FACULTY OF APPLIED SCIENCES

BACHELOR OF SCIENCE IN COMPUTING

LEARNING MODULE OUTLINE

Academic Year	2023/2024	Semester	2
Module Code	COMP490		
Learning Module	Final Year Project		
Pre-requisite(s)	COMP223 Software Engineering, COMP321 Information System Implementation		
Medium of Instruction	English		
Credits	12	Contact Hours	90 hrs
Instructor	Jacky Tang, Philip Lei, Rebecca Choi, June Liu, Zachary Chui, Yang Xu, Wilson Ho, Liam Li, Lyu Erli, Joy Sun, Betty Lo, Evelyn Lo	Email	{sktang, philiplei, rebeccachoi, yue.liu, zchui, xuyang, kcho, liamli, erlilyu, yuesun} @mpu.edu.mo, t0553@mpu.edu.mo, t1510@mpu.edu.mo
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MODULE DESCRIPTION

The final year project (FYP) aims to allow students to tackle a real problem and to complete the specification / design / implementation / documentation / testing / evaluation processes. Students are required to develop software projects and / or carry out research project in a relevant area. The FYP is an individual project. The students are required to explore an area of information technologies in considerable depth, demonstrating sound problem solving and analytical skills.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	Acquire self-learning and problem solving skills; (SM3p, EA4p, EP4p, EP6p)
M2.	Perform system analysis and design; (SM3p, EA1p, EA3p EA4p, D1p, D2p, D4p, D5p, ET2p, ET4p, EP1p, EP7p)
M3.	Carry out research work; (SM3p, EA1p, D2p, D4p, ET5p, EP4p)
M4.	Manage a technical project with specific scope/cost/time requirements; (D5p, ET3p, ET4p)
M5.	Identify and analyze uncertain scenarios; (D3p, EA4p, ET6p, EP8p)
M6.	Perform a formal presentation; (D6p)
M7.	Write formal project documents. (D6p, EP4p)

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

PILOs		M1	M2	M3	M4	M5	M6	M7
P1.	Select and apply proven methods, tools and techniques to the effective and efficient implementation of information systems;	✓		✓				
P2.	Evaluate computer systems in a local area network, and understand the additional requirements for connection to other networks through wide area networks;							
P3.	Be competent in system development in the Internet and the web platform;							
P4.	Work independently to design and implement a relational database, with an emphasis on how to organise, maintain and retrieve information from a DBMS;	✓	✓					
P5.	Acquire essential knowledge in specific fields of computing disciplines including multimedia, security and artificial intelligence;	✓		✓				
P6.	Acquire the perceptive skills needed to understand information presented in the form of UML diagram, flow chart or other industry standard formats;	✓	✓					✓
P7.	Understand the need for and use of the necessary mathematical techniques;							
P8.	Work independently to develop an understanding of, and the knowledge and skills associated with the general support of computer systems and networks;							
P9.	Work as an effective member of a team in the analysis, design and development of software systems;	✓	✓			✓		
P10.	Use project planning and management techniques in systems development;				✓	✓		
P11.	Understand the fundamental and operational issues of computer systems in business environments;							
P12.	Equip with adequate written, oral communication and interpersonal skills;						✓	✓
P13.	Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own;	✓						
P14.	(For Enterprise Information Systems specialisation) Gain an in-depth understanding of the information technology related to enterprise information systems, with an emphasis on development of such systems to support business processes;							
P15.	(For Gaming Technology specialisation) Acquire the general and advanced knowledge of current technologies and operating environment in the gaming industry;							
P16.	(For Computer Education specialization) Acquire the general and practical knowledge of computer education and its practicing environment in secondary education.							

TEACHING AND LEARNING ACTIVITIES

Each student is assigned a project supervisor, who observes and advices him/her in the various activities of project development and / or research, based on the ***Final Year Project Handbook for COMP490***. Students are advised to read the FYP handbook carefully for details of this module.

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

The project supervisors, project assessors, and presentation panel will assess each project in the following aspects. These give a single grade for each project student at the end of the project. There will be no tests or written examination. For details regarding the assessment criteria, please refer to the ***Student Handbook for COMP490 Final Year Project***.

Assessment Activities	Weighting (%)	AHEP3 LOs	ILOs to be Assessed
A1. Motivation and self-study (1st Semester)	6%	D5p, ET3p, EP4p	M1, M4
A2. Motivation and self-study (2nd Semester)	6%	D5p, ET3p, EP4p	M1, M4
A3. Project management (2nd Semester)	6%	D5p, ET3p	M4
A4. Progress report (1st Semester)	10%	SM3p, EA1p, EA4p, D1p, D2p, D3p, D4p, ET2p, ET4p, ET5p, ET6p, EP1p, EP4p, EP6p, EP8p	M1, M2, M3, M4, M5, M7
A5. Final report (2nd Semester)	60%	SM3p, EA1p, EA3p, EA4p, D1p, D2p, D3p, D4p, D5p, ET4p, ET5p, ET6p, EP1p, EP4p, EP6p, EP7p, EP8p	M1, M2, M3, M5, M7
A6. Progress presentation (1st Semester)	4%	D6p	M6
A7. Final presentation and poster session (2nd Semester)	8%	D6p, EP7p	M2, M6

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.

No re-sit examination is provided for the project module. Please note that if you fail the individual project module, you have to retake it in the other academic year. Since the project module is offered in year 4, failing the module will delay the award of the degree.

REQUIRED READINGS

There is no required text for this module. As self-learning ability is highly appreciated, students are encouraged to search for relevant reference by themselves. Project supervisor will also recommend suitable reference to individual project on a required basis.

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/.