



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 original research on a particular topic consistent with every detail of the research methodology. 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"> • Apply knowledge and recognize specialist topics in microelectronics research. • Design the integrated circuits and conduct research. • Create innovative circuit and system techniques in the development of microelectronic integrated circuits. • Use computer-aided design and analysis techniques appropriate to microelectronics engineering. 														
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)	The course requires the student to perform an original research study under the supervision of a faculty staff member. An academic thesis is a scholarly written document of original research on a particular topic consistent with every detail of the research methodology. The supervisor is required to guide the process of the thesis research development by having regular meetings with the students. Finally, an oral defense will be held under the evaluation of an oral defense examination committee.														