

FACULTY OF BUSINES BACHELOR OF E-COMMERCE LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	2				
Module Code	MGPO4110-421						
Learning Module	Graduation Report II	Graduation Report II					
Pre-requisite(s)	Graduation Report I (MGPO4	Graduation Report I (MGPO4100)					
Medium of Instruction	English	English					
Credits	6	Contact Hours	90				
Instructor	Lai Sau Ling, Linda	Email	sllai@mpu.edu.mo				
Office	M526, Meng Tak Building	Office Phone	8599-3329				

MODULE DESCRIPTION

Completion of Graduation Report I is a prerequisite for students to be enrolled in this learning module. Students continue on their selected study in this learning module. The students are required to submit a report upon completing their study.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	develop the expertise and knowhow for accomplishing Report II as specified by the module materials,
M2.	apply such expertise and knowhow to accomplish Report II,
M3.	practise management of general and e-commerce-oriented projects,
M4.	demonstrate leadership in carrying out project teamwork,
M5.	illustrate collaboration and cooperation in executing project teamwork, and
M6.	present project information, both verbally and in written reports.



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

PILOs	M1	M2	M3	M4	M5	М6
P1. Demonstrate an understanding of the business processes and operations and the skilful realization of information technologies required to practice electronic commerce.	√	✓				
P2. Apply knowledge in business, mathematics, programming, computing, web development, and database to address complex problems in the context of electronic commerce.	√	✓				
P3. Analyse critically the effect of web technology use on organizational performance and develop electronic commerce strategies that fit organizational objectives.	✓	✓				
P4. Select and apply tools and technologies to effectively implement electronic commerce systems in business intelligence, enterprise resources planning, supply chain management, and customer relationship management.		✓				
P5. Develop relationships, motivate others, manage conflicts, lead changes, and work across differences in multi-disciplinary electronic commerce projects.			✓	✓	✓	
P6. Communicate and work effectively using written and spoken word, non- verbal language, and electronic tools with fellow professionals and different stakeholders in the electronic commerce industry.						√
P7. Demonstrate a global electronic commerce perspective as evidenced by an understanding of foreign languages and the role of Macau as an interface between the East and the West.						
P8. Cope with and manage contemporary advancement related to electronic commerce development and demonstrate lifelong learning attitudes and abilities.						
P9. Conduct research and devise innovative electronic commerce models to exploit business opportunities.	✓	✓				
P10. Reflect on professional responsibilities and keep up with the latest electronic commerce issues on legal, environmental, ethical, and societal considerations to benefit society comprehensively.						



MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Students are required to deliver their Reports as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

TEACHING AND LEARNING ACTIVITIES

Team meetings, oral presentation, report writing, software development and /or information system development as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

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

Students are required to complete the following assessment activities as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor:

Assessment Items	Weighting (%)	ILOs to be Assessed
A1. The Final Report and the developed information system or software tool	60%	1, 2, 3, 4, 5, 6
A2. Oral presentation	30%	4, 5, 6
A3. Contribution and ongoing performance of individual student	10%	1, 2, 3, 4, 5, 6

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.

MARKING SCHEME

This learning module is graded on a 100-point scale, with 100 as the highest possible score and 50 as the passing score. The grading criteria of the different assessment activities are stipulated in the (attached) Guidelines on the Graduation Reports I and II. The assessment criteria help ensure students understand what is expected at each grade level for each assessment activity.

REQUIRED READINGS

The supervisor will provide the learning materials to students as per the selected project topic.
 There is no suggested textbook.



REFERENCES

• The supervisor will provide the learning materials to students as per the selected project topic.

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.

Bachelor of E-Commerce Programme

MGPO4100 (Graduation Report I) and MGPO4110 (Graduation Report II) Project Guidelines First and Second Semester, 2024/25

The Graduation Report (Report) aims to provide students with an opportunity to apply the knowledge they have acquired to a real-life topic. The Report comprises Reports I and II, which are to be completed respectively in the first and second semesters.

Students are required to form a project team of two or three persons and work on a topic under the guidance of an appointed supervisor. There are two approach options, namely, approach A and approach B, that each team may choose. Each team should consult with their supervisor for a mutually agreed topic and approach option. The team's composition, the topic, and the approach option to be submitted in a Graduation Report proposal (see Appendix 1) are then subject to the Faculty's approval.

For approach A projects, students identify and develop an information system to the benefit of an organization or of values to a target market. The primary outputs of approach A projects are (1) a Study Report that presents the activities and deliverables of all phases of the system development and (2) a fully operational version of the information system with all proposed features and functionalities implemented.

For approach B projects, students conduct a purposeful investigation of an e-commerce-related topic. The primary outputs of approach B projects are (1) a Study Report presenting the purpose, background, design, results, interpretations, and reflections of the investigation and (2) a prototype of a software tool developed to help with the project's data collection or data analysis.

Whether approach A or approach B is chosen, the Report will be marked by two faculty members, including the project supervisor. The Programme External Examiner will also be invited to remark samples of the Report, and responsible internal evaluators may be asked to justify their marking in case irregularities are found. The major components and assessment rubrics for the Report are detailed in Appendix 2 and Appendix 3, respectively. The assessment policy for the Report is as follows:

E	Evaluation Component		Evaluator(s)			
LV			Report I	Report II		
1	The Study Report and the developed information system or software tool	60%	Supervisor	Supervisor, Second Assessor		
2	Oral presentation	30%	Supervisor, Second Assessor	Supervisor, Second Assessor		
3	Contribution and ongoing performance of individual student	10%	Supervisor	Supervisor		
	Total	100%				

Throughout the academic year, students are supposed to work according to the project schedule (see Appendix 4) and meet with their supervisors at least once a week for consultation. Each meeting is to be logged in a progress log (see Appendix 5).

Bachelor of E-Commerce Programme

Graduation Report (MGPO4100/4110) Proposal

Please fill in and sign a copy of this proposal and	d file it with the Su	ipervisor.
Topic:		
1. 2. 3. Supervisor: Signature: For Office Use Only: Programme Coordinator's Signature:	e.)	
 After the submission deadline on 9 Septenteam member(s) will not be encouraged, a faculty. After the submission deadline on 9 Septemusually be approved by the faculty. After the submission deadline on 9 Septemusually be approved by the faculty. 	and any such case aber 2024, switching	es must be approved by the ng of the supervisor will not
Team Member's Name	Student No.	Signature
1.		
2.		
3.		
Supervisor:	Signature:	
For Office Use Only:		
Programme Coordinator's Signature:		
Date:		

