

114 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		操行							
		專題討論暨學術倫理(醫化組) (EN/EMI) Seminar and Academic Integrity (EN/EMI)	4	1	1	1	1	Chai-Lin Kao	English
		專題討論暨學術倫理(醫化組) (EN/EMI) Seminar and Academic Integrity (EN/EMI)	4	1	1	1	1	Po-Yu Chen	English
		專題討論暨學術倫理(應化組) (EN/EMI) Seminar and Academic Integrity (EN/EMI)	4	1	1	1	1	Chih-Kuang Wang	English
		專題討論暨學術倫理(B 組) (EN/EMI) Seminar and Academic Integrity (EN/EMI)	4	1	1	1	1	Hsuan-Ying Chen	For Group B only
		特別演講(EN/EMI) Special Lecture(EN/EMI)	0	0	0	0	0	Chia-Hsiang Chen	
		教學實習(EN/EMI) Professional Practice in Chemistry(EN/EMI)	4	1	1	1	1	Hui-Fen Chen Jin-Tai Lin Chien-Hung Li	English
		碩士論文 Thesis	6						
Elective courses	*	有機化學特論 (一) (EN/EMI) Special Topics in Organic Chemistry (I) (EN/EMI)	2	2				Jeh-Jeng Wang	English
	*	有機化學特論 (二) (EN/EMI) Special Topics in Organic Chemistry (II) (EN/EMI)	2		2			Jeh-Jeng Wang	English
	*	無機化學特論 (一) (EN/EMI) Special Topics in Inorganic Chemistry (I) (EN/EMI)	2	2				Sodio C.N. Hsu	English
	*	無機化學特論 (二) (EN/EMI) Special Topics in Inorganic Chemistry (II) (EN/EMI)	2		2			Sodio C.N. Hsu	English
	*	物理化學特論 (一) (EN/EMI) Special Topics in Physical Chemistry (I) (EN/EMI)	2	2				Li-Fang Wang	English
	*	物理化學特論 (二) (EN/EMI) Special Topics in Physical Chemistry (II) (EN/EMI)	2		2			Li-Fang Wang	English
	*	儀器分析特論 (一) (EN/EMI) Special Topics in Instrumental Analysis (I) (EN/EMI)	2	2				Tsai-Hui Duh	English
	*	儀器分析特論 (二) (EN/EMI) Special Topics in Instrumental Analysis (II) (EN/EMI)	2		2			Po-Yu Chen	English
	●	有機化學導論(EN/EMI) Introduction to Organic Chemistry(EN/EMI)	3	3				Yeh-Long Chen	For Group B only
	●	無機化學導論(EN/EMI) Introduction to Inorganic Chemistry(EN/EMI)	3	3				Hsuan-Ying Chen	For Group B only
	●	物理化學導論(EN/EMI) Introduction to Physical Chemistry(EN/EMI)	3		3			Hsing-Yin Chen	For Group B only
	●	分析化學導論(EN/EMI) Introduction to Analytical Chemistry(EN/EMI)	3		3			Genin Gary Huang	For Group B only
		材料化學特論 (一) (EN/EMI) Special topics in materials in chemistry (I) (EN/EMI)	2	2				Chih-Kuang Wang	
		材料化學特論 (二) (EN/EMI) Special topics in materials in chemistry (II) (EN/EMI)	2		2			Chih-Kuang Wang	
		生物化學特論 (一) (EN/EMI) Special Topics in Biochemistry (I) (EN/EMI)	2	2				Tzu-Pin Wang	
		生物化學特論 (二) (EN/EMI) Special Topics in Biochemistry (II) (EN/EMI)	2		2			Tzu-Pin Wang	

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

【Note】

Master's Program Regulations

- A total of 34 credits is required for graduation. Required courses (including 6 thesis credits): 14 credits, Electives: 20 credits
 - Group A: Students must complete 3 out of 8 designated electives (marked “*”). (Applicable to students admitted from 2019 Academic year)
 - Group B: Students must complete all 4 designated electives (marked “●”) and 1 out of 8 electives (marked “*”).
- Each elective course requires a minimum of 3 students to be offered.
- Students admitted in the 2009 Academic year and thereafter must pass an English test equivalent to GEPT Intermediate (First Stage) before graduation. Those who fail must take additional English courses.

