



FACULTY OF BUSINESS
BACHELOR OF E-COMMERCE
LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	1
Module Code	MGPO4100-411		
Learning Module	Graduation Report I		
Pre-requisite(s)	Nil		
Medium of Instruction	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

This is an integrated module which requires students to apply their knowledge and skills acquired in previous courses to accomplish a project by pursuing an in-depth and hands on study in a selected topic in E-Commerce applications. Students are required to complete a project proposal by the end of this course before proceeding to Graduation Report II.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	explain the skills, techniques, and knowledge for completing the Reports as stipulated in the Guidelines on the Graduation Reports I and II,
M2.	apply such skills, techniques, and knowledge to complete the Reports,
M3.	manage general and e-commerce-specific projects,
M4.	practise leadership in the context of project teamwork,
M5.	collaborate and cooperate in the context of project teamwork, and
M6.	present project information in both verbal and written formats.



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

PILOs	M1	M2	M3	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 Study 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 re-mark 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:

Evaluation Component		Weight	Evaluator(s)	
			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 file it with the Supervisor.

Topic: _____

Approach: _____ A / B (Please delete as appropriate.) _____

Please note the following conditions:

1. After the submission deadline on 9 September 2024, neither withdrawal nor addition of team member(s) will not be encouraged, and any such cases must be approved by the faculty.
2. After the submission deadline on 9 September 2024, switching of the supervisor will not usually be approved by the faculty.
3. After the submission deadline on 9 September 2024, change of the Approach will not usually be approved by the faculty.

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*
MGPO4110 (Graduation Report II)	MGPO4100 (Graduation Report I)	Target Market/ Organisation	<ul style="list-style-type: none"> Background, description of the business, product/service description, customer portfolio
		Business Analysis and E-Business Initiative	<ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Objectives and scopes of the initiative
		Requirements Specification	<ul style="list-style-type: none"> Functional requirements <ul style="list-style-type: none"> Use case diagram and use case narratives Description of the business processes Non-functional requirements
		System Design	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Implementation of the proposed information system <ul style="list-style-type: none"> 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
		Test	<ul style="list-style-type: none"> Testing of the proposed information system <ul style="list-style-type: none"> Test plans such as the unit test, integration test, and product test Test cases and results corresponding to the above test plans
		Documentation	<ul style="list-style-type: none"> User manuals such as a user guide, reference manual, and installation manual
		Abstract	<ul style="list-style-type: none"> 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.

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

Approach B Project

		Report Component	Suggested Content and/or Deliverables*
MGPO4110 (Graduation Report II)	MGPO4100 (Graduation Report I)	Introduction	<ul style="list-style-type: none"> Purpose, objectives, scope, and value of the study
		Background and Problem Definition	<ul style="list-style-type: none"> A real-world area that is worthy of study <ul style="list-style-type: none"> Background of the study Problem definition Rationale of the study
		Intellectual Framework and Literature Review	<ul style="list-style-type: none"> A framework of ideas to make sense of the study <ul style="list-style-type: none"> Literature review of previous influential studies in similar domains Definitions of key concepts A theoretical framework or model to guide the study
		Design and Methodology of the Study	<ul style="list-style-type: none"> Specific procedures and/or techniques used to conduct the study <ul style="list-style-type: none"> Study workflow Procedures and techniques for data collection and data analyses Study plan, e.g., Gantt charts
		Software Tool Development	<ul style="list-style-type: none"> A software tool developed for data collection, quantitative analysis, or simulation <ul style="list-style-type: none"> Prototype of the developed software tool Documentation of the installation, functionalities, and usage of the software tool
		Results and Findings	<ul style="list-style-type: none"> Findings resulting from the execution of the adopted methodology <ul style="list-style-type: none"> Use of the methodology Data collected Processes and results of data analyses
		Discussions and Implications	<ul style="list-style-type: none"> Reflection on the study <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Target Market/Organisation						5		
Background of the market/organisation	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Business Analysis and E-Business Initiative						20		
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			
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined			
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 Specification						20		
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			
Use of specification notations and formats	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
System Design						35		
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			
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			
Report Quality						20		
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			
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Originality assessment by the supervisor: _____ (based on the Turnitin report).						Comments (to be continued on additional pages if necessary):		

Evaluator: _____ (Name) _____ (Signature)

Date: _____

Assessment Rubric for MGPO4100 Study Report (Approach B)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Introduction						5		
Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined			
Background and Problem Definition						20		
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			
Rationale of the study	Not given	Vaguely given	Given	Given and justified	Given and well justified			
Intellectual Framework and Literature Review						20		
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			
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 Methodology of the Study						20		
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			
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 Development						15		
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive			
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good			
Report Quality						20		
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			
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Originality assessment by the supervisor: _____(based on the Turnitin report). Comments (to be continued on additional pages if necessary): _____								