Graduation Report (MGPO4100/4110) Components, Contents and Deliverables

Approach A Project

		Report Component	Suggested Contents and/or Deliverables*
		Target Market/ Organisation	Background, description of the business, product/service description, customer portfolio
MGPO4100 (Graduation Report I) MGPO4110 (Graduation Report II)	Business Analysis and E-Business Initiative	 Business analysis with relevant analytical model(s) such as five forces analysis, critical success factors, strength-weakness-opportunity-threat analysis, etc. An e-business initiative resulting from the business analysis Objectives and scopes of the initiative 	
	Requirements Specification	 Functional requirements Use case diagram and use case narratives Description of the business processes Non-functional requirements 	
	n Report I)	System Design	 Design models such as class diagrams, object diagrams, communication diagrams, sequence diagrams, activity diagrams, and state diagrams User interface design System architecture, e.g., network diagrams Hardware and software platform Choice of programming language(s), Implementation plan, e.g., Gantt charts
tion Report II)		Implementation	 Implementation of the proposed information system Documentation that explains clearly how each core system feature and functionality is implemented Fully operational version of the information system that demonstrates the specified features and functionalities
	I)	Test	 Testing of the proposed information system Test plans such as the unit test, integration test, and product test Test cases and results corresponding to the above test plans
		Documentation	User manuals such as a user guide, reference manual, and installation manual
		Abstract	• A structured abstract of around 1000 words (4 to 8 pages, including diagrams) that includes (i) the background of the system development, (ii) the main features and functionalities of the developed system, and (iii) the development process of the artefact

^{*} Students should consult their supervisors for the most appropriate deliverables and content of their study.

1

Graduation Report (MGPO4100/4110) Components, Contents and Deliverables

Approach B Project

		Report Component	Suggested Content and/or Deliverables*
		Introduction	Purpose, objectives, scope, and value of the study
MGPO4100 (Graduation Keport I) MGPO4110 (Gradua ion Report II)	M	Background and Problem Definition	 A real-world area that is worthy of study Background of the study Problem definition Rationale of the study
	GPO4100 (Gra	Intellectual Framework and Literature Review	 A framework of ideas to make sense of the study Literature review of previous influential studies in similar domains Definitions of key concepts A theoretical framework or model to guide the study
	duation Report I	Design and Methodology of the Study	 Specific procedures and/or techniques used to conduct the study Study workflow Procedures and techniques for data collection and data analyses Study plan, e.g., Gantt charts
04110 (Gradua		Software Tool Development	 A software tool developed for data collection, quantitative analysis, or simulation Prototype of the developed software tool Documentation of the installation, functionalities, and usage of the software tool
ion Report II)		Results and Findings	 Findings resulting from the execution of the adopted methodology Use of the methodology Data collected Processes and results of data analyses
		Discussions and Implications	 Reflection on the study Interpretation of the findings Discussion and implications related to the findings and study purpose Recommendations and limitations of the study; areas for further study
		Conclusion	A conclusion recaps what the study is about, what it aims to examine, what is its relevance, and what is achieved or its important findings
		Abstract	A structured abstract of around 1500 words (5 to 8 pages, including diagrams) that includes (i) the purpose of the study, (ii) design/methodology/approach, (iii) key findings of the study, (iv) managerial and/or practical implications, and (v) conclusion

^{*} Students should consult their supervisors for the most appropriate deliverables and content of their study.

Assessment Rubric for MGPO4100 Study Report (Approach A)

Project Title:

Student Names:

(Name)

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)						Level	Mar
Assessment Criterion	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)						Achieved	Give
		Target Market/Org	ganisation					1
Background of the market/organisation	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	5		
Business Analysis and E-Business Initiative								
Business analysis with analytical nodel(s)	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Ceasibility analysis of the initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Requirements Spe	ecification					
Functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive			
Non-functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	20		
Use of specification notations and Formats	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
		System Desi	ign					
Mapping of requirements to design	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Data design (structure of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive			
Process design (behaviour of the nformation system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive	35		
Jser interface design (user experience)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Use of design notations and format	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
Others (system architecture, hardware and software platform, etc.)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			<u> </u>
		Report Qua	lity					
anguage (spelling, grammar)	Very poor	Poor	Fair	Good	Very good			
Vriting style	Very poor	Poor	Fair	Good	Very good	20		
Citation and reference format	Very poor	Poor	Fair	Good	Very good			
structure and organisation	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

_(Signature)

Assessment Rubric for MGPO4100 Study Report (Approach B)

Project Title:

Student Names:

Evaluator:___

(Name)

Assessment Criterion		Level of Comprehensiveness (Please mark the level achieved for each criterion)					Level	Mar
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Giv
	_							
Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	5		
		Background and Prob	olem Definition					
Background of the study	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
Problem definition	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Rationale of the study	Not given	Vaguely given	Given	Given and justified	Given and well justified			
	In	tellectual Framework an	d Literature Review					
Review of previous influential studies	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive			
Key concept definitions	Missing	Few concepts are defined	Some concepts are defined	Key concepts are defined	Key concepts are well defined	20		
Theoretical framework/model	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Design and Methodolo	gy of the Study					
Study flow and procedure	Missing	Unclear and inappropriate	Unclear or inappropriate	Clear and appropriate	Very clear and appropriate			
Sampling and data collection	No description	Vague description	Fairly clear description	Clear description	Very clear description	20		
Instruments and techniques employed	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
Data analysis methods	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Software Tool De	velopment					
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive	15		
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good			
		Report Qua	ality					
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good			
Writing style	Very poor	Poor	Fair	Good	Very good	20		
Citation and reference format	Very poor	Poor	Fair	Good	Very good			
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

_(Signature)

Assessment Rubric for MGPO4100 Oral Presentation (Approach A)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)						Level	Marl
	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)						Achieved	Give
Target Market/Organisation Background of the market/organisation Not presented Not presented and described described described Described Appropriately presented and described described described described								
Background of the market/organisation	Not presented				Clearly presented and well described	5		
Business Analysis and E-Business Initiative Presented and Presented and Presented and somewhat Clearly presented and Clearly presented and								
Business analysis with analytical model(s)	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Feasibility analysis of the initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Requirements Spe	cification					
Functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive			
Non-functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	20		
Use of specification notations and formats	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
		System Desi	gn					
Mapping of requirements to design	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Data design (structure of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive			
Process design (behaviour of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive	35		
User interface design (user experience)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Use of design notations and format	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
Others (system architecture, hardware and software platform, etc.)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
		Oral Presenta	ntion					
Communication skills	Very poor	Poor	Fair	Good	Very good	20		
Visual aids	Very poor	Poor	Fair	Good	Very good	20		
Response to questions	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

(Name) (Signature)

