

FACULTY OF APPLIED SCIENCES

DOCTOR OF PHILOSOPHY IN ARTIFICIAL INTELLIGENCE DRIVEN DRUG DISCOVERY

LEARNING MODULE OUTLINE

Academic Year	2024/2025	Semester	2		
Module Code	AIDD8299				
Learning Module	Thesis				
Pre-requisite(s)	None				
Medium of Instruction	Chinese and English				
Credits	21	Contact Hours			
Instructor	* See Supervisor List	Email	* See Supervisor List		
Office	MPU HQ, * See Supervisor List	Office Phone	* See Supervisor List		

MODULE DESCRIPTION

The doctoral thesis aims to allow students, by tackling advanced research problems over diverse settings, to significantly contribute to the expansion of knowledge in the field of Artificial Intelligence driven Drug Discovery, especially in applied technology and produce a coherent body of work that is of scholarly value and worthy of publication. The work must be original and be the student's own. There must be evidence that the field has been thoroughly surveyed by the student with critical exposition of relevant works, clearly demonstrating the mastery of a body of knowledge in the field and strong analytical skills. Students are responsible for ensuring that the thesis is presented in a clear, accessible and consistent format. Good project management practices and effective writing and oral presentation skills are essential to the successful completion of the thesis.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

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

M1.	To create new knowledge or originality in the application of Artificial Intelligence in widely divergent fields of drug design, including antibiotics, fungicides and agrochemicals.
M2.	To research on an advanced and contemporary drug discovery-related topic, including neurodegenerative diseases, cancer, bacterial infection and agriculture.
M3.	To critically assess and analyse an advanced technical issue, upon which the mastery of a body of knowledge for a defined scholarly field is demonstrated.
M4.	To write research proposal which captures the relevant issues and identifies research problems.
M5.	To plan, execute, and report scholarly research project.
M6.	To publish and present orally research papers.



TEACHING AND LEARNING ACTIVITIES

In this learning module, each student is assigned a project supervisor and/or co-supervisor(s), who observe(s) and advice(s) him/her in the various activities of research, based on the PhD Handbook. Students are advised to read the handbook carefully for details of this module.

ATTENDANCE

The normal period of study of a doctoral degree programme is 36 calendar months (i.e. 3 years) and the maximum period of study is 72 calendar months (i.e. 6 years).

The attendance report for the past 6 months is attached to the semiannual report, which can be failed if attendance requirement is not met.

Please refer to the "Academic Regulations Governing Doctoral Degree Programmes" in MPU official homepage (<u>https://www.mpu.edu.mo/student_corner_p/en/ar_doctoral.php</u>) for more details.

ASSESSMENT

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

1. Each student is required to submit the semiannual report every 6 months.

2. In the 18th-24th month, each student needs to complete the doctoral thesis proposal.

3. Implementation of performance requirement and monitoring of students: All students must be compliant with the requirements specified by: 1. Macao Polytechnic University; 2. Faculty of Applied Sciences, Macao Polytechnic University; 3. Centre for Artificial Intelligence driven Drug Discovery, Faculty of Applied Sciences, Macao Polytechnic University; 4. Doctoral Thesis Supervisor(s)'s specific academic requirements

REFERENCES

There is no required text for this module. References are suggested by Doctoral Thesis Supervisor(s).

SUPERVISOR LIST

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