

Bachelor's Degree Program in Medical Imaging and Radiological Sciences (MIRS), 136 credits, Fall 2024

Category 科目類別	Course Title in Chinese 課程中文名稱	Course Title in English 課程英文名稱	Credits 學分	Hours 時數	Year 1		Year 2		Year 3		Year 4		Note
					1st Semester	2nd Semester	1st Semester	2nd Semester	1st Semester	2nd Semester	1st Semester	2nd Semester	
Basic General Courses (Required)	中文閱讀與書寫	Chinese Reading and Writing	2	2	2								8 credit(s) 8學分
	基礎英文	Fundamental English	2	2	2								
	*程式設計	Programming	2	2	2								
	慈濟人文	Tzu-Chi Philosophy	2	2		2							
	*程式設計：網頁視覺程式設計(2)、APP程式設計入門(2)、邏輯與運算思維(2)。全學年開課，擇一課程修習。 *Programming: Web Visual Programming (2), Introduction to APP Programming (2), Logic and Computational Thinking (2). Classes are open throughout the academic year, and you can choose a course to study.												
共同必修	通識選修課程	General Elective Courses	16	16	不限領域自由選修。建議於一、二年級修完。 Elective courses without restrictions in any field. It is recommended to complete them during the first and second years.								16 credit(s) 16學分
	院通識課程	General Courses of the Colleges	4	4	由各學院規劃。 Planned by each college.								4 credit(s) 4學分
小計			28	28									
外語課程		Foreign Language Courses	2	2	建議於一、二年級修完。 It is recommended to complete it in the first or second grade.								2 credit(s) 2學分
Physical Education 體育	運動與健康	Physical Activity & Health	2	2		2							3 credit(s) 3學分
	*活動性體育課程興趣選項	Interest Options for Active Physical Education Courses	1	1				1					
	小計			3	3								
*活動性體育課程興趣選項由體育教學中心所開設選修課程中任選一門。 *The interest option for active physical education courses is to choose any one of the elective courses offered by the Physical Education Center.													
Professional Basic Courses (Required)	普通物理學	General Physics	2	2	2								37 credits required (37學分)
	普通物理學實驗	General Physics Laboratory	1	2	1								
	普通化學	General Chemistry	2	2	2								
	普通化學實驗	General Chemistry Laboratory	1	2	1								
	普通生物	General Biology	2	2		2							
	普通生物實驗	General Biology Laboratory	1	2	1								
	微積分(一)	Calculus I	2	2	2								
	微積分(二)	Calculus II	2	2		2							
	應用數學	Applied Mathematics	3	3			3						
	醫學影像程式概論	Medical Imaging Processing: An Overview	2	2			2						
	醫用電子電路學	Medical Electronics and Circuits	2	2		2							
	放射物理學(一)	Physics of Radiology I	2	2		2							
	放射物理學(二)	Physics of Radiology II	2	2			2						
	放射化學	Radiochemistry	2	2				2					
放射生物學	Radiobiology	2	2			2							
解剖學	Anatomy	4	4			4							
生理學	Physiology	3	3				3						
病理學	Pathology	2	2					2					
小計			37	40	8	9	13	5	2				
Professional Core Courses for MIRS (Required)	放射診斷器材學	Instrumentation for Diagnostic Radiography	3	3			3						54 credits required (54學分)
	放射解剖學	Sectional Anatomy	1	1			1						
	放射治療物理學	Physics of Radiation Therapy	2	2			2						
	放射診斷技術學(一)	Radiological Technology I	2	2			2						
	輻射安全學	Radiation Safety	2	2			2						
	核子醫學藥物學	Radiopharmaceuticals	2	2				2					
	核子醫學器材學	Instrumentation for Nuclear Medicine	2	2				2					
	超音波學	Medical Ultrasound	2	2				2					
	磁共振學	Magnetic Resonance Imaging	2	2				2					