Assessment Rubric for MGPO4100 Oral Presentation (Approach B)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)						Level	Mark
Assessment Criterion	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)						Achieved	Give
Introduction								
Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	5		
Background of the study	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
Problem definition	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Rationale of the study	Not given	Vaguely given	Given	Given and justified	Given and well justified			
•	In	tellectual Framework an	d Literature Review					
Review of previous influential studies	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive			
Key concept definitions	Missing	Few concepts are defined	Some concepts are defined	Key concepts are defined	Key concepts are well defined	20		
Theoretical framework/model	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Design and Methodolo	ogy of the Study					
Study flow and procedure	Missing	Unclear and inappropriate	Unclear or inappropriate	Clear and appropriate	Very clear and appropriate			
Sampling and data collection	No description	Vague description	Fairly clear description	Clear description	Very clear description	20		
Instruments and techniques employed	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
Data analysis methods	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Software Tool De	evelopment					
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive	15		
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good			
		Oral Present	tation					
Communication skills	Very poor	Poor	Fair	Good	Very good	20		
Visual aids	Very poor	Poor	Fair	Good	Very good	20		
Response to questions	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

(Name) (Signature)

Assessment Rubric for MGPO4110 Study Report (Approach A)

Project Title:

Student Names:

(Name)

Assessment Criterion		Level of Comprehen	siveness (Please mark the leve	el achieved for each criterion)		Full	Level	Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given
Concise description of the development project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented	10		
Inclusion of Report I								
Completeness and content updated (%)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	10		
		Implementa	tion					
Documentation of system implementation (% completeness)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Documentation of system implementation (clarity)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Functionality of the information system	Very poor	Poor	Fair	Good	Very good	35		
Utility of the information system	Very poor	Poor	Fair	Good	Very good			
Usability of the information system	Very poor	Poor	Fair	Good	Very good			
Coding standards	Not followed	Rarely followed	Followed occasionally	Followed appropriately	Followed appropriately and extensively			
Test								1
Test plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	15		
Test cases and results	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
		Documentat	tion					
User manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient	10		
		Report Qua	lity					
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good			
Writing style	Very poor	Poor	Fair	Good	Very good	20		
Citation and reference format	Very poor	Poor	Fair	Good	Very good			I
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

_(Signature)

Assessment Rubric for MGPO4110 Study Report (Approach B)

Project Title:

Student Names:

Evaluator:__

(Name)

ASSESSMENT CITETION	0 (0% - 29%)	1 (30% - 49%)		Assessment Criterion Level of Comprehensiveness (Please mark the level achieved for each criterion)					
		1 (30/0 15/0)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given	
Abstract Concise description of the investigation									
Concise description of the investigation project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented	10			
Inclusion of Report I									
Completeness and content updated (%)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	10			
		Results and Fi	ndings						
Execution of the methodology	Missing	Inappropriate and unclear	Somewhat appropriate but unclear	Clear and appropriate	Very clear and appropriate				
Sample data	Not presented	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	35			
Data analysis process	Not presented	Inappropriate and inadequate	Somewhat appropriate but inadequate	Appropriate and adequate	Appropriate, adequate, and sophisticated				
Results from data analyses	Not presented	Inaccurate and incompletely presented	Presented correctly, but with inaccurate explanation	Presented correctly with accurate explanation	Presented correctly with accurate and detailed explanation				
Discussions and Implications									
Interpretation of the findings	Not presented	Findings are interpreted superficially	Findings are somewhat interpreted	Findings are interpreted	Findings are well interpreted	- 0			
Discussion and implications	Not presented	Not relevant and not discussed	Relevant, but not adequately discussed	Relevant and adequately discussed	Very relevant and thoroughly discussed	20			
Recommendations and limitations	Not presented	Not relevant	Relevant, but not adequately described	Relevant and adequately described	Very relevant and fully described				
		Conclusio	n			_			
Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant	5			
		Report Qua	lity						
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good				
Writing style	Very poor	Poor	Fair	Good	Very good	20			
Citation and reference format	Very poor	Poor	Fair	Good	Very good				
Structure and organisation	Very poor	Poor	Fair	Good	Very good				
					Total:	100			

_(Signature)

Assessment Rubric for MGPO4110 Oral Presentation (Approach A)

Project Title:

Evaluator:

Student Names:

(Name)

Assessment Criterion		Level of Comprehen	siveness (Please mark the leve	l achieved for each criterion)		Full	Level	Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Giver
Market/Organisation and the E- business initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
User requirements and system specification	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		System Impleme	entation					
Documentation of system implementation (% completeness)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Documentation of system implementation (clarity)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate	35		
Functionality of the information system	Very poor	Poor	Fair	Good	Very good			
Utility of the information system	Very poor	Poor	Fair	Good	Very good			
Usability of the l information system	Very poor	Poor	Fair	Good	Very good			
Coding standards	Not followed	Rarely followed	Followed occasionally	Followed appropriately	Followed appropriately and extensively			
·		Test						
Test plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	15		
Test cases and results	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
		Documentat	ion			10		
User manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient	10		
		Oral Presenta	ation					
Communication skills	Very poor	Poor	Fair	Good	Very good	20		
Visual aids	Very poor	Poor	Fair	Good	Very good	20		
Response to questions	Very poor	Poor	Fair	Good	Very good			
					Total:	100		

_(Signature)

Assessment Rubric for MGPO4110 Oral Presentation (Approach B)

Project Title:

Student Names:

Evaluator:_____

Assessment Criterion		Level of Comprehen	siveness (Please mark the level	achieved for each criterion)		Full	Level	Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given
	Backg	round of the investigation	n work (from Report I)					
Background and problem definition	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
Intellectual framework and/or model; Methodology	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Findings and Results of	the Investigation					
Execution of the methodology Missing Inappropriate and unclear Somewhat appropriate but unclear Clear and appropriate Very clear and appropriate								
Sample data	Not presented	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	35		
Data analysis process	Not presented	Inappropriate and inadequate	Somewhat appropriate but inadequate	Appropriate and adequate	Appropriate, adequate, and sophisticated			
Results from data analyses	Not presented	Inaccurate and incompletely presented	Presented correctly, but with inaccurate explanation	Presented correctly with accurate explanation	Presented correctly with accurate and detailed explanation			
Discussions and Implications								
Interpretation of the findings	Not presented	Findings are interpreted superficially	Findings are somewhat interpreted	Findings are interpreted	Findings are well interpreted	• •		
Discussion and implications	Not presented	Not relevant and not discussed	Relevant, but not adequately discussed	Relevant and adequately discussed	Very relevant and thoroughly discussed	20		
Recommendations and limitations	Not presented	Not relevant	Relevant, but not adequately described	Relevant and adequately described	Very relevant and fully described			
		Conclusio	n			5		
Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant	3		
		Oral Presents	ation					
Communication skills	Very poor	Poor	Fair	Good	Very good	•		
Visual aids	Very poor	Poor	Fair	Good	Very good	20		
Response to questions	Very poor	Poor	Fair	Good	Very good			
					Total:	100		
Comments (to be continued on additional p	pages if necessary):							

_(Signature)

_(Name)___

Date: _____

Graduation Report (MGPO4100/4110) Project Schedule First and Second Semesters, 2024/25

