implement information systems  |



These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

| PILOs (Bachelor of Business Administration in Marketing)  | M1 | M2 | M3 | M4 | M5 |
|---|----|----|----|----|----|
| P1. Explain the core concepts, values and Skills<br>- Students are able to apply the marketing principles, concepts, theories in analyzing the changing business environment. | ✓  | ✓  |    | ✓  |    |
| P2. Apply appropriate Tools and technologies<br>- Students are able to demonstrate using related tools, technology and skills to generate proposals and solutions.            | ✓  | ✓  | ✓  | ✓  | ✓  |
| P3. Proceed Lifelong learning<br>- Students are able to apply self and independent learning to leverage learned knowledge in practical life.                                  | ✓  | ✓  | ✓  | ✓  | ✓  |
| P4. Adopt Leadership approaches<br>- Students are able to develop collaborative groups, synergy teams in achieving objectives and shared goals.                               |    |    |    |    |    |
| P5. Demonstrate and practice Legal and Ethical Values<br>- Students are able to identify professional ethics from broad business practices.                                   |    | ✓  | ✓  | ✓  |    |
| P6. Effective Communication Skills<br>- Students are able to communicate and present ideas effectively.   | ✓  |    |    | ✓  | ✓  |
| P7. Critical Thinking<br>- Students are able to apply self understanding and analysis of critical perspectives to issues in broad conditions for problem solving.             |    | ✓  | ✓  | ✓  |    |
| P8. Intercultural Competence<br>- Students are competent to associate in a diversified social and global community.   |    |    | ✓  | ✓  |    |



**MODULE SCHEDULE, COVERAGE AND STUDY LOAD**

| Week | Content Coverage  | Contact Hours |
|------|---|---------------|
| 1    | Business Information Systems in your Career (chapter 1)<br>1.1 Understand why IS is essential for running a business<br>1.2 Define an information system and explain how it works<br>1.3 Describe the information systems skills and knowledge                                  | 3             |
| 2    | Global E-business and Collaboration (chapter 2)<br>2.1 Explain how IS serves different management groups<br>2.2 Describe the role of the information systems functions  | 3             |
| 3    | Achieving Competitive Advantages with Information Systems (chapter 3)<br>3.1 Describe how IS helps businesses compete globally<br>3.2 Explain the role of business process management (BPM) in enhancing competitiveness  | 3             |
| 4    | Ethical and Social Issues in Information System (chapter 4)<br>4.1 Identify the ethical, social and political issues<br>4.2 Describe principles of conduct used to guide ethical decisions<br>4.3 Contemporary system quality, accountability and control                       | 3             |
| 5    | IT Infrastructure: Hardware and Software (chapter 5)<br>5.1 Identify the components of IT infrastructure<br>5.2 Identify the principal issues in managing hardware & software   | 3             |
| 6    | Foundations of Business Intelligence: Databases and IM (chapter 6)<br>6.1 Explain how a relational database organizes data<br>6.2 Principal tools and technologies for accessing information<br>6.3 Data governance and data quality assurance                                  | 3             |
| 7    | Telecommunications, the Internet, and Wireless Technology (chapter 7)<br>7.1 Identify the major components of telecommunications networks<br>7.2 Explain how the internet and internet technology work<br>7.3 Principal technologies and standards for wireless networking etc. | 3             |
| 8    | Mid-term Examination (Chapters 1-6)   | 3             |
| 9    | Securing Information Systems (chapter 8)<br>8.1 Describe the business value of security and control<br>8.2 Components of an organizational framework for security & control<br>8.3 Tools and technologies for safeguarding information resources                                | 3             |
| 10   | Achieving Operational Excellence and Customer Intimacy... (chapter 9)<br>9.1 Describe how supply chain management systems coordinate planning, production, and logistics with suppliers<br>9.2 Explain how CRM systems help firms achieve customer intimacy                     | 3             |
| 11   | E-commerce: Digital Markets, Digital Goods (chapter 10)<br>10.1 Identify the unique features of e-commerce, digital markets, and digital goods<br>10.2 Describe the roles of m-commerce on businesses and the most important m-commerce applications                            | 3             |
| 12   | Improving Decision Making and Managing Artificial Intelligence (chapter 11)<br>11.1 Describe how business intelligence and analytics support decision making<br>11.2 Define artificial intelligence (AI) and explain how it differs from human intelligence                     | 3             |



