

慈濟科技大學111學年度四年制醫學影像暨放射科學系開課科目及學分時數表

Tzu Chi University of Science and Technology

Bachelor's Degree Program in Medical Imaging and Radiological Sciences (MIRS), 132 credits, Fall 2022

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 Education (Required) 基礎通識 (必修)	國文	Chinese	4	4	2	2							10 credits required
	英文	English	4	8	1	1	1	1					
	邏輯與運算思維	Logic and Computational Thinking	2	2		2							
	慈濟人文	Tzu-Chi Philosophy	2	2		2							
	勞作教育(一)	Labor Education I	0	2	0								
	勞作教育(二)	Labor Education II	0	2		0							
	體育	Physical Education	0	8	0	0	0	0					
	小計	Total Credits	12	28	3	7	1	1					
Core General Education (Required) 核心通識 (必修)	人文與藝術向度(Humanities and Arts)												
	語文應用與表達	The Expression & Application of Chinese Language & Literature	2	2	2								2 credits required
	生命教育	Life Education	2	2	2								
	音樂欣賞	Music Appreciation	2	2	2								
	公民素養向度(Civic Literacy)												
	憲法與人權	Constitution and Rights	2	2	2								2 credits required
	法學緒論	Introduction to the Study of Law	2	2	2								
	社會與文化	Sociology and Culture	2	2	2								
	歷史與文化向度(History and Culture)												
	中西藝術史導論	History of Art	2	2		2							2 credits required
	歷史小說與史學名著選讀	Select Readings of History Novels and Literatures	2	2		2							
	科技與智慧生活向度(Technology and Wisdom)												
	Python與資料科學入門	Introduction to Python and Data Science	2	2		2							2 credits required
現代生活科技	Modern Science and Technology	2	2		2								
	小計	Total Credits	8	8	4	4							
Professional Fundamentals (Required) 專業基礎 (必修)	普通物理學	General Physics	2	2	2								36 credits required
	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 and 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	2	2			2						
	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	Total Credits	36	39	8	9	12	5	2				
Core Courses for MIRS (Required) 專業核心 (必修)	放射診斷器材學	Instrumentation for Diagnostic Radiography	3	3			3						53 credits required
	放射切面解剖學	Radiosectional 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 Ultrasonics	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				
	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	Total Credits	53	82			3	7	12	18	12	1	
Elective Courses for MIRS 專業選修	放射醫學概論	Introduction to Radiology	2	2	2								15 credits required
	醫放專業術語	English for Radiological Technology	2	2	2								
	解剖學實驗	Anatomy Laboratory	1	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				2					
	放射診斷技術學實驗(一)	Radiological Technology Practice I	1	3				3					
	輻射安全學實驗	Radiation Safety Laboratory	1	2				2					
	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	1	3					3				
	超音波學實驗	Ultrasonography Practice	1	2						2			
	治療計畫模擬	Simulation of Treatment Planning System	2	2						2			
	進階放射診斷物理暨器材學	Advanced physics and instruments for diagnostic radiography	2	2							2		
	進階核子醫學影像物理暨器材學	Advanced Nuclear Medicine Imaging Physics and Instrumentation	2	2							2		
	進階放射治療物理暨器材學	Advanced Radiation Therapy 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	Minimum Credits for Elective Courses - MIRS	15										
Other Elective Courses 通識選修	通識選修最低學分數	Minimum Credits for Elective Courses - General Education	8										
	必修學分數	Total Credits for Required Courses	109	157									
Total Credits 學分總計	選修最低學分數	Minimum Total Credits for Elective Courses	23										
	畢業最低學分數(時數)	Credit Requirements for Graduation	All students are required to complete a minimum of 132 credits										