Miles	stone/l	Deadline	Date
MGPC	1.	Submission of each team's Graduation Report proposal to the supervisor, consisting of a list of the students in the team (2 to 3 students each), the Graduation Report's topic, and the chosen approach option (i.e., approach A or approach B)	6/9/2024
)4100 (G	2.	The supervisor's announcement of the faculty's approval/rejection of the Graduation Report proposal and the follow-up actions in case of rejection	9/9/2024
MGPO4100 (Graduation Report I)	 3. 4. 	Oral presentation* of each team for Report I Submission of the following to the supervisor by each team: One hard copy of the Study Report† for Report I CD(s), DVD(s), or USB drive(s) containing one soft copy of the Study Report for Report I and for approach B only, the software tool developed, including all source codes, compiled codes, etc. The list of students' individual contributions to Report I All the progress logs for the meetings with the supervisor throughout the first semester	2/12/2024 2/12/2024
MGPO4110 (Graduation Report II)	 5. 6. 	Oral presentation* of each team for Report II Submission of the following to the supervisor by each team: • Two hard copies of the Study Report† for Report II • CD(s), DVD(s), or USB drive(s) containing • one soft copy of the Study Report for Report II; • for approach A, a fully operational version of the information system, inclusive of all programmes (i.e., all source codes, compiled codes, and the like), all databases, and all other files enabling the installation and execution of the system; and • for approach B, the software tool developed in the first semester (including all source codes, compiled codes, etc.), all data collected, and all other files enabling the regeneration of the results and findings of the study • The list of students' individual contributions to Report II • All the progress logs for the meetings with the supervisor throughout the second semester	28/4/2025

^{*} The oral presentation will last 30 minutes, including a 10-minute question and answer session.

[†] The written report should be printed on A4 plain white paper using 12-pt Times New Roman, double-spacing, and leaving a 1" margin on all four sides.

Bachelor of E-Commerce Programme

MGPO4100 Graduation Report I First Semester, 2024/25

Progress Log

Students' Nai	nes:			
Supervisor's Topic:	Name:			
Meeting No.	-	Outc	ome Met	<u> </u>
Date: //	Planned Outcome	Yes	Partially	No
1				
2				
3				
4				
5				
6				
Supervisor's Co	mments:			

Please duplicate this page as necessary.

Bachelor of E-Commerce Programme

MGPO4110 Graduation Report II Second Semester, 2024/25

Progress Log

Students' Nai	nes:			
Supervisor's 1	Vame:			
Торіс:				<u> </u>
Meeting No.		Outc	ome Met	(✓):
Date: //	Planned Outcome	Yes	Partially	No
1				
2				
3				
4				
5				
6				
Supervisor's Co	mments:			

Please duplicate this page as necessary.



FACULTY OF BUSINES BACHELOR OF E-COMMERCE LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	2				
Module Code	MGPO4110-421						
Learning Module	Graduation Report II	Graduation Report II					
Pre-requisite(s)	Graduation Report I (MGPO4100)						
Medium of Instruction	English						
Credits	6	Contact Hours	90				
Instructor	Dr. LAI TSZ MING, TERENCE	Email	tmlai@mpu.edu.mo				
Office	M530	Office Phone	8599 3346				

MODULE DESCRIPTION

Completion of Graduation Report I is a prerequisite for students to be enrolled in this learning module. Students continue on their selected study in this learning module. The students are required to submit a report upon completing their study.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	develop the expertise and knowhow for accomplishing Report II as specified by the module materials,
M2.	apply such expertise and knowhow to accomplish Report II,
M3.	practise management of general and e-commerce-oriented projects,
M4.	demonstrate leadership in carrying out project teamwork,
M5.	illustrate collaboration and cooperation in executing project teamwork, and



M6.

present project information, both verbally and in written reports.

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

PILC	Os	M1	M2	М3	M4	M5	M6
P1.	Demonstrate an understanding of the business processes and operations and the skilful realization of information technologies required to practice electronic commerce.	√	√				
P2.	Apply knowledge in business, mathematics, programming, computing, web development, and database to address complex problems in the context of electronic commerce.	√	√				
P3.	Analyse critically the effect of web technology use on organizational performance and develop electronic commerce strategies that fit organizational objectives.	√	✓				
P4.	Select and apply tools and technologies to effectively implement electronic commerce systems in business intelligence, enterprise resources planning, supply chain management, and customer relationship management.		✓				
P5.	Develop relationships, motivate others, manage conflicts, lead changes, and work across differences in multi-disciplinary electronic commerce projects.			√	√	√	
P6.	Communicate and work effectively using written and spoken word, non- verbal language, and electronic tools with fellow professionals and different stakeholders in the electronic commerce industry.						✓
P7.	Demonstrate a global electronic commerce perspective as evidenced by an understanding of foreign languages and the role of Macau as an interface between the East and the West.						
P8.	Cope with and manage contemporary advancement related to electronic commerce development and demonstrate lifelong learning attitudes and abilities.						
P9.	Conduct research and devise innovative electronic commerce models to exploit business opportunities.	✓	√				



P10. Reflect on professional responsibilities and keep up with the latest electronic commerce issues on legal, environmental, ethical, and societal considerations to benefit society comprehensively.						
--	--	--	--	--	--	--

MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Students are required to deliver their Reports as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

TEACHING AND LEARNING ACTIVITIES

Team meetings, oral presentation, report writing, software development and /or information system development as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

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

Students are required to complete the following assessment activities as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor:

Assessment Items	Weighting (%)	ILOs to be Assessed
A1. The Final Report and the developed information system or software tool	60%	1, 2, 3, 4, 5, 6
A2. Oral presentation	30%	4, 5, 6
A3. Contribution and ongoing performance of individual student	10%	1, 2, 3, 4, 5, 6

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.

MARKING SCHEME

This learning module is graded on a 100-point scale, with 100 as the highest possible score and 50 as the passing score. The grading criteria of the different assessment activities are stipulated in the (attached) Guidelines on the Graduation Reports I and II. The assessment criteria help ensure students understand what is expected at each grade level for each assessment activity.



REQUIRED READINGS

The supervisor will provide the learning materials to students as per the selected project topic.
 There is no suggested textbook.

REFERENCES

• The supervisor will provide the learning materials to students as per the selected project topic.

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.

Bachelor of E-Commerce Programme

MGPO4100 (Graduation Report I) and MGPO4110 (Graduation Report II) Project Guidelines First and Second Semester, 2024/25

The Graduation Report (Report) aims to provide students with an opportunity to apply the knowledge they have acquired to a real-life topic. The Report comprises Reports I and II, which are to be completed respectively in the first and second semesters.

Students are required to form a project team of two or three persons and work on a topic under the guidance of an appointed supervisor. There are two approach options, namely, approach A and approach B, that each team may choose. Each team should consult with their supervisor for a mutually agreed topic and approach option. The team's composition, the topic, and the approach option to be submitted in a Graduation Report proposal (see Appendix 1) are then subject to the Faculty's approval.

