FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE IN COMPUTING

LEARNING MODULE OUTLINE

Academic Year	2025/2026	Semester	1
Module Code	MSEL3110		
Learning Module	E-Government		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	3	Contact Hours	45 hrs
Instructor	Dr KM Chan, Jacob	Email	t1421@mpu.edu.mo
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MODULE DESCRIPTION

Governments are increasingly moving their functions to the online world, and public services are being delivered through websites, apps and digital channels gradually. This module will give an overview of key concepts in e-government, such as smart governance, citizen engagement, law and regulations, as well as the choices of implementation. In addition, students will be introduced to different types of e-government applications and their implications. They will be encouraged to explore the technological, ethical and policy tensions that emerged when government services are being digitalized.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Understanding the fundamental of E-Government and relevant terminology; (C15)
M2.	Explain the contemporary theories of E-Government; (C15)
M3.	Explain how E-Government delivers governmental services and facilitates citizens' participation and democracy; (C7)
M4.	Examine the current issues and future trend related to E-Government; (C7, C11)
M5.	Apply E-Government Applications in the context of Digital Governance and Innovations of Governmental Services to citizen; (C6)

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 on common platforms, including the Internet platform;					
P2.	Acquire essential knowledge in specific fields of computing disciplines including networking, artificial intelligence and security;	✓				✓
P3.	Apply necessary mathematical techniques to model, analyse and devise solutions to complex problems;					
P4.	Work independently to develop an understanding of, and the knowledge and skills associated with the general support and mitigation of security risks of computer systems and networks;					
P5.	Design and implement relational database, with an emphasis on how to organise, maintain, retrieve and analyse information;					
P6.	Distinguish the fundamental and operational issues of computer systems, with considerations of user, business, ethical, societal and environmental needs;			✓		✓
P7.	Evaluate, prepare and communicate effectively on technical information to both technical and non-technical audience;			✓		✓
P8.	Work as an effective member of a team in the analysis, design and development of software systems, with recognition of requirement to support equality, diversity and inclusion;	✓	✓			✓
P9.	Use project planning, risk management and quality management techniques in solutions to complex problems;					✓
P10.	Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own;				✓	✓
P11.	(For Business Intelligence specialization) Gain an in-depth knowledge of technologies related to data analysis and management of information to support business processes in enterprises;					
P12.	(For Gaming Technology specialization) Acquire the general and advanced knowledge of current technologies and operating environment for the development of the gaming and tourism industry;					
P13.	(For Computer Education specialization) Acquire 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. Introducing E-Government	6
3 - 4	2. Theory of E-Government	
	2.1 The contribution of digital technologies and data to societal change	3

5 - 7	2.1 Different theories and perspectives on digital government	3
	3. Areas of Public Sector Reform	
	3.1 The service state	1.5
	3.2 Open and transparent government	1.5
	3.3 Smart Government	3
	3.4 Participatory democracy and public engagement	3
8 - 10	4. Emerging Issues of E-Government	
	4.1 Citizen identity, privacy, ethics and security	3
	4.2 Digital citizenship	3
	4.3 Digital government strategy, leadership and governance	3
11 - 13	5. E-Government Applications	6
	5.1 The use of AI in Governmental Context	3
14 - 15	6. Managing Innovations and Digital Governance	6

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. In-class exercises				✓	✓

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 (%)	AHEP4 LOs	ILOs to be Assessed
A1. Assignment	15	C6, C7, C11, C15	M1, M3, M4, M5
A2. Group Project	25	C6, C7, C11, C15	M1, M3, M5
A3. Test	20	C6, C7, C11, C15	M1, M2, M3

A4. Examination	40	C6, C7, C11, C15	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. Lips, Miriam. *Digital Government: Managing Public Sector Reform in the Digital Era*. Routledge, 2020.
2. Papers and readings will be provided in class.

REFERENCES

1. Frederic P. Miller, Agnes F. Vandome, and John McBrewster. *E-Government*. Alphascript Publishing, 2013.…

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/.