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

FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE IN COMPUTING

LEARNING MODULE OUTLINE

Academic Year	2024/2025	Semester	2
Module Code	COMP423		
Learning Module	Strategic Planning for Information Systems		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	3	Contact Hours	45 hrs
Instructor	CHIANG KONG WA	Email	t1387@mpu.edu.mo
Office	B201	Office Phone	--

MODULE DESCRIPTION

This module aims to provide students with an overall understanding of the strategic role of information systems, and the strategic planning and management of them within a modern organization. Within this scope the emphasis is on student knowledge of the range of established strategic analysis and planning tools and how they can be applied.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Showcase the ability to integrate management, information systems, and e-commerce concepts learned previously; (EA4p)
M2.	Evaluate an organization's strengths, weaknesses, opportunities, and threats related to IT and business capabilities; (EA1p)
M3.	Analyse how artificial intelligence leads to new strategic directions; (EA1p, EP1p)
M4.	Create and present a feasible strategic plan based on the learned skills from analytical and practical perspectives; (D1p, D2p, D3p, EP6p, and EP9p)
M5.	Summarize and investigate technical and organizational challenges in information systems planning and management. (ET2p, ET3p)

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

PILOs		**M1**	**M2**	**M3**	**M4**	**M5**
P1.	Select and apply proven methods, tools and techniques to the effective and efficient implementation of information systems;	✓				
P2.	Evaluate computer systems in a local area network, and understand the additional requirements for connection to other networks through wide area networks;					

P3.	Be competent in system development in the Internet and the web platform;					
P4.	Work independently to design and implement a relational database, with an emphasis on how to organise, maintain and retrieve information from a DBMS;					✓
P5.	Acquire essential knowledge in specific fields of computing disciplines including multimedia, security and artificial intelligence;			✓	✓	
P6.	Acquire the perceptive skills needed to understand information presented in the form of UML diagram, flow chart or other industry standard formats;					
P7.	Understand the need for and use of the necessary mathematical techniques;					
P8.	Work independently to develop an understanding of, and the knowledge and skills associated with the general support of computer systems and networks;					
P9.	Work as an effective member of a team in the analysis, design and development of software systems;					
P10.	Use project planning and management techniques in systems development;				✓	
P11.	Understand the fundamental and operational issues of computer systems in business environments;		✓			
P12.	Equip with adequate written, oral communication and interpersonal skills;					
P13.	Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own;					
P14.	(For Enterprise Information Systems specialization) Gain an in-depth understanding of the information technology related to enterprise information systems, with an emphasis on development of such systems to support business processes;					
P15.	(For Gaming Technology specialization) Acquire the general and advanced knowledge of current technologies and operating environment in the gaming industry;					
P16.	(For Computer Education specialization) Acquire the general and practical knowledge of computer education and its practicing environment in secondary education.					

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Week	Content Coverage	Contact Hours
1-2	1. Management Information Systems: Business Driven MIS	6
	1.a Business Driven MIS	
	1.b Business Strategy	
3-4	2. Decisions and Processes: Value-Driven Business	6
	2.a Decision Support Systems	

	2.b Business Processes	
5-6	3. E-Business: Electronic Business Value	6
	3.a Web 1.0 and 2.0 E-Businesses	
	3.b Web 3.0 E-Business	
7-8	4. Ethics and Information Security: MIS Business Concerns	6
	4.a Ethics	
	4.b Information Security	
9-10	5. Infrastructures: Sustainable Technologies	6
	5.a MIS Infrastructures	
	5.b Building Sustainable MIS Infrastructures	
11-12	6. Data: Business Intelligence	6
	6.a Data, Information, and Database	
	6.b Data Warehouse and Blockchain	
13-14	7. Networks: Mobile Business	6
	7.a Connectivity	
	7.b Mobility	
15	8. Enterprise Applications, Systems Developments, and Project Managements	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 study and 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 (%)	AHEP3 LOs	ILOs to be Assessed
A1. Assignments (x2)	20%	D1p, D2p, EA1p	M1, M2, M3, M4
A2. Quizzes (x3)	15%	EA1p	M1, M2, M3
A3. Test (Midterm)	20%	EA1p, ET2p, ET3p	M1, M2, M3, M5
A4. Examination (Final)	45%	D3p, D6p, EP9p, ET3p, EA4p	M1, M2, M3, M4, M5

The assessment will be conducted following the University's Assessment Strategy (see 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.

Students with an overall score of less than 35 in the coursework must take the re-sit examination even if the overall score for the module is 50 or above.

Students with a score of less than 35 in the final examination must take the re-sit examination even if the overall score for the module is 50 or above.

Students with an overall final grade of less than 35 are NOT allowed to take the re-sit examination.

REQUIRED READINGS

1. Paige Baltzan and Amy Phillips (2023), Business Driven Information Systems, 8th ed., McGraw Hill, New York, NY.

REFERENCES

1. Richard Whittington, Patrick Regner, Duncan Angwin, Gerry Johnson and Kevan Scholes (2019), Exploring Strategy: Text and Cases, 12th ed., Pearson, Harlow, UK.
2. Sanjeev K. Bordoloi, James A. Fitzsimmons, Mona J. Fitzsimmons (2022), Service Management: Operations Strategy Information Technology, 10th ed., McGraw Hill, New York, NY.

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/.