For approach A projects, students identify and develop an information system to the benefit of an organization or of values to a target market. The primary outputs of approach A projects are (1) a Study Report that presents the activities and deliverables of all phases of the system development and (2) a fully operational version of the information system with all proposed features and functionalities implemented.

For approach B projects, students conduct a purposeful investigation of an e-commerce–related topic. The primary outputs of approach B projects are (1) a Study Report presenting the purpose, background, design, results, interpretations, and reflections of the investigation and (2) a prototype of a software tool developed to help with the project's data collection or data analysis.

Whether approach A or approach B is chosen, the Report will be marked by two faculty members, including the project supervisor. The Programme External Examiner will also be invited to remark samples of the Report, and responsible internal evaluators may be asked to justify their marking in case irregularities are found. The major components and assessment rubrics for the Report are detailed in Appendix 2 and Appendix 3, respectively. The assessment policy for the Report is as follows:

England on Comment	W/-!-l-4	Evaluator(s)			
Evaluation Component	Weight	Report I	Report II		
The Study Report and the developed 1 information system or software tool	60%	Supervisor	Supervisor, Second Assessor		
2 Oral presentation	30%	Supervisor, Second Assessor	Supervisor, Second Assessor		
Contribution and ongoing 3 performance of individual student	10%	Supervisor	Supervisor		
Total	100%				

Throughout the academic year, students are supposed to work according to the project schedule (see Appendix 4) and meet with their supervisors at least once a week for consultation. Each meeting is to be logged in a progress log (see Appendix 5).

Bachelor of E-Commerce Programme

Graduation Report (MGPO4100/4110) Proposal

Please fill in an	nd sign a copy of this proposal an	d file it with the Su	upervisor.
Topic:			
Approach:	A / B_(Please d	lelete as appropriat	e.)
 After the team mem After the usually be After the 	e following conditions: submission deadline on 9 September(s) will not be encouraged, and submission deadline on 9 September approved by the faculty. submission deadline on 9 September approved by the faculty.	d any such cases months and any such cases months and any such and such any such any such any such any such and such any such and such any such and such any such any such and such any such and such any such and such any such any such and such any such and such any such and such any such any such and such any such and such any such and such and such and such any such any such and such any such and such any such and such any such any such and such any such any such and such any such any such any such and such any such any such and such any such any such any such and such any such any such and such any such any such any such any such any such and such any such any such any such any such any such and such any such any such and	ust be approved by the faculty. ng of the supervisor will not
Te	eam Member's Name	Student No.	Signature
1.			
2.			
3.			
Supervisor:		Signature:	

For Office Use Only:	
Programme Coordinator's Signature:	
Date:	

Appendix 2

Graduation Report (MGPO4100/4110) Components, Contents and Deliverables

Approach A Project

		Report Component	Suggested Contents and/or Deliverables*
MGPO	MGPO	Target Market/ Organisation	Background, description of the business, product/service description, customer portfolio
MGPO4110 (Graduation Report II)	MGPO4100 (Graduation Report I)	Business Analysis and E-Business Initiative	 Business analysis with relevant analytical model(s) such as five forces analysis, critical success factors, strengthweakness-opportunity-threat analysis, etc. An e-business initiative resulting from the business analysis Objectives and scopes of the initiative
Report II)	Report I)	Requirements Specification	Feasibility analysis of the initiative • Functional requirements o Use case diagram and use case narratives o Description of the business processes • Non-functional requirements
		System Design	 Design models such as class diagrams, object diagrams, communication diagrams, sequence diagrams, activity diagrams, and state diagrams User interface design System architecture, e.g., network diagrams Hardware and software platform Choice of programming language(s), Implementation plan, e.g., Gantt charts
		Implementation	Implementation of the proposed information system o Documentation that explains clearly how each core system feature and functionality is implemented o Fully operational version of the information system that demonstrates the specified features and functionalities

Test	Testing of the proposed information system o Test plans such as the unit test, integration test, and product test o Test cases and results corresponding to the above test plans
Documentation	User manuals such as a user guide, reference manual, and installation manual
Abstract	• A structured abstract of around 1000 words (4 to 8 pages, including diagrams) that includes (i) the background of the system development, (ii) the main features and functionalities of the developed system, and (iii) the development process of the artefact

^{*} Students should consult their supervisors for the most appropriate deliverables and content of their study.

1 Appendix 2

Graduation Report (MGPO4100/4110) Components, Contents and Deliverables

Approach B Project

		Report Component	Suggested Content and/or Deliverables*
MG	MG	Introduction	Purpose, objectives, scope, and value of the study
MGPO4110 (Graduation	MGPO4100 (Gra	Background and Problem Definition	A real-world area that is worthy of study ○ Background of the study ○ Problem definition ○ Rationale of the study
duation Report II)	(Graduation Report	Intellectual Framework and Literature Review	 A framework of ideas to make sense of the study o Literature review of previous influential studies in similar domains Operation of key concepts A theoretical framework or model to guide the study
II)	1)	Design and Methodology of the Study	 Specific procedures and/or techniques used to conduct the study Study workflow Procedures and techniques for data collection and data analyses Study plan, e.g., Gantt charts

Software Tool Development	 A software tool developed for data collection, quantitative analysis, or simulation Prototype of the developed software tool Documentation of the installation, functionalities, and usage of the software tool
Results and Findings	 Findings resulting from the execution of the adopted methodology Use of the methodology o Data collected Processes and results of data analyses
Discussions and Implications	 Reflection on the study ○ Interpretation of the findings ○ Discussion and implications related to the findings and study purpose ○ Recommendations and limitations of the study; areas for further study
Conclusion	• A conclusion recaps what the study is about, what it aims to examine, what is its relevance, and what is achieved or its important findings
Abstract	A structured abstract of around 1500 words (5 to 8 pages, including diagrams) that includes (i) the purpose of the study, (ii) design/methodology/approach, (iii) key findings of the study, (iv) managerial and/or practical implications, and (v) conclusion

^{*} Students should consult their supervisors for the most appropriate deliverables and content of their study.

