

明志科技大學114入學年化學工程系生化工程碩士班 課程表

Ming Chi University of Technology「2025 SchoolYear」MS Program in Biochemical Engineering Curriculum

114/06/17校課程委員會議通過

114/06/03院課程委員會議通過

114/05/29系課程委員會議通過

Examination at School Curriculum Committee Meeting on June 17,2025

Examination at College Curriculum Committee Meeting on June 3,2025

Examination at Department Curriculum Committee Meeting on May 29,2025

類別 category		課程名稱 Course name	上學期 Semester I		下學期 Semester II		備註
			學分 Credits	時數 Hours	學分 Credits	時數 Hours	
必修課程 Required Courses		產業實務與書報討論(I) Industrial and Practical Discussion(1)	1	2			演講式課程 Lecture series
		產業實務與書報討論(II) Industrial and Practical Discussion(2)			1	2	演講式課程 Lecture series
		科技論文寫作 Technical English Writing	1	2			全英語授課 English-medium instruction
		專題研究(I) Special Topics(1)	1	2			全英語授課 English-medium instruction
		專題研究 (II) Special Topics(2)			1	2	全英語授課 English-medium instruction
		小計	3	6	2	4	
		高等生物化學 Advanced Biochemistry	3	3			全英語授課 English-medium instruction
		生化工程特論 Special Topics on Biochemical Engineering	3	3			
核心選修課程 Core Elective Courses		生醫工程 Biomedical Engineering			3	3	
		高等分子生物學 Advanced Molecular Biology			3	3	全英語授課 English-medium instruction
		小計	6	6	6	6	1.上下學期各至少選1門核心選修課程 2.超過兩門可抵專業選修課程 1.The credits of core elective courses should exceed 6 and should be earned from semester I and II respectively. 2. Credits obtained from core elective courses exceeding the minimum requirement can be transferred to professional elective course credits.
		發酵工程 Fermentation Engineering			3	3	
		酵素工程 Enzyme Engineering	3	3			
		超臨界流體應用 Application of Supercritical Fluid			3	3	
專業選修課程 (至少選6門) Professional Elective Courses	生化工程領域 Biochemical Engineering	生醫複合材料 Biomedical composites	3	3			
		微生物技術 Microbial Technology	3	3			
		高等細胞生物學 Advanced Cell Biology	3	3			
	生物技術領域 Biotechnology	生物技術特論 Special Topics on Biotechnology	3	3			
		細胞組織培養 Cell Tissue Culture			3	3	全英語授課/偶數學年開課 English-Medium Instruction/Offered in even-numbered academic years
		基因工程技術暨實務 Gentic Engineering Technology and Practice			3	3	全英語授課 English-medium instruction
		生化儀器分析暨實作 Biochemical Analysis Technology and Practice	3	3			全英語授課 English-medium instruction
	共同領域 Generality	能源與環境生物技術暨實務 Energy and Environmental Biotechnology and	3	3			
		實驗設計與方法 Experimental Design and Method	3	3			全英語授課 English-medium instruction
		生物感測器技術 Biosensing Technology			3	3	奇數學年開課 Offered in odd-numbered academic years
		生技法律 Biotechnology legislation			3	3	
		生物製劑專論 Biopharmaceuticals			3	3	
		小計	24	24	21	21	專業選修課程至少18學分 Professional elective courses must be a minimum of 18 credits(6 courses)
		小計	24	24	21	21	

1. 畢業學分下限為29學分(不含論文6學分)，每學期修課上限為17學分，開課人數最低為5人。
The minimum graduation credits for degree are 29 (excluding 6 credits for the thesis). The maximum credits earned are 17 per semester. The minimum enrollment for a course is 5 students.

2. 本課程表未包含非本系科畢業同學之規定補修課程。
The course curriculum does not include the required remedial classes for non-departmental graduates.

3. 必修科目5學分；核心課程6學分；選修科目18學分(經指導教授簽名同意，可跨所選課，最多3門)；合計29學分。
There are a total of 29 credits for graduation, including 5 credits of required courses, 6 credits of core elective courses, and 18 credits of professional elective courses. The transferable credits of 3 courses only from other institutes are earned with the agreement of the advisor.