Department of Electrical Engineering
Curriculum Requirements for Enrollees in the Academic Year 114 (Fall 2025)

Program	Master's Program for the Day Division	
Group	None	
Class Type	Regular Class	
Special Program	None	
Curriculum Committee	Department Curriculum	114.05.14
	College Curriculum	114.05.16
	University Curriculum	114.06.09
	Academic Affairs	114.06.09
Graduation Credits /Study Duration	At least 30 credits required (plus 6 thesis credits), with a study period of 1－4 years; actual graduation credits based on the table below.	
Credit Load per Semester	The courses and credits required for each semester are determined by the respective departments (or institutes). However, during the first academic year, the total number of credits per semester must not be fewer than 6 credits and not exceed 18 credits.	
Required and Elective	Credits	Subject Category
Required	14 Credits	Major Requirements (including Thesis)
Elective	16 Credits	Major Elective
Graduation	Course Title	Regulations/Notes
Thesis	Thesis (6/6)	1.Guidelines for Degree Conferment 2.Regulations for Graduate Degree Examinations 3.Implementation Guidelines for Thesis/Dissertation Review and Quality Assurance Mechanisms 4.Guidelines for the Deferred Public Release Review of Theses and Dissertations
Other Regulations	於國內外電機相關專業期刊、學報或研討會發表一篇以上(含)之專業論文，詳如相關辦法。	
Remarks	"Computer Course" means computer access is required (computer and internet usage fee). Graduation Requirements： 「G07」：Thesis	

First Semester, First Year					Second Semester, First Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	M05208	Seminar (1)	2/2		Major Required	M05209	Seminar (2)	2/2	
Major Elective	M05805	Engineering Project Management	3/3		Major Elective	M05803	Technical Paper Writing	3/3	
Major Elective	M05806	Applications of Control Engineering	3/3		Major Elective	M05804	Advanced programming	3/3	
Major Elective	M05807	Practice of Electro-optics Engineering	3/3		Major Elective	M05821	Control System Design	3/3	
Major Elective	M05822	Electronic Circuits Design	3/3		Major Elective	M05825	Digital Control	3/3	
Major Elective	M05824	Power Generation	3/3		Major Elective	M05826	Adaptive Control	3/3	
Major Elective	M05828	Electrical Energy Control and Management	3/3		Major Elective	M05827	Introduction to Power Electronics	3/3	
Major Elective	M05835	Power Quality Practice	3/3		Major Elective	M05836	Practice of Green energy and Energy Conservation	3/3	
Major Elective	M05861	Optoelectronic materials	3/3		Major Elective	M05837	Coating Technology Practice	3/3	
Major Elective	M05862	Solid-State Physics	3/3		Major Elective	M05838	Optoelectronic Devices Practices	3/3	
Major Elective	M05863	Flat-Panel Display Engineering	3/3		Major Elective	M05839	Smart grid integration practice	3/3	

Major Elective	M05864	Plasma Physics and Processes	3/3		Major Elective	M05866	Optoelectronic Electromagnetism	3/3	
Major Elective	M05890	Radio frequency (RF) circuit design	3/3		Major Elective	M05867	Solar Energy Devices Physics	3/3	
Major Elective	M05893	Artificial intelligence	3/3		Major Elective	M05896	Generative AI: Text and Image Synthesis Principles and Practice	3/3	
					Major Elective	M05897	Energy Storage System Design and Application	3/3	

First Semester, Second Year					Second Semester, Second Year				
Course	Course	Course Name	Credits / Hours	Notes	Course	Course	Course Name	Credits / Hours	Notes
Major Required	M05210	Seminar (3)	2/2		Major Required	M05207	Thesis	6/6	G07
Major Elective	M05808	Off-Campus Internship	3/3		Major Required	M05211	Seminar (4)	2/2	
Major Elective	M05829	Optimal Control	3/3		Major Elective	M05892	Systems and control Topics	3/3	
Major Elective	M05830	Nonlinear Control	3/3		Major Elective	M05895	Power System Impact Analysis	3/3	
Major Elective	M05831	Control of Electric Machinery	3/3						
Major Elective	M05832	Power Deregulation	3/3						
Major Elective	M05869	Electroceramics	3/3						
Major Elective	M05871	Optoelectronic Measurement	3/3						
Major Elective	M05872	Thin Film Diagnostics	3/3						
Major Elective	M05891	ower and Energy Project	3/3						