Assessment Rubric for MGPO4100 Study Report (Approach A) Project

Title:

Level of Comprehensiveness (Please mark the level achieved for each criterion)								Mark
Assessment Criterion	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)						Level Achieved	Given
Background of the market/organisation	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	5		
]	Business Analysis and E-B	Susiness Initiative					
usiness analysis with analytical odel(s) Not presented		Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Feasibility analysis of the initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		Requirements Spe	cification					
Functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	•		
Non-functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	20		
Use of specification notations and formats	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
Mapping of requirements to design	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Data design (structure of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive			
Process design (behaviour of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive	35		
User interface design (user experience) None		Unclear and inappropriate	Fairly clear and appropriate Clear and appropriate		Very clear and appropriate			
Use of design notations and format	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
Others (system architecture, hardware and software platform, etc.)			Very clear and appropriate					
		Report Qual	lity					
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good			

	Evaluator:	Name)		(Signat	ture)	D	Pate:
--	------------	-------	--	---------	------	---	---	-------

Very poor	Poor	Fair	Good	Very good	20				
Very poor	Poor	Fair	Good	Very good					
Very poor	Poor	Fair	Good	Very good					
(based on the Turnitin report). Comments (to be continued on additional pages if necessary): Total: 100									
Originality assessment by the supervisor:									
	Very poor Very poor	Very poor Poor Very poor Poor	Very poor Poor Fair Very poor Poor Fair	Very poor Poor Fair Good Very poor Poor Fair Good	Very poor Poor Fair Good Very good Very poor Poor Fair Good Very good	Very poor Poor Fair Good Very good Very poor Poor Fair Good Very good	Very poor Poor Fair Good Very good Very poor Poor Fair Good Very good		

Assessment Rubric for MGPO4100 Study Report (Approach B)

Project Title: Student Names:

Level of Comprehensiveness (Please mark the level achieved for each criterion)							Level	Mark
Assessment Criterion 0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 10			4 (90% - 100%)	Mark	Achieved	Given		
Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	5		
		Background and Prob	olem Definition					
Background of the study	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
Problem definition	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Rationale of the study	Not given	Vaguely given	Vaguely given Given		Given and well justified			
		tellectual Framework and						
Review of previous influential studies	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive			I
Key concept definitions	Missing	Few concepts are defined	Some concepts are defined	Key concepts are defined	Key concepts are well defined	20		
Theoretical framework/model Not presented not discussed discussed		Presented, but not adequately discussed	Presented and somewhat adequately discussed Clearly presented and adequately discussed					
		Design and Methodolo	gy of the Study					1
Study flow and procedure	Missing	Unclear and inappropriate	Unclear or inappropriate	Clear and appropriate	Very clear and appropriate			
Sampling and data collection	No description	Vague description	Fairly clear description	Clear description	Very clear description	•		
Instruments and techniques employed	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		

Evaluator:	(Name	(Sign	nature)	Date:	

Data analysis methods	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed		
		Software Tool De	velopment				
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive	15	
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good		
		Report Qua	ality				
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good		
Writing style	Very poor	Poor	Fair	Good	Very good		
Citation and reference format	Very poor	Poor	Fair	Good	Very good	20	
Structure and organisation	Very poor	Poor	Fair	Good	Very good		
					Total:	100	
Originality assessment by the supervisor:	(based on the Tur	nitin report). Comments	(to be continued on additional pa	ges if necessary):			

Assessment Rubric for MGPO4100 Oral Presentation (Approach A)

Project Title:

		Level of Comprehensiveness (Please mark the level achieved for each criterion)						Mark
Assessment Criterion	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)		Mark	Achieved	Given			
		Target Market/Org	ganisation	1	L			
Background of the market/organisation	Not presented	Not presented Poorly presented and described		Briefly presented and described Appropriately presented and described		5		
Business Analysis and E-Business Initiative								
Business analysis with analytical model(s)	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20		
Feasibility analysis of the initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			

valuator:	(Name)	(Sig	gnature	e)	Date:

		Requirements Spe	cification				
Functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	20	
Non-functional requirements gathered	None	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	20	
Use of specification notations and formats	None I Inaccurate and inappropriate I Accurate and appropriate I			Very accurate and appropriate			
		System Desi	gn				
Mapping of requirements to design	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate		
Data design (structure of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive		
Process design (behaviour of the information system)	None	Inadequate and inappropriate	Somewhat adequate and appropriate	Adequate and appropriate	Adequate, appropriate, and comprehensive	35	
User interface design (user experience)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate		
Use of design notations and format	ations and format None Inaccurate and inappropria		Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate		
Others (system architecture, hardware and software platform, etc.)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate		
		Oral Presenta	ntion				
Communication skills	Very poor	Poor	Fair	Good	Very good	20	
Visual aids	Very poor	Poor	Fair	Good	Very good	20	
Response to questions	Very poor Poor		Fair	Good	Very good		
		l			Total:	100	

Assessment Rubric for MGPO4100 Oral Presentation (Approach B)

Project Title:

Assessment Cuitorien	Level of Comprehensiveness (Please mark the level achieved for each criterion)							Mark Given
Assessment Criterion	0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (70% - 89%) 4 (90% - 100%)							Given
Introduction								

Evaluator:	(Name)	(Signature)	Date:

Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined		
						5	
		Background and Prob	lem Definition				
Background of the study	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed		
Problem definition	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined	20	
Rationale of the study	Not given	Vaguely given	Given	Given and justified	Given and well justified		
Review of previous influential studies	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive		
Key concept definitions	Missing	Few concepts are defined	Some concepts are defined	Key concepts are defined	Key concepts are well defined	20	
Theoretical framework/model	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed		
		Design and Methodolo	gy of the Study				
Study flow and procedure	Missing	Unclear and inappropriate	Unclear or inappropriate	Clear and appropriate	Very clear and appropriate		
Sampling and data collection	No description	Vague description	Fairly clear description	Clear description	Very clear description	20	
Instruments and techniques employed	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20	
Data analysis methods	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed		
		Software Tool De	velopment				
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive	15	
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good	13	
		Oral Present	ation				
Communication skills	Very poor	Poor	Fair	Good	Very good		
Visual aids	Very poor	Poor	Fair	Good	Very good	20	
Response to questions	Very poor	Poor	Fair	Good	Very good		
					Total:	100	
Comments (to be continued on additional pa	ages if necessary):						

_(Signature)

Date:

(Name)

Evaluator:__

Assessment Rubric for MGPO4110 Study Report (Approach A) Project

Title:

	Level of Comprehensiveness (Please mark the level achieved for each criterion)							Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Full Mark	Level Achieved	Given
		Abstract		<u> </u>	1			
Concise description of the development project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented	10		
		Inclusion of Re	eport I					
Completeness and content updated (%) 0 (0% - 29%)		1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	10		
		Implementa	tion					
Documentation of system implementation (% completeness)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Documentation of system implementation (clarity)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Functionality of the information system	Very poor	Poor	Fair	Good	Very good	35		
Utility of the information system	Very poor	Poor	Fair	Good	Very good			
Usability of the information system	Very poor	Poor	Fair	Good	Very good			
Coding standards	Not followed	Rarely followed	Followed occasionally	Followed appropriately	Followed appropriately and extensively			
		Test						
Test plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	15		
Test cases and results	Poorly presented and Rijefly presented and Appropriately presented and Clearly presented and well							
		Documentat	tion					
User manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient	10		
		Report Qua	lity	'				
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good			
Writing style	Very poor	Poor	Fair	Good	Very good			

Evaluator: (Name) (Signature) Date:	Date:
-------------------------------------	-------