	放射診斷技術學(二)	Radiological Technology II	2	2				2					
	電腦斷層影像學	Computed tomography images	2	2				2					
	輻射度量	Radiation Measurement	1	1				1					
	醫學影像診斷學	Clinical Medical Images	2	2					2				
	醫學影像品質管制	Image Evaluation and Quality Management	2	2					2				
	醫學影像處理	Medical image processing	2	2					2				
	醫學影像儲存系統	Picture Archiving and Communication System	1	1					1				
	特殊攝影技術學	Special Radiographic Technology	2	2					2				
	放射治療技術學	Radiation Therapy Technology	3	3					3				
	放射治療器材學	Instrumentation for Radiation Therapy	2	2					2				
	核子醫學技術學	Nuclear Medicine Technology	3	3					3				
	放射治療品質管制	Quality Management in Radiation Therapy	1	1					1				
放射診斷技術實習	Clinical Practice in Radiography	6	20							6			
放射治療技術實習	Clinical Practice in Nuclear Medicine	3	10							3			
核子醫學技術實習	Clinical Practice in Radiation Therapy	3	10							3			
書報討論	Seminar	1	2								1		
小計			54	83			3	7	13	18	12	1	
Professional Elective Courses for MIRS	放射醫學概論	Introduction to Radiology	2	2	2								12 credits required (12學分)
	醫放專業術語	English for Radiological Technology	2	2	2								
	抗輻射蔬果美妝保養創新應用	Innovative application of anti-radiation vegetable and fruit beauty care	2	2	2								
	解剖學實驗	Anatomy Laboratory	1	2			1						
	放射醫學服務學習	Learning by serving in radiological departments	2	2			2						
	放射師之醫學倫理	Understanding the importance of medical ethics	2	2			2						
	生理學實驗	Physiology Experiment	1	2				1					
	放射診斷技術學實驗(一)	Radiological Technology Practice I	2	4				2					
	輻射安全學實驗	Radiation Safety Laboratory	1	2				1					
	電腦斷層與牙科放射技術學	Computed Tomography and Dental radiography	2	2				2					
	磁共振之臨床應用與研究	Advanced MRI: Clinical Application and Research	2	2					2				
	放射診斷技術學實驗(二)	Radiological Technology Practice II	2	4					2				
	治療計畫模擬	Simulation of Treatment Planning System	1	1					1				
	超音波學實驗	Ultrasonography Practice	2	4						2			
	進階放射診斷物理學器材學	Advanced physics and instruments for diagnostic radiography	2	2							2		
	進階核子醫學影像物理學器材學	Advanced Nuclear Medicine Imaging Physics and Instrumentation	2	2							2		
	進階放射治療物理學器材學	Advanced Radiotherapy Physics and Instrumentation	2	2							2		
整合醫學與臨床應用	Integrative medicine and clinical application	2	2							2			
放射醫學實務	Radiological Medicine	1	1								1		
專業選修最低學分數			12										
Total Credits 學分總計	必修學分數	Total Credits for Required Courses		91	專業基礎(必修)+專業核心(必修)								
			28		通識課程28學分(必修8+選修16+院通識4)								
			5		體育課程3+外語課程2								
		醫放專業選修最低學分數	Minimum Total Credits for Elective Courses	12									
專業最低學分數				136	All students are required to complete a minimum of 136 credits								
Remarks: 備註:	1.The graduation threshold for students of this Department is as follows: Graduation threshold of professional ability: Obtain a Radiation Safety Certificate or CPR certificate while studying. 2.In case of any changes or discrepancies with the actual course offering, the actual courses and credit hours offered by the Department of Medical Imaging and Radiological Sciences shall prevail. 一、本系學生畢業門檻如下:專業能力畢業門檻在學期間取得輻射安全證書或CPR證書。 二、本表如有變動或與開課狀況不同,一律以醫學影像暨放射科學系實際開課科目及學分時數為準。												