

中臺科技大學大學部二年制日間部醫學檢驗生物技術系114學年度入學課程標準表

Central Taiwan University of Science and Technology Undergraduate 2-Year Daytime Department of Medical Laboratory Science and Biotechnology Program Curriculum Standards for the 114<sup>th</sup> Academic Year

1140211系課程委員會會議審議通過

1140213系務會議審議通過

1140311院課程委員會會議審議通過

學年 Academic Year	科目 Course	學分數 Credits	時數 Teaching hours	上學期 First Semester		下學期 Second Semester		備註 Remarks
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
<b>基本素養(8學分) Basic Competencies (8 Credits)</b>								
第一學年 1 <sup>st</sup> Academic Year	當代思維與視野 Modern Thinking and Vision	2	2	2				
	人文學概論 Introduction to Humanities	2	2			2		
	進階英文(一) Advanced English (I)	2	2	2				
	進階英文(二) Advanced English (II)	2	2			2		
<b>專業必修(33學分) Professional Required Courses (33 Credits)</b>								
<b>核心基礎(6學分) Core Foundations (6 Credits)</b>								
第一學年 1 <sup>st</sup> Academic Year	生技專業論文導讀 Reading Skills for Biotechnology-related Literature	2	2	2				
	醫用生物化學 Medical Biochemistry	2	2	2				
	臨床檢驗品質管理 Clinical Laboratory Quality Management	2	2			2		
<b>核心專業(15學分) Core Professional Courses (15Credits)</b>								
第一學年 1 <sup>st</sup> Academic Year	生物技術學含實驗 Biotechnology and Laboratory	3	4			2	2	
	專題研究(一) Research in Special Topics I	3	3			3		
	生物資訊學概論 Introduction to Bioinformatics	2	2			2		電腦課程 Computer Course
	專題討論(一) Seminar I	1	2			2		
	生物統計學 Biostatistics	2	2	2				
第二學年 2 <sup>nd</sup> Academic Year	專題研究(二) Research in Special Topics II	3	3	3				
	專題討論(二) Seminar II	1	2	2				
<b>博學涵養(4學分) Liberal Education (4 Credits)</b>								
第一學年 1 <sup>st</sup> Academic Year	博學涵養 Liberal Education	2	2			2		
第二學年 2 <sup>nd</sup> Academic Year	博學涵養 Liberal Education	2	2	2				
學年 Academic Year	科目 Course	學分數 Credits	時數 Teaching hours	上學期 First Semester		下學期 Second Semester		備註 Remarks
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
<b>專業選修(59學分) Professional Electives Courses (59 Credits)</b>								
<b>醫學檢驗類 Medical Laboratory Science</b>								

