

Ming Chuan University Department of Electronic Engineering Course Outline for all students entering in 2008

Course	Credits	Hours	1 st year				2 nd year				3 rd year				4 th year				Note	
			Fall		Spring		Fall		Spring		Fall		Spring		Fall		Spring			
			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab		
Core Required Courses (Electronic Engineering Department)	Chinese Literature: Appreciation And Creative Writing	4	4	2		2														
	Practical English 1-6	12	18	2	1	2	1	2	1	2	1	2	1	2	1					1-semester courses
	General Ed	12	12																	
	Physical Education (1)~(6)	0	12	2		2		2		2		2		2						
	Subtotal	28	46	6		6		4		4		4		4						
Professional Required Courses (Electronic Engineering Department & International Program)	Calculus	6	8	3	1	3	1													
	Physics I	3	3	3																
	Physics Laboratory I	1	3	1	2															Computer course
	Concept of Computer Science	3	5	3	2															
	Introduction to Information Technology	1	1	1																
	Engineering Linear Algebra	3	3	3																
	Physics II	3	3			3														
	Physics Laboratory II	1	3			1	2													Computer course
	Programming Design I	3	5			3	2													Computer course
	Electronic Circuits I	3	3			3														
	Digital Logic Design					3														
	Electronic Circuits II	3	3					3												
Electronic Circuits Laboratory I	1	3					1	2											Computer course	

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Elective Courses (Electronic Engineering Department & International Program)	Digital System and Laboratory	3	4					2	2										Computer course
	Data Structure	3	3					3											Computer course
	Matlab Simulation	3	3					3											Computer course
	Computer Architectures	3	3									3							
	Digital Signal Processing	3	3									3							
	FPGA/CPLD Design	3	4									4							Computer course
	Control System	3	3											3					
	Communication System	3	3											3					
	Digital Image Processing	3	3											3					Computer course
	Digital Communication	3	3												3				
	Computer Vision	3	3												3				
	The Introduction of Network	3	3														3		
	Digital System and Laboratory	3	4					2	2										Computer course
	Computer Architectures	3	3									3							
	FPGA/CPLD Design	3	4									4							Computer course
	VLSI Design	3	3											3					
	Analog VLSI Design	3	3											3					
	Chip Design and Implementation	3	3												3				Computer course
Embedded System	3	3														3		Computer course	
Optoelectronic Devices	3	3											3						

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Military Training Education II	0	4					2		2										1-semester courses
Probability and Statistics	3	3					3												Required Elective Courses
Programming Design II	3	5					3	2											Computer course
Electromagnetics II	3	3							3										Required Elective Courses
Intellectual Property Rights	2	2							2										
Optoelectronics	3	3									3								
Introduction to VLSI Design	3	4									3	1							
Complex Variables	3	3											3						Required Elective Courses
Introduction to Telecommunication Engineering	3	3											3						
Solid State Electronics	3	3													3				
Introduction of Electronic Materials	3	3													3				
III-V compound semiconductor and photo- electronic devices	3	3													3				
Artificial Intelligent	3	3													3				
Neural Networks	3	3													3				
Nano Electronic Devices	3	3															3		

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			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab		
Physical Training (7) ~ (8)	4	4													2		2		1-semester courses	
Grand Total (Electronic Engineering Department & International Program)	Subtotal Required Course Credits	95																		
	Subtotal Elective Course Credits	41																		
	Total	136																		

Notes:

1. Students who entered in and since the 2008-09 academic year need to complete at least 12 General Education course credits. General Education courses are divided into three areas: Humanities, Social Science, and Natural Science. Each area is divided into two subcategories: core and extended. Students need to take 1 two-credit course in both of the subcategories within each area to be eligible for graduation. Additional course credits earned in General Education courses are not counted toward graduation.
2. First-year undergraduate students (including first-year returning students) who entered in 2008-09 academic year need to complete Service Learning to be eligible for graduation. Students can select either course-based or recognition-based Service Learning and need to complete at least 16 hours of service learning, 2 hours of on-campus service learning-related seminar, 2 reflection reports, and attend 1 Reflection Activity or Achievement Presentation.
3. Students taking elective credits of each department 's credited courses in School of Information Engineering, as well as the credited courses which are collaborate with the School of Information Engineering' s Program can be consider as this department 's professional elective courses; students take professional courses of the School of Information Engineering, after approval by the department chairman, can be regarded as this department' s professional elective courses; any none of school of Information Engineering 's elective professional courses, must subject to the department chairman' s approval, otherwise, this will not be considered as the department 's professional elective courses, that is not to be included in the credits for graduation.
4. Students who fulfill the requirement of each program can apply for the corresponding certificate. The requirement of each program will be specified in the other regulation.

5. The international students whose school required courses and general education related courses taken in the International College will be counted toward the credits required for graduation. In addition, other related courses taken in the International College will be also counted toward the credits required for graduation through the approval of the department chair.
6. Students want to take the elective courses of EE master program, must subject to the department chairman 's approval, then these credited courses can be classified as professional elective credits of the department; these credited courses can be counted in total credits for graduation.
7. The elective courses on this Course Outline may be counted toward total graduation credits by students who entered the university prior to the 2008 academic year.