4. With the approval of both the advisor and the department chair, credits from partner universities may be recognized toward graduation.
5. With the approval of the advisor and department chair, students may take biostatistics-related courses offered by other departments at KMU. (According to the Office of Academic Affairs, notice, June 20, 2011)
6. Students who pass the early admission selection and obtain early-entry student status are required to take the Master's Special Lecture (0,0) course for one academic year.
7. Students who pass the early admission selection and obtain early-entry student status are required to take the Master's Teaching Practicum (0,0) course for one academic year.
8. Students who pass the early admission selection and obtain early-entry student status must take the Master's Teaching Practicum (1,1) course during their first year (senior undergraduate year). Effective from the 2024 Academic year.
9. Graduate students may take up to 15 credits per semester.
10. Master's students may take doctoral-level courses in the department, and the credits may be counted as electives toward graduation.
11. Starting from 2017 Academic year, graduate students must complete the self-study course and pass the final test on the Taiwan Academic Ethics Education Resource Center website during their first semester. A course certificate is required before applying for the degree examination.
12. Students in this Frontier chemistry division may take existing courses offered by Academia Sinica, Taiwan. These courses may be added directly to the curriculum list (as newly added courses) without external review.
13. For graduate students taking undergraduate-level courses, the minimum passing grade is 60. Failed courses cannot be retaken or made up, and their grades/credits are not included in the semester GPA, graduation GPA, or credit totals.

1. **Credits for Graduation:** A total of **34 credits** is required. Required courses (including 6 thesis credits): **14 credits**, Electives: **20 credits**

Group A: Students must complete 3 out of 8 designated electives (marked "□").
(Applicable to students admitted from the 2019 academic year onward)

Group B: Students must complete all 4 designated electives (marked "□") and 1 out of 8 electives (marked "□").

2. **Minimum Enrollment:** Each elective course requires at least **3 students** to be offered.
3. **English Proficiency Requirement:** Students admitted in the 2009 academic year and thereafter must pass an English test equivalent to **GEPT Intermediate (First Stage)** before graduation. Students who do not pass must take additional English courses.
4. **Transfer Credits:** With the approval of both the advisor and the department chair, credits from partner universities may be recognized toward graduation.

5. **Biostatistics Courses:** With prior approval of the advisor and department chair, students may take **biostatistics-related courses** offered by other departments at KMU. (Office of Academic Affairs notice, June 20, 2011)
6. **Early Admission Program – Special Lecture:** Students admitted through early admission who obtain early-entry student status are required to take the **Master’s Special Lecture (0,0)** course for one academic year.
7. **Early Admission Program – Teaching Practicum (0,0):** Students admitted through early admission who obtain early-entry student status are required to take the **Master’s Teaching Practicum (0,0)** course for one academic year.
8. **Early Admission Program – Teaching Practicum (1,1):** Students admitted through early admission who obtain early-entry student status must take the **Master’s Teaching Practicum (1,1)** course during their first year (senior undergraduate year). Effective from the 2024 academic year.
9. **Credit Limit per Semester:** Graduate students may register for up to **15 credits per semester**.
10. **Ph.D.-Level Courses:** Master’s students may take doctoral-level courses within the department. These credits may count toward elective requirements for graduation.
11. **Academic Ethics Requirement:** Starting from the 2017 academic year, graduate students must complete the **online self-study course** and pass the final test on the **Taiwan Academic Ethics Education Resource Center** website during their first semester. A course certificate is required before applying for the degree examination.
12. **Frontier Chemistry Division:** Students in the Frontier Chemistry Division may take existing courses offered by Academia Sinica, Taiwan. These courses may be added directly to the curriculum list (as newly added courses) without additional external review.
13. **Undergraduate Courses:** Graduate students taking undergraduate-level courses must obtain a minimum passing grade of **60**. Failed courses cannot be retaken or made up, and their credits/grades will not be included in semester GPA, graduation GPA, or credit totals.