## **Tamkang University Department of Physics Curriculum Plan**

(Required Courses for New Students Admitted in the Academic Year 114)

科 目 名 稱		學分	Year 1		Year 2		Year 3		Year 4		備 註 Notes		
C	ourse title	數	1st	2nd	1st	2n	1st	2nd	1st	2nd	Notes		
General Education 26 Credits													
基知課2分	外國語文學門(Q) Foreign Languages and Drills	8	2	2	2	2					大 1 英文必修、大 2 外文 自由選 English is required for freshmen.		
	中國語文能力表達 Capability of expressing chinese in spoken and written	2									語文表達 Language Expression		
	大學學習 Learning in University	1	1								學習與發展學門(N) Learning and Development		
	社團學習與實作 Extracurricular activities and team development	1		1							課外活動與團隊發展(K) Learning and practice of clubs:an Introduction		
	AI 與程式語言 AI & Programming Language	1	1										
	探索永續 Exploring Sustainability	1	1										
	文學經典學門(L) Classics In World Literature	2									人文領域 至少2學		
	歷史與文化學門(P) History And Cultures	2									全分2字 分 2 credits		
	哲學與宗教學門(V) Philosophy and Religion	2									required (1 out of 4		
識核	藝術欣賞與創作學門(m) Art appreciation and invetion	2									categories)		
心課程	全球視野學門(t) Global outlook	2									社會領域 至少2學		
12 學分	未來學學門(r) Futures studies	2									分 与學門至多修習		
	社會分析學門(w) Social analysis	2									required (1 out of 4 2 科 4 學分		
	公民社會及參與學門(S) Civil Society And Participation	2									categories)		
	資訊教育學門(O) Information & Computer Education	2									科學領域 至少2學 分		
	全球科技革命學門(Z) Global technology revolution	2									2 credits required (1		
	自然科學學門(u) Natural sciences	2									out of 4 categories)		

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Course title	學分數	1st	2nd	1st	2n	1st	2nd	1st	2nd	Notes
體育 Physical education	4	1	1	1	1					*Not counted toward graduation credits*
其他 課程 (一)-國防科技 All-Out Defense Education Military Training(I)-National Defense Technolog	0									0 credit, offered in Year 1 for one semester
校園與社區服務學習 Learning campus and community		1	1							
srevices	2	1	1							
Physi	ics D	epar	tmen	t Red	quire	d Co	ourse	63 (	Credit	S
普通化學	3	3								
General chemistry	3	3								
普通化學實驗	1	1								實驗課程
General chemistry lab.										7 20 1 1
普通物理 General Physics		4	4							
普通物理實驗										
General physics lab.		1	1							實驗課程
微積分 Calculus	6	3	3							
基礎物理數學 Fundamental mathematical physics	2		2							
計算機概論 Introduction to computers	3		3							
電磁學 Electromagnetism	6			3	3					
物理數學 Mathematical physics	3			3						
電磁學實驗 Electromagnetic physics lab.	2			1	1					實驗課程
カ學 Mechanics	3				3					
AI 數值方法(一) Numerical Methods and Artificial Intelligence (I)	2			2						
專題研究 Research seminar	2				1	1				專題課程

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Course title	數	1st	2nd	1st	2n	1st	2nd	1st	2nd	140105
量子物理 Quantum physics						3	3			
熱力學 Thermodynamics	3						3			
光學 Optics	3					3				
光學實驗 Optics lab.	1						1			實驗課程
電子學 Electronics	3					3				
電子學實驗 Electronics lab.	2					1	1			實驗課程
近代物理實驗 Modern physics lab	2							1	1	實驗課程

(1) Required credits (including general education 26 credits): 89 credits

(2) Minimum departmental elective credits: 11 credits

(3) Free elective credits: 28 credits
Total credits for graduation: 128 credits