

## Study Plan of Academic Year 113 (2024) in PHYS(Electrophysics Section )

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類別 Type	類別 Module	科目名稱 Course Title	規定學分 Credits	修課年級 Academic Year / Semester	備註 Remark
校訂 Courses Required by the University		導師時間 Academic Advising	0	From Freshman to Senior / 8 semesters	0
全人教育課程 Holistic Education (Required)	核心課程 Fundamental Courses	大學入門 Introduction to University Studies	2	Freshman / 1st	32
		人生哲學 Philosophy of Life	4	Sophomore / 1st & 2nd	
		專業倫理-科技倫理 Professional Ethics-Scientific and Technology Ethics	2	Junior / 2nd	
		體育 Physical Education	0	From Freshman to Sophomore / 4 semesters	
	基本能力課程 Core Abilities Courses	國文 Chinese	4	Freshman / 1st & 2nd	
		外國語文 Foreign Language	8	From Freshman to Sophomore / 4 semesters	
		資訊素養 Information Literacy	0	N/A	
	通識涵養課程 General Education Courses	人文 Humanities & Arts	4	N/A	
		自然 Nature & Technology	4	N/A	
		社會 Social Sciences	4	N/A	
系必修課程 Department Required		微積分(一) Calculus I	3	Freshman/1st	70
		普通物理(一) General Physics (I)	3	Freshman/1st	
		程式設計(一) Computer programming I	3	Freshman/ 2nd	
		普通化學(一) General Chemistry (I)	2	Freshman/1st	
		普通物理實驗 General Physics Lab.	2	Freshman/ 1st & 2nd	
		普通化學實驗(一) General Chemistry Lab. (I)	1	Freshman/1st	
		微積分(二) Calculus II	3	Freshman/ 2nd	
		普通物理(二) General Physics (II)	3	Freshman/ 2nd	
		線性代數 Linear Algebra	2	Freshman/ 2nd	
		普通物理(三) General Physics (III)	3	Sophomore/1st	
		電磁學(一) Electromagnetism (I)	3	Sophomore/1st	
		應用數學(一) Applied Mathematics (I)	3	Sophomore/1st	
		電子學(一) Electronics (I)	3	Sophomore/1st	
		電子學實驗(一) Experiments on Electronics (I)	2	Sophomore/1st	
		電磁學(二) Electromagnetism(II)	3	Sophomore/ 2nd	
		近代物理 Modern Physics	3	Sophomore/ 2nd	
		應用數學(二) Applied Mathematics (II)	3	Sophomore/ 2nd	
		電子學(二) Electronics (II)	3	Sophomore/ 2nd	
		電子學實驗(二) Experiments on Electronics (II)	2	Sophomore/ 2nd	
		量子物理(一) Quantum Physics I	3	Junior/1st	
		固態物理導論	3	Junior/1st	
		半導體物理導論 Introduction to Semiconductor Physics	3	Junior/1st	
		半導體元件 Semiconductor Devices	2	Junior/2nd	
		半導體製程概論 Fundamentals of semiconductor fabrication	2	Junior/2nd	
	熱統計物理	3	Junior/2nd		
	進階實驗物理 Advanced Experimental Physics	2	Junior/2nd		
	書報討論 Colloquium	2	Senior/1st		
	物理數學(一) Mathematical Physics (I)	3	Senior/1st		
	物理數學(二) Mathematical Physics (II)	3	Senior//2nd		
	專題演講(一) Colloquia I	2	Sophomore/1st		
	專題演講(二) Colloquia II	2	Sophomore/ 2nd		
	物理英文 English for Physics	2	Sophomore/ 2nd		

系選修課程 Department elective subject	真空鍍膜技術 Vacuum Coating Technology	2	Sophomore/1st	15
	光電實驗 Opto-Electronics Laboratory	2	Junior/2nd	
	計算物理	3	Senior/1st	
	進階應用電子學實驗	2	Senior/1st	
	光電導論 Introduction to Optoelectronics	2	Junior/2nd	
	科學英文 English for Science	2	Sophomore/ 2nd	
	材料科學與工程導論 Materials Science and Engineering:An Introduction	3	Junior/2nd	
	應用光學(一) Applied Optics I	3	Junior/1st	
	應用光學(二) Applied Optics	3	Junior/2nd	
	低溫物理 Low Temperature Physics	2	Senior/1st	
	圖形化積木式程式設計 Programming with Visual Building Blocks	2	Sophomore/1st	
	生醫光電導論 Introduction to Biophotonics	2	Junior/2nd	
	光纖雷射導論 Introduction to Fiber Lasers	2	Senior//2nd	
	固態光譜學	2	Junior/1st	
	電路學(一) Circuit Theory(I)	3	Sophomore/1st	
	高等粒子物理(二) Advanced Particle Physics (II)	3	Senior/1st	
	高等量子力學 Advanced Quantum Mechanics	3	Senior/1st	
	量子電腦概論 Introduction to quantum computer	2	Junior/2nd	
	半導體製程概論 Fundamentals of semiconductor fabrication	3	Junior/2nd	
	專題研究(一) Special Topics (I)	1	From Sophomore to Senior/1st or 2nd	
專題研究(二) Special Topics (II)	1	From Sophomore to Senior/1st or 2nd		
專題研究(三) Special Topics (III)	1	From Sophomore to Senior/1st or 2nd		
專題研究(四) Special Topics (IV)	1	From Sophomore to Senior/1st or 2nd		