Citation and reference format	Very poor	Poor	Fair	Good	Very good	20	
Structure and organisation	Very poor	Poor	Fair	Good	Very good		
	(based on the T	Furnitin report). Comme	ents (to be continued on addition	nal pages if necessary):	Total:	100	
Originality assessment by the supervisor:							

Assessment Rubric for MGPO4110 Study Report (Approach B) Project

Title:

Level of Comprehensiveness (Please mark the level achieved for each criterion)								Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given
·		Abstract						I
Concise description of the investigation project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented	10		I
		Inclusion of Re	port I					ı
Completeness and content updated (%) 0 (0% - 29%) 1 (30% - 49%) 2 (50% - 69%) 3 (3 (70% - 89%)	4 (90% - 100%)	10		I		
·		Results and Fir	ndings					
Execution of the methodology	Missing	Inappropriate and unclear	Somewhat appropriate but unclear	Clear and appropriate	Very clear and appropriate			I
Sample data	Not presented	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	35		
Data analysis process	Not presented	Inappropriate and inadequate	Somewhat appropriate but inadequate	Appropriate and adequate	Appropriate, adequate, and sophisticated			
Results from data analyses	Inaccurate and bresented correctly, but with inaccurate explanation accurate explanation from data analyses Not presented incompletely presented with inaccurate explanation accurate explanation explanation							
		Discussions and Im	plications					İ
Interpretation of the findings	Not presented	Findings are interpreted superficially	Findings are somewhat interpreted	Findings are interpreted	Findings are well interpreted	20		I
Discussion and implications	Relevant but not Relevant and adequately Very relevant and fully]
Recommendations and limitations					<u> </u>			
		Conclusio	n					1

Evaluator:	(Name	(Sign	nature))	Date:	

Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant	5	
Report Quality							
Language (spelling, grammar)	Very poor	Poor	Fair	Good	Very good		
Writing style	Very poor	Poor	Fair	Good	Very good	20	
Citation and reference format	Very poor	Poor	Fair	Good	Very good		
Structure and organisation	Very poor	Poor	Fair	Good	Very good		
(based on the Turnitin report). Comments (to be continued on additional pages if necessary): Total:					100		
Originality assessment by the supervisor:							

Assessment Rubric for MGPO4110 Oral Presentation (Approach A)

Project Title:

	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full	Level	Mark
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given
Background of the system implementation (from Report I)								
Market/Organisation and the Ebusiness initiative	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20		
User requirements and system specification	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed			
		System Impleme	entation					
Documentation of system implementation (% completeness)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	35		
Documentation of system implementation (clarity)	None	Unclear and inappropriate	Fairly clear and appropriate	Clear and appropriate	Very clear and appropriate			
Functionality of the information system	Very poor	Poor	Fair	Good	Very good			
Utility of the information system	Very poor	Poor	Fair	Good	Very good			
Usability of the l information system	Very poor	Poor	Fair	Good	Very good			

Evaluator:	(Name)	(Signature)	Date:

Coding standards	Not followed	Rarely followed	Followed occasionally	Followed appropriately	Followed appropriately and extensively		
	•	Test		•			
est plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described	15	
est cases and results	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described		
		Documentat	ion			10	
Jser manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient	10	
	<u> </u>	Oral Presenta	ation				
Communication skills	Very poor	Poor	Fair	Good	Very good		
Visual aids	Very poor	Poor	Fair	Good	Very good	20	
Response to questions	Very poor	Poor	Fair	Good	Very good		
	l			I	Total:	100	
Comments (to be continued on addition	onal pages if necessary):						

Assessment Rubric for MGPO4110 Oral Presentation (Approach B)

Project Title:

Student Names:

Level of Comprehensiveness (Please mark the level achieved for each criterion)						Full	Level	Mark	
Assessment Criterion	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)	Mark	Achieved	Given	
Background of the investigation work (from Report I)									
Background and problem definition	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed	20	20		
Intellectual framework and/or model; Methodology	Not presented	Vaguely presented and not discussed	Presented, but not adequately discussed	Presented and somewhat adequately discussed	Clearly presented and adequately discussed				
		Findings and Results of t	he Investigation						
Execution of the methodology	Missing	Inappropriate and unclear	Somewhat appropriate but unclear	Clear and appropriate	Very clear and appropriate				
Sample data	Not presented	Irrelevant and inadequate	Somewhat relevant but inadequate	Relevant and adequate	Relevant, adequate, and comprehensive	35			
Data analysis process	Not presented	Inappropriate and inadequate	Somewhat appropriate but inadequate	Appropriate and adequate	Appropriate, adequate, and sophisticated				
Results from data analyses	Not presented	Inaccurate and incompletely presented	Presented correctly, but with inaccurate explanation	Presented correctly with accurate explanation	Presented correctly with accurate and detailed explanation				
		Discussions and Im	plications						
Interpretation of the findings	Not presented	Findings are interpreted superficially	Findings are somewhat interpreted	Findings are interpreted	Findings are well interpreted	• •			
Discussion and implications	Not presented	Not relevant and not discussed	Relevant, but not adequately discussed	Relevant and adequately discussed	Very relevant and thoroughly discussed	20			
Recommendations and limitations	Not presented	Not relevant	Relevant, but not adequately described	Relevant and adequately described	Very relevant and fully described				
		Conclusio	n						
Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant	5			
		Oral Presenta	ntion						
Communication skills	Very poor	Poor	Fair	Good	Very good				
Visual aids	Very poor	Poor	Fair	Good	Very good	20			

	Response to questions	Very poor	Poor	Fair	Good	Very good			
						Total:	100		
	Comments (to be continued on additional	pages if necessary):							
Ev	valuator: (Name)			(Sign	nature) Date	2:		_	

Graduation Report (MGPO4100/4110) Project Schedule First and Second Semesters, 2024/25

Mineston	e/Deadline	Date
M G 1	a list of the students in the team (2 to 3 students each),	6/9/2024
P04	 the Graduation Report's topic, and the chosen approach option (i.e., approach A or approach B) 	9/9/2024
100 (Gra	the Graduation Report proposal and the follow-up actions in case of	2/12/2024
adu	Oral presentation* of each team for Report I	
MGPO4100 (Graduation Report I)	 Submission of the following to the supervisor by each team: One hard copy of the Study Report[†] for Report I CD(s), DVD(s), or USB drive(s) containing one soft copy of the Study Report for Report I and for approach B only, the software tool developed, including all source codes, compiled codes, etc. 	2/12/2024
	 The list of students' individual contributions to Report I All the progress logs for the meetings with the supervisor throughout the first semester 	
5.	Oral presentation* of each team for Report II	28/4/2025
MGPO4110 (Graduation Report II)	 Submission of the following to the supervisor by each team: Two hard copies of the Study Report[†] for Report II CD(s), DVD(s), or USB drive(s) containing one soft copy of the Study Report for Report II; for approach A, a fully operational version of the information system, inclusive of all programmes (i.e., all source codes, compiled codes, and the like), all databases, and all other files enabling the installation and execution of the system; and for approach B, the software tool developed in the first semester (including all source codes, compiled codes, etc.), all data collected, and all other files enabling the regeneration of the results and findings of the study The list of students' individual contributions to Report II All the progress logs for the meetings with the supervisor throughout 	

* The oral presentation will last 30 minutes, including a 10-minute question and answer session.

