



FACULTY OF BUSINESS
BACHELOR OF E-COMMERCE
LEARNING MODULE OUTLINE

Academic Year	2026 / 2027	Semester	1
Module Code	COMP1100 - 111		
Learning Module	Business Software Applications (e-Commerce)		
Pre-requisite(s)	Nil		
Medium of Instruction	English		
Credits	3	Contact Hours	45
Instructor	Billy Yu	Email	billyyu@mpu.edu.mo
Office	M5-34 Meng Tak Building, MPU	Office Phone	8599-3312

MODULE DESCRIPTION

This is an introductory course in Business Software Applications. This course also provides an introduction to computers and Microsoft Windows. When students complete the course they will have a firm knowledge and understanding of selected business office tools in practical uses.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Understand the fundamentals and terms in selected MS office tools
M2.	Select appropriate charting and analysis tool with Excel
M3.	Compare various Excel functions
M4.	Apply Excel or Access skills to solve business problems
M5.	Understand how VBA functions in Excel

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

PILOs	M1	M2	M3	M4	M5
P1. demonstrate an understanding of the business processes and operations and the skillful realization of information technologies required to practice electronic commerce,			✓	✓	
P2. apply knowledge in business, mathematics, programming, computing, web development, database, and artificial intelligence to address complex problems in the context of electronic commerce,	✓				✓



P3. critically analyze the effect of information technology use on organizational performance and develop electronic commerce strategies that fit organizational objectives,		✓			
P4. select and apply tools and technologies, including AI-driven solutions, to effectively implement electronic commerce systems in business intelligence, enterprise resources planning, supply chain management, and customer relationship management,			✓		
P5. foster teamwork, manage conflicts, and lead change across multi-disciplinary electronic commerce projects while working effectively with diverse stakeholders,					
P6. communicate and work effectively using written and spoken word, non-verbal language, and electronic tools with fellow professionals and global stakeholders in the electronic commerce industry,				✓	
P7. evaluate electronic commerce through a global lens as evidenced by an understanding of foreign languages, and the unique role of Macau as a bridge between East and West, and cross-border,					
P8. cope with and manage contemporary advancements, including rapid developments in AI, related to electronic commerce development and demonstrate lifelong learning attitudes and abilities,					
P9. conduct research and devise innovative electronic commerce models leveraging emerging technologies to exploit business opportunities, and					
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

Week	Content Coverage	Contact Hours
1	Chapter 1 Introduction - Overview and project briefing	3 hours
2	Chapter 2 Excel Basics - Creating a Worksheet and using formulas	3 hours
3	Chapter 2 - Using Functions and Formatting Tables	3 hours
4	Chapter 3 Charting - Basic kinds of charts	3 hours
5	Chapter 3 - Sparkline Chapter 4 Simple analysis - What-if analysis	3 hours
6	Chapter 4 - Vlookup and Validating Data	3 hours
7	Chapter 5 Excel in practices	3 hours



	- Using Sorting and Filtering	
8	Chapter 5 - Using Add-Ins in Excel	3 hours
9	Midterm Exam I - Reviewing midterm exam result and briefing for projects	3 hours
10	Project Demo - Audit and corrections	3 hours
11	Chapter 6 VBA in Excel - Sub and function - Use of Loops - FOR & DO	3 hours
12	Chapter 7 AI - Using AI to utilize Excel	3 hours
13	Midterm Exam II	3 hours
14	Reviewing midterm exam result and summing up Excel skills	3 hours
15	Project Presentation	3 hours

Project Presentation (3 hours)

TEACHING AND LEARNING ACTIVITIES

Students are required to participate attentively to lecturer explanation and practice in a step-by-step manner. They are required to apply the techniques in real business problems as well as in group project. A high level of self-learning, with the reference books, lectures, videos, case studies, and group project discussion or any other resources, is vital and expected in their projects and examinations. In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

Teaching and Learning Activities	M1	M2	M3	M4	M5
T1. Lectures: change management theories, concepts, and approaches will be presented using multimedia instructional materials. Q&A: It allows interactions between instructor and students.	✓	✓	✓	✓	✓
T2. Project: 4 to 5 students will be required to work as a group to complete a group project. This group project will be designed to promote students intellectual, social and presentation skills and help to prepare them for the real world in which teamwork and collaboration are important.		✓	✓	✓	
T3. Preparation: Students must read teaching materials before coming to the class. They will be asked to work on problems or respond to key conceptual issues during the class hour. - Midterm exam will be given to students in order to motivate them to review what they have learned.	✓	✓			✓

ATTENDANCE



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

ASSESSMENT

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

Assessment Activities	Weighting (%)	ILOs to be Assessed
A1. Project	35	M2 – M4
A2. Midterm I	25	M1 – M4
A3. Midterm II	30	M1, M2 – M5
A4. Class performance	10	M1 - M5

The assessment will be conducted following the University's Assessment Strategy (see www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits. Project is not assignment. Students are required of their critical thinking, problem solving skills, collaboration, and various forms of communication. To answer a driving question and create high-quality work, students need to do much more than remember information. They need to use higher-order thinking skills and learn to work as a team.

MARKING SCHEME

	Assessment Tasks	Criteria	Excellent (A, A-)	Very Good, Good (B+, B, B-)	Satisfactory (C+, C, C-)	Pass (D+, D)	Fail (F)
			88-100	73 - 87	58 - 72	50 - 57	0 – 49
1.	Class Learning Activities	Demonstrate the efforts to <u>think</u> and <u>answer</u> questions in classes and show active learning attitude	High	Significant	Moderate	Basic	Not even reaching marginal levels
2.	Group Project	Demonstrate the understanding of the subject and the ability to solve problems with <u>articulated</u> arguments in <u>well-organized</u> oral	High	Significant	Moderate	Basic	Not even reaching marginal levels



		presentation and written report					
3.	Mid-term tests and Final examination	Demonstrate the ability to identify and apply appropriate concepts, methods and techniques	High	Significant	Moderate	Basic	Not even reaching marginal levels

REQUIRED READINGS

Textbook(s)

- Hein Smith (2018) *Excel VBA: A Step-By-Step Guide To Learn And Master Excel VBA Programming*, CreateSpace Independent Publishing Platform, ISBN 1722122129
- Nigel Tillery (2023) *Excel 2023 Essentials: A Step-by-Step Guide with Pictures for Absolute Beginners to Master the Basics and Start Using Excel with Confidence*, Smashwords, ISBN 979-8223016915.

REFERENCES

- Paul McFedries (2022) *Teach Yourself VISUALLY Excel 365*, Wiley, ISBN 1119933625.
- John Walkenbach (2010) *Excel 2010 Power Programming with VBA* (Mr. Spreadsheet's Bookshelf) Wiley, ISBN 0470475358.

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/.

Note:

1. The above class schedule is tentative and subject to change depending on the progress of the students.
2. Students are responsible for ALL materials covered in class AND in the textbook.