國立陽明交通大學電機工程學系丙組修業規定及必(選)修科目表

NYCU Department of Electronics and Electrical Engineering
Requirements and Table of Required Courses for Medical ECE Program

自 112 學年度起 (Start from Academic Year 2023)

科目名稱 Course Name	規定學分 Credit	第一學年 Freshmen 上 1st	第一學年 Freshmen 下 2st	第二學年 Sophomore 上 1st	第二學年 Sophomore 下 2st	第三學年 Junior 上 1st	第三學年 Junior 下 2st	第四學年 Senior 上 1st	第四學年 Senior 下 2st	備註 Remarks	
微積分(一)(二) Calculus(I)(II)	8	4	4							基礎類(16 學分) Fundamental (Mathematics) Courses (16 credits)	基礎必修課程(59 學分) Fundamental Courses (59 credits)
物理(一) General Physics(I)	4	4									
線性代數 Linear Algebra	3		3								
專題演講 Seminar	1					(1)	1				
生涯規劃與導師時間 Career Planning and Mentor's Hours	0	0	0								
服務學習(一)(二) Student Service Education(I)(II)	0		0	0							
電子學(一)(二) Electronics(I)(II)	6			3	3					電機類(14 學分) Electrical Engineering (14 credits)	
電子實驗(一) Electronics Lab(I)	2			2							
電路學 Circuit Theory	3			3							
訊號與系統 Signals and Systems	3				3						
計算機概論與程式設計 Intro. to Computers and Programming	3	3								計算機類(6 學分) Computer Science (6credits)	
邏輯設計 Logic Design	3	3									
化學(一)(二) Chemistry(I)(II)	6	3	3							醫預類(19 學分) Pre-Med Courses (19 credits)	
普通生物學(一)(二) (生物科技系) General Biology(I)(II)	6	3	3								
普通生物學實驗 (生物科技系) General Biology Lab	1		1								
生物化學 (醫學系遠距) Biochemistry (remote learning)	4				4						
醫學人文導論 (醫學系遠距) Introduction to Medical Humanities	2	2									
普通心理學 (博雅書苑) General Psychology	2	2								醫學通識類(4 學分) General Medical (4 credits)	
基礎醫學概論 (醫學系非同步) Introduction to Basic Medicine (remote)	2				2						
電子實驗(二) Electronics Lab(II)	2				2					工程類(必選至少5)	基礎必選
微分方程	3				3						

課程 Course	學分				醫學類(必選至少 5 學分) Medical Course (at least 5 credits)
Differential Equation					
機率 Probability	3		3		
電磁學 Electromagnetics	3		3		
微生物及免疫學 (醫學系遠距) Microbiology & Immunology (remote)	4		4		
微生物及免疫學實驗 (醫學系) Lab Practice in Microbiology & Immunology	1		1		
生物化學實驗 (醫學系) Biochemistry Lab	1	1			
公共衛生概論 (醫學系遠距) Introduction to Public Health (remote)	1		1		
環境衛生概論 (醫學系) Introduction to Environment Health	1		1		
生醫工程導論 Introduction to Biomedical Engineering	3			3	

課程 Course	學分	說明
跨領域專題 Interdisciplinary Project	3	需選修至少一學期的電機工程專題或醫師工程師專題研究 Require 3 credits for "Special Project on Electrical Engineering" or "Physician Engineering Research Project"
專業必修實驗課程 Major compulsory Labs (at least 1 lab)	3	應從本系開授之專業必修實驗課程至少修得 3 學分(不含基礎必修實驗課程與專題)
專業選修領域 Major Elective Courses	21	應從本系開授之專業課程至少修得 21 學分(不含基礎必修、專業必修實驗課程 3 學分與專題)，需涵蓋至少 15 學分的本系核心課程。 Require at least 21 credits obtained from our department (not including the Fundamental Courses, 3 credits of the Major Compulsory Labs, and Project Courses), and at least 15 credits must be obtained from Core Curricular.
合計	96	除了醫學通識課程 4 學分之外，另需選修校訂核心課程至少 14 學分，外語至少 6 學分，共同必修課程至多採計 32 學分。 Besides the 4 credits for general medical courses, at least 14 credits of NYCU-regulated Core Curricular and at least 6 credits of Foreign Language Courses are required. In total, the department recognizes at most 32 credits from NYCU-regulated Core Curricular.

本系最低畢業學分為 128 學分　Graduation requirement 128 credits

※本組學生之「專業必修實驗課程」、「專業選修課程」、「校定共同必修課程」之定義，同本系乙組學生之基本修業規範。
※The definitions for "Major Compulsory Labs", "Major Elective Courses" and "NYCU General Education Curricular" for the students in this program are the same as the General Program's guidelines for fundamental curriculum study.
※基礎必修課程第一次修課須修習本校榮譽班或針對本組同學所開設之課程。
※Students, who take fundamental courses for the first time, shall take either NYCU's honor classes or courses specifically offered to this program.
※外系課程之開課單位以當學期實際開課狀況為準。
※The courses offered by other departments are subject to the actual course opening status of each semester.
※大學程式設計先修檢測(APCS)成績總級分九級(含)以上，可申請抵修大一[計算機概論與程式設計]，核予三學分。
※Students, who receive grade nine or above in the Advanced Placement Computer Science (APCS) exam, can be recognized as having gotten the credits of the fundamental course "Introduction to Computers and Programming".