學年 Academic Year	科目 Course	學分數 Credits	時數 Teaching hours	上學期 First Semester		下學期 Second Semester		備註 Remarks
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
第一學年 1 <sup>st</sup> Academic Year	臨床血液學與血庫學證照實務 License Practice of Clinical Hematology and Immunoematology	1	2			2		
	醫學分子檢驗學與臨床鏡檢學證照實務 License Practice of Molecular Medicine and Clinical Microscopy	1	2	2				
	臨床生理學與病理學證照實務 License Practice of Clinical Physiology and Clinical Pathology	1	2			2		
	生物化學與臨床生化學證照實務 License Practice of Biochemistry and Clinical Biochemistry	1	2	2				
	微生物學與臨床微生物學證照實務 License Practice of Microbiology and Clinical microbiology	1	2	2				
	臨床血清免疫學與臨床病毒學證照實務 License Practice of Clinical Seroimmunology and Clinical Virology	1	2			2		
第二學年 2 <sup>nd</sup> Academic Year	輸血醫學 Transfusion Medicine	2	2	2				
	分子病理學 Molecular Pathology	2	2			2		
	檢驗分析應用 Applications of Laboratory analytical Methods	2	2	2				
	醫學實驗室認證與管理 Accreditation and Management in Medical Laboratory	2	2	2				
<b>生物技術類 Biotechnology</b>								
第一學年 1 <sup>st</sup> Academic Year	生技產業 Biotechnology Industry	2	2	2				
	細胞培養技術 Cell Culture Technique	2	2			2		
	實驗室開發檢測 Laboratory Developed Tests	2	2	2				
	分子病毒學 Molecular Virology	2	2			2		
第二學年 2 <sup>nd</sup> Academic Year	遺傳學特論 Special Topics in Genetics	2	2			2		
	毒物化學 Chemistry of Poisons	2	2	2				
	生殖技術學 Reproduction Technology	2	2	2				
	微生物遺傳學 Microbial Genetics	2	2			2		
	生物製劑學 Biologics	2	2	2				
	細胞生物學 Cell Biology	2	2	2				
<b>智慧健康類 Intelligent Health</b>								
第一學年 1 <sup>st</sup> Academic Year	流行病學 Epidemiology	2	2	2				
	臨床醫學實驗室安全 Clinical Laboratory Safety	1	1	1				學術倫理課程 Academic Ethics Course
	醫師病人與社會 Physician Patient and Society	2	2			2		
	睡眠醫學技術 Sleep Medicine and Technology	2	2	2				
	醫療與衛生法規 Healthcare and Health Regulations	2	2	2				
第二學年 2 <sup>nd</sup> Academic Year	臨床檢驗數據評估 Assessment of Clinical Data	2	2			2		
	醫院資訊系統與管理 Hospital Information System and Management	2	2			2		
	人工智慧與大數據 AI and Big Data	2	2	2				AI課程 AI course
	健康照護與健檢諮詢 Health Care and Health Information	2	2	2				
	高齡醫學與檢驗 Geriatric Medicine and Diagnostics	2	2			2		
<b>業界實習 Clinical Practice</b>								

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				First Semester		Second Semester		
				授課 Teaching	實習 Internship	授課 Teaching	實習 Internship	
第二學年 2 <sup>nd</sup> Academic Year	業界實習 Clinical Practice	6	12				12	<small>實習 12 週 Off-Campus Internship Internship Duration: 12 weeks</small>
<b>第一學年小計(1) 1<sup>st</sup> Academic Year Credits Subtotal (1)</b>		50	58	27	0	29	2	
<b>第二學年小計(2) 2<sup>nd</sup> Academic Year Credits Subtotal (2)</b>		42	49	25	2	12	12	
<b>合計 Total = (1)+(2)</b>		92	107					

### 畢業規定及其他相關說明：Graduation Requirements and Other Relevant Instructions

一	<p>最低畢業學分為72學分，必修29學分【含基本素養8學分、專業必修21學分】，博學涵養4學分，選修至少39學分（其中專業選修至少24學分）。</p> <p>The minimum graduation requirement is 72 credits, including mandatory 29 credits [comprising 8 credits for core competencies, and mandatory professional 21 credits]. 4 credits for broad knowledge. Elective credits must be at least 39 credits [with a minimum number of 24 credits for professional electives].</p>
二	<p>在本校就學期間必須取得心肺復甦術（CPR）畢業門檻之相關規定，依照「中臺科技大學健康科學院心肺復甦術(CPR)證照畢業門檻實施要點」之規定辦理</p> <p>During the period of study, it is required to fulfill the graduation threshold for CPR in accordance with the 'Implementation Guidelines for Graduation Threshold of CPR Certification at the College of Health Science, Central Taiwan University of Science and Technology.</p>
三	<p>修習「臨床醫學實驗室安全」課程之學生，需依「中臺科技大學學術倫理教育課程實施要點」完成「學術倫理教育」相關課程修習後，提交任課老師列入成績考核。"Clinical Laboratory Safety" is an elective course. Students are required to complete the relevant courses of "Academic Ethics Education" in accordance with the "Implementation Guidelines for Academic Ethics Education Courses at Central Taiwan University of Science and Technology" and submit the certificate to the department for review before applying for the degree examination.</p>
四	<p>學生於第1年需修習「班級永續經營課程(三)、(四)」，成績及格可認列為「一般選修」學分。</p> <p>Students need to take "Class Sustainable Management Course (III), (IV) " in the first year. Passing the credits can be counted as General Elective credits.</p>