|    |   |   |
|----|---|---|
|    | 11.3 Identify the major types of AI techniques and how they benefit organizations   |   |
| 13 | Making the Business Case for Information Systems and Managing Projects (chapter 12)<br>12.1 Identify the core problem-solving steps for development a new information system<br>12.2 Compare the alternative methods for building information systems<br>12.3 Describe how information systems projects should be managed | 3 |
| 14 | Project Presentation & Revision   | 3 |
| 15 | Final Examination   | 3 |

### TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

| Teaching and Learning Activities | M1 | M2 | M3 | M4 | M5 |
|----------------------------------|----|----|----|----|----|
| T1. Lectures                     | ✓  | ✓  | ✓  | ✓  | ✓  |
| T2. Case studies                 | ✓  | ✓  | ✓  | ✓  | ✓  |
| T3. Group discussion             |    | ✓  | ✓  | ✓  | ✓  |

### ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Bachelor's Degree Programmes of the Macao Polytechnic University. Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

### ASSESSMENT

In this learning module, students are required to complete the following assessment activities:

| Assessment Activities                                | Weighting (%) | ILOs to be Assessed |
|--|---------------|---------------------|
| A1. Project(s)                                       | 20            | M1-M5               |
| A2. Assignment(s), quizze(s) and class participation | 20            | M1-M5               |
| A3. Midterm Exam                                     | 20            | M1-M3               |
| A4. Final Exam                                       | 40            | M1-M5               |

The assessment will be conducted following the University's Assessment Strategy (see [www.mpu.edu.mo/teaching\\_learning/en/assessment\\_strategy.php](http://www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php)). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.



## MARKING SCHEME

|    | Assessment Task                              | Criterion  | Excellent  | Very Good, Good | Satisfactory | Pass      | Fail                              |
|----|--|--|------------|-----------------|--------------|-----------|-----------------------------------|
|    |  |  | A, A-      | B+, B, B-       | C+, C, C-    | D+, D     | F                                 |
|    |  |  | 88% - 100% | 73% - 87%       | 58% - 72%    | 50% - 57% | 0 – 49%                           |
| 1. | Projects /Assignments (if applicable)        | Demonstrate the understanding of the subjects  | High       | Significant     | Moderate     | Basic     | Not even reaching marginal levels |
| 2. | Oral presentation (if applicable)            | Demonstrate the ability to answer questions on topics covered in the outline   |            |                 |              |           |                                   |
| 3. | Midterm / Final / Resit Exam (if applicable) | Demonstrate the understanding of the subject and the arguments are articulated and organized in terms of skills, presentation, writing, concepts, methods and techniques.<br><br>Be able to provide a specific conclusion / solution in some cases (if applicable) |            |                 |              |           |                                   |

## REQUIRED READINGS

K. Laudon, J. Laudon, and C. Traver (2024), Essentials of MIS, 15<sup>th</sup> ed., Global Edition, Pearson.

## REFERENCES

K. Laudon, J. Laudon, and C. Traver (2026), Management Information Systems: Managing the Digital Firm, 18<sup>th</sup> ed., Pearson.



澳門理工大學  
Universidade Politécnica de Macau  
Macao Polytechnic University

T. Issa, et al (2023), Management Information Systems, Harnessing Technologies for Business & Society, 1<sup>st</sup> ed., Sage.

## **STUDENT FEEDBACK**

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

## **ACADEMIC INTEGRITY**

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at [www.mpu.edu.mo/student\\_handbook/](http://www.mpu.edu.mo/student_handbook/).