Evaluator: _____ (Name) _____ (Signature)

Date: _____

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)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Target Market/Organisation						5		
Background of the market/organisation	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Business Analysis and E-Business Initiative						20		
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			
E-business initiative	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined			
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 Specification						20		
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			
Use of specification notations and formats	None	Inaccurate and inappropriate	Somewhat accurate and appropriate	Accurate and appropriate	Very accurate and appropriate			
System Design						35		
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			
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 Presentation						20		
Communication skills	Very poor	Poor	Fair	Good	Very good			
Visual aids	Very poor	Poor	Fair	Good	Very good			
Response to questions	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Comments (to be continued on additional pages if necessary):								

Evaluator: _____ (Name) _____ (Signature)

Date: _____

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)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Introduction						5		
Purpose, scope, and value of the study	Not defined	Poorly defined	Given	Given and defined	Given and clearly defined			
Background and Problem Definition						20		
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			
Rationale of the study	Not given	Vaguely given	Given	Given and justified	Given and well justified			
Intellectual Framework and Literature Review						20		
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			
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 Methodology of the Study						20		
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			
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 Development						15		
Documentation (clarity and completeness)	Missing	Unclear and insufficient	Unclear or insufficient	Clear and sufficient	Very clear and extensive			
Prototype of the tool (utility, functionality, and usability)	Very poor	Poor	Fair	Good	Very good			
Oral Presentation						20		
Communication skills	Very poor	Poor	Fair	Good	Very good			
Visual aids	Very poor	Poor	Fair	Good	Very good			
Response to questions	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Comments (to be continued on additional pages if necessary):								

Evaluator: _____ (Name) _____ (Signature)

Date: _____

Assessment Rubric for MGPO4110 Study Report (Approach A)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Abstract						10		
Concise description of the development project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented			
Inclusion of Report I						10		
Completeness and content updated (%)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Implementation						35		
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			
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						15		
Test plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Test cases and results	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Documentation						10		
User manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient			
Report Quality						20		
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			
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
Originality assessment by the supervisor: _____(based on the Turnitin report). Comments (to be continued on additional pages if necessary):						Total: 100		

Evaluator: _____ (Name) _____ (Signature)

Date: _____

Assessment Rubric for MGPO4110 Study Report (Approach B)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Abstract						10		
Concise description of the investigation project	Not presented	Poorly presented	Briefly presented	Appropriately presented	Clearly presented			
Inclusion of Report I						10		
Completeness and content updated (%)	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Results and Findings						35		
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			
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						20		
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			
Recommendations and limitations	Not presented	Not relevant	Relevant, but not adequately described	Relevant and adequately described	Very relevant and fully described			
Conclusion						5		
Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant			
Report Quality						20		
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			
Structure and organisation	Very poor	Poor	Fair	Good	Very good			
Originality assessment by the supervisor: _____ (based on the Turnitin report). Comments (to be continued on additional pages if necessary): _____						Total: 100		

Evaluator: _____ (Name) _____ (Signature)

Date: _____

Assessment Rubric for MGPO4110 Oral Presentation (Approach A)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Background of the system implementation (from Report I)						20		
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			
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 Implementation						35		
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			
Utility of the information system	Very poor	Poor	Fair	Good	Very good			
Usability of the I information system	Very poor	Poor	Fair	Good	Very good			
Coding standards	Not followed	Rarely followed	Followed occasionally	Followed appropriately	Followed appropriately and extensively			
Test						15		
Test plans	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Test cases and results	Not presented	Poorly presented and described	Briefly presented and described	Appropriately presented and described	Clearly presented and well described			
Documentation						10		
User manual	None	Unclear and insufficient	Unclear or insufficient	Fairly clear and sufficient	Very clear and sufficient			
Oral Presentation						20		
Communication skills	Very poor	Poor	Fair	Good	Very good			
Visual aids	Very poor	Poor	Fair	Good	Very good			
Response to questions	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Comments (to be continued on additional pages if necessary):								

Evaluator: _____ (Name) _____ (Signature)

Date: _____

Assessment Rubric for MGPO4110 Oral Presentation (Approach B)

Project Title:

Student Names:

Assessment Criterion	Level of Comprehensiveness (Please mark the level achieved for each criterion)					Full Mark	Level Achieved	Mark Given
	0 (0% - 29%)	1 (30% - 49%)	2 (50% - 69%)	3 (70% - 89%)	4 (90% - 100%)			
Background of the investigation work (from Report I)						20		
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			
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						35		
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			
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						20		
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			
Recommendations and limitations	Not presented	Not relevant	Relevant, but not adequately described	Relevant and adequately described	Very relevant and fully described			
Conclusion						5		
Main points of the study are recapped	None	Unclear and irrelevant	Fairly clear and relevant	Clear and relevant	Very clear and relevant			
Oral Presentation						20		
Communication skills	Very poor	Poor	Fair	Good	Very good			
Visual aids	Very poor	Poor	Fair	Good	Very good			
Response to questions	Very poor	Poor	Fair	Good	Very good			
Total:						100		
Comments (to be continued on additional pages if necessary):								