Appendix 5a

Bachelor of E-Commerce Programme

MGPO4100 Graduation Report I First Semester, 2024/25

Progress Log

Students' Names:				
Supervisor's Name:				
Topic:				
Meeting No.		Outo	come Me	t (✓):
Date: //	Planned Outcome	Yes	Partially	No
1				
2				
3				
4				
5				

[†] The written report should be printed on A4 plain white paper using 12-pt Times New Roman, double-spacing, and leaving a 1" margin on all four sides.

	nments:						
Supervisor's							
Со							
Please duplicat	te this nage	as necessary					
i icase dupiicai	ic uns page	as necessary.					
							Appendix 5b
	В	achelor of E-C	Commerce P	rogramme			
MG	PO4110	Graduation Re	eport II Sec	ond Semester	·, 2024/	25	
		n	T				
		Pro	gress Log				
Students' Nan	nes:						
c · • • •	N T						
Supervisor's I	Name:						
Topic:							
ropic.							
Meeting No.					Outcor	ne Met (✓):	
					Se	Ž	
		Planned	Outcome		Yes		

Planned Outcome

Date: // ———		Partially	
1			
2			
3			
4			
5			
6			
Supervisor's Co	nments:		

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FACULTY OF BUSINES BACHELOR OF E-COMMERCE LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	2				
Module Code	MGPO4110 - 422						
Learning Module	Graduation Report II	Graduation Report II					
Pre-requisite(s)	Graduation Report I (MGPO4100)						
Medium of Instruction	English						
Credits	6	Contact Hours	90				
Instructor	Billy Yu	Email	billyyu@mpu.edu.mo				
Office	M5-34 Meng Tak Building, MPU	Office Phone	8599-3312				

MODULE DESCRIPTION

Completion of Graduation Report I is a prerequisite for students to be enrolled in this learning module. Students continue on their selected study in this learning module. The students are required to submit a report upon completing their study.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	develop the expertise and knowhow for accomplishing Report II as specified by the module materials,
M2.	apply such expertise and knowhow to accomplish Report II,
M3.	practise management of general and e-commerce-oriented projects,
M4.	demonstrate leadership in carrying out project teamwork,
M5.	illustrate collaboration and cooperation in executing project teamwork, and
M6.	present project information, both verbally and in written reports.



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

PILO	S	M1	M2	М3	M4	M5	M6
P1.	Demonstrate an understanding of the business processes and operations and the skilful realization of information technologies required to practice electronic commerce.	✓	✓				
P2.	Apply knowledge in business, mathematics, programming, computing, web development, and database to address complex problems in the context of electronic commerce.	✓	√				
P3.	Analyse critically the effect of web technology use on organizational performance and develop electronic commerce strategies that fit organizational objectives.	✓	√				
P4.	Select and apply tools and technologies to effectively implement electronic commerce systems in business intelligence, enterprise resources planning, supply chain management, and customer relationship management.		√				
P5.	Develop relationships, motivate others, manage conflicts, lead changes, and work across differences in multi-disciplinary electronic commerce projects.			✓	✓	✓	
P6.	Communicate and work effectively using written and spoken word, non- verbal language, and electronic tools with fellow professionals and different stakeholders in the electronic commerce industry.						√
P7.	Demonstrate a global electronic commerce perspective as evidenced by an understanding of foreign languages and the role of Macau as an interface between the East and the West.						
P8.	Cope with and manage contemporary advancement related to electronic commerce development and demonstrate lifelong learning attitudes and abilities.						
P9.	Conduct research and devise innovative electronic commerce models to exploit business opportunities.	✓	√				
P10.	Reflect on professional responsibilities and keep up with the latest electronic commerce issues on legal, environmental, ethical, and societal considerations to benefit society comprehensively.						



MODULE SCHEDULE, COVERAGE AND STUDY LOAD

Students are required to deliver their Reports as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

TEACHING AND LEARNING ACTIVITIES

Team meetings, oral presentation, report writing, software development and /or information system development as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor.

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

Students are required to complete the following assessment activities as stipulated in the Guidelines on the Graduation Reports I and II (attached) under the guidance of their supervisor:

Assessment Items	Weighting (%)	ILOs to be Assessed
A1. The Final Report and the developed information system or software tool	60%	1, 2, 3, 4, 5, 6
A2. Oral presentation	30%	4, 5, 6
A3. Contribution and ongoing performance of individual student	10%	1, 2, 3, 4, 5, 6

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.

MARKING SCHEME

This learning module is graded on a 100-point scale, with 100 as the highest possible score and 50 as the passing score. The grading criteria of the different assessment activities are stipulated in the (attached) Guidelines on the Graduation Reports I and II. The assessment criteria help ensure students understand what is expected at each grade level for each assessment activity.

REQUIRED READINGS

The supervisor will provide the learning materials to students as per the selected project topic.



There is no suggested textbook.

REFERENCES

• The supervisor will provide the learning materials to students as per the selected project topic.

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.



FACULTY OF BUSINES BACHELOR OF E-COMMERCE LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	2			
Module Code	MGPO4110-422					
Learning Module	Graduation Report II	Graduation Report II				
Pre-requisite(s)	Graduation Report I (MGPO4100)					
Medium of Instruction	English					
Credits	6	Contact Hours	90			
Instructor	Thomas Li	Email	spli@mpu.edu.mo			
Office	M546	Office Phone	8599 3332			

MODULE DESCRIPTION

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

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M3.	practise management of general and e-commerce-oriented projects,			
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PILOs		M1	M2	М3	M4	M5	M6
P1.	Demonstrate an understanding of the business processes and operations and the skilful realization of information technologies required to practice electronic commerce.	√	√				
P2.	Apply knowledge in business, mathematics, programming, computing, web development, and database to address complex problems in the context of electronic commerce.	√	√				
P3.	Analyse critically the effect of web technology use on organizational performance and develop electronic commerce strategies that fit organizational objectives.	✓	✓				
P4.	Select and apply tools and technologies to effectively implement electronic commerce systems in business intelligence, enterprise resources planning, supply chain management, and customer relationship management.		√				
P5.	Develop relationships, motivate others, manage conflicts, lead changes, and work across differences in multi-disciplinary electronic commerce projects.			✓	✓	✓	
P6.	Communicate and work effectively using written and spoken word, non- verbal language, and electronic tools with fellow professionals and different stakeholders in the electronic commerce industry.						√
P7.	Demonstrate a global electronic commerce perspective as evidenced by an understanding of foreign languages and the role of Macau as an interface between the East and the West.						
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