



澳門大學
UNIVERSIDADE DE MACAU
UNIVERSITY OF MACAU

Major Programme:	Master of Philosophy in Microelectronics														
Course Type:	<input checked="" type="checkbox"/> CM – Compulsory Major <input type="checkbox"/> L&S – Languages and Skills <input type="checkbox"/> * GE – General Education <input type="checkbox"/> MI – Minor			<input type="checkbox"/> RE – Required Elective <input type="checkbox"/> CPE – Community and Peer Education <input type="checkbox"/> FE – Free Elective											
Course Title: (in Chinese and English)	Thesis 論文				Suggested Year of Study:		Year 2								
Duration:	<input checked="" type="checkbox"/> 4-Semester Course <input type="checkbox"/> Yearly Course			Credit Units:		12									
Grading System:	<input type="checkbox"/> Letter Grade <input checked="" type="checkbox"/> P/NP			Pre-requisite: (if any)		None									
Medium of Instruction:	English														
Course Description:	An independent and original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of a piece of original research on a particular topic in consistent with every details of research methodology. In general, the study could result in a technical publication or a presentation at a professional meeting.														
Intended Learning Outcomes (ILO):	This course enables students to have: <ul style="list-style-type: none"> • An ability to apply knowledge of mathematics, science, and engineering appropriate to the degree discipline. • An ability to design and conduct experiments, as well as to analyze and interpret data. • An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. • An ability to function on multi-disciplinary teams. • An ability to identify, formulate, and solve engineering problems. • An understanding of professional and ethical responsibility. • An ability to communicate effectively. • An ability to understand the impact of engineering solutions in a global and societal context, especially the importance of health, safety and environmental considerations to both workers and the general public. • An ability to stay abreast of contemporary issues. • An ability to recognize the need for, and to engage in life-long learning. • An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice appropriate to the degree discipline. • Ability to use the computer/IT tools relevant to the discipline along with an understanding of their processes and limitations. 														
Major Assessment Methods:	Case Study	Role Playing	Student Presentation	Individual project / paper	Group project / paper	Group discussions	Writing Assignment	Exercises & problems	Service learning	Internship	Field study	Company visits	Reading & Writing Assessments / tests	Listening & Oral Assessments / tests	Others (please specify)
Class Participation / Discussion															
Assignment(s)															
Test(s)															
Examination															
Others: Project			√	√									√		
Course Content: (topic outline)	N.A.														