Evaluator: _____ (Name) _____ (Signature)

Date: _____

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

Milestone/Deadline		Date
MGPO4100 (Graduation Report I)	1. Submission of each team's Graduation Report proposal to the supervisor, consisting of <ul style="list-style-type: none"> 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
	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
	3. Oral presentation* of each team for Report I	4/12/2024
	4. Submission of the following to the supervisor by each team: <ul style="list-style-type: none"> One hard copy of the Study Report[†] for Report I CD(s), DVD(s), or USB drive(s) containing <ul style="list-style-type: none"> 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 	4/12/2024
MGPO4110 (Graduation Report II)	5. Oral presentation* of each team for Report II	25/4/2025
	6. Submission of the following to the supervisor by each team: <ul style="list-style-type: none"> <u>Two</u> hard copies of the Study Report[†] for Report II CD(s), DVD(s), or USB drive(s) containing <ul style="list-style-type: none"> 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 	2/5/2024

* 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' Names: _____

Supervisor's Name: _____

Topic: _____

Meeting No. _____ Date: / /	Planned Outcome	Outcome Met (✓):		
		Yes	Partially	No
1				
2				
3				
4				
5				
6				
Supervisor's Comments:				

Please duplicate this page as necessary.

Bachelor of E-Commerce Programme

MGPO4110 Graduation Report II
Second Semester, 2024/25

Progress Log

Students' Names: _____

Supervisor's Name: _____

Topic: _____

Meeting No. Date: / /	Planned Outcome	Outcome Met (✓):		
		Yes	Partially	No
1				
2				
3				
4				
5				
6				
Supervisor's Comments:				

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FACULTY OF BUSINES
BACHELOR OF E-COMMERCE
LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	1
Module Code	MGPO4100-411		
Learning Module	Graduation Report I		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	6	Contact Hours	90
Instructor	Lai Tsz Ming, Terence	Email	tmlai@mpu.edu.mo
Office	M530, Meng Tak Building	Office Phone	8599-3346

MODULE DESCRIPTION

This is an integrated module which requires students to apply their knowledge and skills acquired in previous courses to accomplish a project by pursuing an in-depth and hands on study in a selected topic in E-Commerce applications. Students are required to complete a project proposal by the end of this course before proceeding to Graduation Report II.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	explain the skills, techniques, and knowledge for completing the Reports as stipulated in the Guidelines on the Graduation Reports I and II,
M2.	apply such skills, techniques, and knowledge to complete the Reports,
M3.	manage general and e-commerce-specific projects,
M4.	practise leadership in the context of project teamwork,
M5.	collaborate and cooperate in the context of project teamwork, and
M6.	present project information in both verbal and written formats.



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

PILOs	M1	M2	M3	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 Study 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	1
Module Code	MGPO4100 - 412		
Learning Module	Graduation Report I		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	6	Contact Hours	90
Instructor	Billy Yu	Email	billyyu@mpu.edu.mo
Office	M534 Meng Tak Building, MPU	Office Phone	8599-3312

MODULE DESCRIPTION

This is an integrated module which requires students to apply their knowledge and skills acquired in previous courses to accomplish a project by pursuing an in-depth and hands on study in a selected topic in E-Commerce applications. Students are required to complete a project proposal by the end of this course before proceeding to Graduation Report II.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	explain the skills, techniques, and knowledge for completing the Reports as stipulated in the Guidelines on the Graduation Reports I and II,
M2.	apply such skills, techniques, and knowledge to complete the Reports,
M3.	manage general and e-commerce-specific projects,
M4.	practise leadership in the context of project teamwork,
M5.	collaborate and cooperate in the context of project teamwork, and
M6.	present project information in both verbal and written formats.



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

PILOs	M1	M2	M3	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.

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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

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STUDENT FEEDBACK

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FACULTY OF BUSINES
BACHELOR OF E-COMMERCE
LEARNING MODULE OUTLINE

Academic Year	2024 / 2025	Semester	1
Module Code	MGPO4100-412		
Learning Module	Graduation Report I		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	6	Contact Hours	90
Instructor	Dr. Thomas Li	Email	sp1i@mpu.edu.mo
Office	M546, Meng Tak Building	Office Phone	8599 3332

MODULE DESCRIPTION

This is an integrated module which requires students to apply their knowledge and skills acquired in previous courses to accomplish a project by pursuing an in-depth and hands on study in a selected topic in E-Commerce applications. Students are required to complete a project proposal by the end of this course before proceeding to Graduation Report II.

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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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