

112 Master program for the Faculty of Medicinal and Applied Chemistry

Type of Course	Code	Courses	Credits	1 st Year 1 st Semester	1 st Year 2 nd Semester	2 nd Year 1 st Semester	2 nd Year 2 nd Semester	Faculty	note
Require courses		Behavior							
		專題討論（醫化組）(EMI) Seminar(EMI)	4	1	1	1	1	Chai-Lin Kao	English
		專題討論（醫化組）(EMI) Seminar(EMI)	4	1	1	1	1	Po-Yu Chen	English
		專題討論（應化組）(EMI) Seminar(EMI)	4	1	1	1	1	Chih-Kuang Wang	English
		專題討論（B 組） Seminar	4	1	1	1	1	Hsuan-Ying Chen	For Group B only
		生命科學核心技術與學術倫理 The Principle of Core Techniques and Ethics in Life Sciences	2	2				Yin-Tse Huang	
		特別演講 Special Lecture	0	0	0	0	0	Genin Gary Huang	
		教學實習(EMI) Professional Practice in Chemistry(EMI)	0	0	0	0	0	1. Hui-Fen Chen 2. Chien-Hung Li	English
		碩士論文 Thesis	6						
Elective courses	*	有機化學特論（一）(EMI) Special Topics in Organic Chemistry（I）(EMI)	2	2				Jeh-Jeng Wang	English
	*	有機化學特論（二）(EMI) Special Topics in Organic Chemistry（II）(EMI)	2		2			Jeh-Jeng Wang	English
	*	無機化學特論（一）(EMI) Special Topics in Inorganic Chemistry（I）(EMI)	2	2				Sodio C.N. Hsu	English
	*	無機化學特論（二）(EMI) Special Topics in Inorganic Chemistry（II）(EMI)	2		2			Sodio C.N. Hsu	English
	*	物理化學特論（一）(EMI) Special Topics in Physical Chemistry（I）(EMI)	2	2				Li-Fang Wang	English
	*	物理化學特論（二）(EMI) Special Topics in Physical Chemistry（II）(EMI)	2		2			Li-Fang Wang	English
	*	儀器分析特論（一）(EMI) Special Topics in Instrumental Analysis（I）(EMI)	2	2				Tsai-Hui Duh	English
	*	儀器分析特論（二）(EMI) Special Topics in Instrumental Analysis（II）(EMI)	2		2			Po-Yu Chen	English
	●	有機化學導論 Introduction to Organic Chemistry	3	3				Yeh-Long Chen	For Group B only
	●	無機化學導論 Introduction to Inorganic Chemistry	3	3				Hsuan-Ying Chen	For Group B only
	●	物理化學導論 Introduction to Physical Chemistry	3		3			Hsing-Yin Chen	For Group B only
	●	分析化學導論 Introduction to Analytical Chemistry	3		3			Genin Gary Huang	For Group B only
		材料化學特論（一） Special topics in materials in chemistry（I）	2	2				Chih-Kuang Wang	
		材料化學特論（二） Special topics in materials in chemistry（II）	2		2			Chih-Kuang Wang	
		藥物化學特論(EMI) Special Topics in Medicinal Chemistry(EMI)	2	2				Chai-Lin Kao	English
		生物化學特論（一） Special Topics in Biochemistry（I）	2	2				Tzu-Pin Wang	
		生物化學特論（二） Special Topics in Biochemistry（II）	2		2			Tzu-Pin Wang	
		生醫材料特論 Special Topics in Biomaterials	2		2			Li-Fang Wang	
		有機光譜特論 Special Topics in Spectroscopy	2	2				Yeh-Long Chen	
		雜環化學特論（一）(EMI)	2	2				Chai-Lin Kao	English

	Special Topics in Heterocyclochemistry (I) (EMI)							
	雜環化學特論 (二) (EMI) Special Topics in Heterocyclochemistry (II) (EMI)	2		2			Chai-Lin Kao	English
	生物有機化學特論 (一) Special Topics in Bioorganic Chemistry (I)	2	2				Jeh-Jeng Wang	
	生物有機化學特論 (二) Special Topics in Bioorganic Chemistry (II)	2		2			Jeh-Jeng Wang	
	醫藥品合成化學特論 Special Topics in Drug Synthesis (I)	2		2			Yeh-Long Chen	
	有機金屬化學特論 Special Topics in Organometallic Chemistry	2	2				Hsuan-Ying Chen	
	超分子化學特論 Special Topic in Supramolecular Chemistry	2		2			Sodio C.N. Hsu	
	生物無機化學特論(EMI) Special Topics in Bioinorganic Chemistry(EMI)	2	2				Sodio C.N. Hsu	English
	電化學特論 Special Topics in Electrochemistry	2	2				Po-Yu Chen	
	質譜學特論 Special Topics in Mass Spectrometry	2		2			Po-Jui Huang	
	生物觸媒化學特論(一) Special Topics in Biocatalytical Chemistry(I)	2	2				Tzu-Pin Wang	
	生物觸媒化學特論(二) Special Topics in Biocatalytical Chemistry(II)	2		2			Tzu-Pin Wang	
	藥物分析特論 Special Topics in Pharmaceutical Analysis	2		2			Tsai-Hui Duh	
	有機金屬催化劑特論 Special Topics in Organometallic Catalysts	2		2			Hsuan-Ying Chen	
	計算化學概論 Introduction to Computational Chemistry	2	2				Hsing-Yin Chen	

【Note】

- A total of 30 credits is required for graduation, including 12 required credits (of which 6 credits are for the Master's thesis) and 18 elective credits.
Group A: Students must select 3 out of 8 designated elective courses (marked with "★"). (Applicable to students admitted from the 2019 academic year onwards)
Group B: Students must complete 4 out of 4 designated elective courses (marked with "●") and 1 out of 8 elective courses (marked with "★").
- Each elective course requires a minimum enrollment of 3 students to be offered.
- Students admitted in the 2009 academic year and thereafter must pass a test equivalent to the **GEPT Intermediate Listening & Reading Test** before graduation. Those who fail must take additional English courses.
- Credits from partner institutions may be accepted with advisor and department chair approval.
- Students may take biostatistics-related courses from other departments with prior approval.
- Graduate students may take up to 15 credits per semester.
- Master's students may take Ph.D.-level courses in the department; credits count toward electives.
- From 2017, students must complete the **Academic Ethics course** online in their first semester and pass the test before applying for degree defense.
- Students in the Advanced Chemistry Division may take existing courses offered by Academia Sinica, and the credits may be included in the curriculum list (as newly added courses) without additional external review.
- From the 2017 academic year onward, graduate students must complete self-study and pass the final test on the Taiwan Academic Ethics Education Resource Center website during their first semester in order to be eligible to apply for the degree examination
- For graduate students taking undergraduate-level courses, a minimum score of 60 is required to pass. Failed courses cannot be retaken through make-up exam, failed courses cannot be retaken and are not counted toward GPA or credit totals.