

Graduate Institute of Natural Products
Graduate Program Master Curriculum (2024-2026)

領域/組別 Divisions	必選修 Required(R) or Elective(E)	科目名稱 Course Title	學分 Credit	開課 年級 Year	上學期 Fall	下學期 Spring	備註 Note
共同必修科目 General Required Courses	R	中醫藥專題討論 Seminar in Traditional Chinese Medicine and Herbal Medicine	2	—	1	1	
	R	中醫藥研究概論 Research in Chinese Medicine and Herbal Drugs	2	—	2		*「藥物開發生技管理學程」選修課程 offered jointly with Graduate Institute of Traditional Chinese Medicine.
本班必修 Graduate Institute of Natural Products Required Courses	R	生物藥學特論 Special Topics in Biopharmaceutics	2	—		2	一~二年級本班必修課程共六學分；惟修滿四學分且提前通過學位考試者或學碩一貫生修滿四學分者須至少修習「中醫藥專題討論」及「天然藥物專題討論」英文班各一學期，以符合畢業英文門檻，但仍需補足畢業所需學分數。Required course: students should fulfill minimum of 4 credits, and maximum of 6 credits. 「天然藥物學特論」列為「藥物開發生技管理學程」選修課程。
	R	天然藥物學特論 Special Topics in Natural Products	2	—	2		
	R	天然藥物專題討論 Seminar on Natural Products	2	二	1	1	
核心選修課程 Core Elective Courses	E	中草藥藥效篩選 Pharmacodynamic Evaluation of Chinese Herbal Drugs	2	—	2		理學組選修科目 Elective courses in the science program
	E	中草藥藥效篩選實驗 Pharmacodynamic Evaluation of Chinese Herbal Drugs Laboratory	1	—	1		需同時修「中草藥藥效篩選」，理學組選修科目 1. Elective courses in the science program 2. Taking 「Pharmacodynamic Evaluation of Chinese Herbal Drugs」 is required.
	E	儀器分析 Instrumental Analysis	2	—	2		理學組選修科目 Elective courses in the science program
	E	儀器分析實驗 Instrumental Analysis Laboratory	1	—	1		需同時修「儀器分析」，理學組選修科目 1. Elective courses in the science program 2. Taking 「Instrumental Analysis」 is required.
	E	科學研究方法 Scientific Methods	2	—		2	與生物醫學研究所合開 Offered jointly with Graduate Institute of Biomedical Sciences
	E	中藥資訊研究 Information Studies in Traditional Chinese Medicine	2	二	2		英文授課，藥學組選修科目，與生物醫學研究所天藥組碩博合開課程 (taught in English) 1. Offered jointly with Division of Natural Products 2. Elective courses in the pharmaceutical program
	E	中草藥產業技術開發 Industrial Development in Chinese Medicine and Herbal Drugs	2	二		2	英文授課，與生物醫學研究所天藥組碩博合開課程 (taught in English) Offered jointly with Division of Natural Products.
	E	藥用植物學 Pharmaceutical Botany	2	—	2		藥學組選修科目 Elective courses in the pharmaceutical program
	E	分離技術 Isolation Techniques	2	—	2		
	E	分離技術實驗 Isolation Techniques Laboratory	1	—	1		需同時修「分離技術」 Taking 「Isolation Techniques」 is required.
	E	藥效學特論 Special Topics in Pharmacodynamics	2	—		2	與生物醫學研究所天藥組碩博合開課程 Offered jointly with Division of Natural Products.
	E	基礎藥學研究方法 Methodolgy in Drug Research	2	—		2	英文授課，理學組選修科目 (taught in English) Elective courses in the science program
	E	製藥生技學特論 Special Topics in Industrial Pharmaceutical Biotechnology	2	—		2	英文授課，藥學組、理學組選修科目，與生物醫學研究所天藥組碩博 合開課程 (taught in English) 1. Offered jointly with Division of Natural Products. 2. Elective courses in the pharmaceutical program and in the science program
	E	藥物設計及合成 Drug Design and Synthesis	2	—		2	英文授課，藥學組、理學組選修科目 (taught in English) Elective courses in the pharmaceutical program and in the science program
	E	血栓與血液恆定生物技術 Thrombosis and Haemostasis Biotechnology	2	—		2	英文授課，藥學組、理學組選修科目 (taught in English) Elective courses in the pharmaceutical program and in the science program
	E	血栓與血液恆定生物技術實驗 Thrombosis and Haemostasis Biotechnology Laboratory	1	—		1	英文授課，藥學組、理學組選修科目，需同時修「血栓與血液恆定生 物技術」 (taught in English) 1. Elective courses in the pharmaceutical program and in the science program 2. Taking 「Thrombosis and Haemostasis Biotechnology」 is required.

天然藥物碩士班其他選修課程 Elective Courses	E	有機光譜學 Organic Spectroscopy	2	—	2	
	E	有機光譜學實驗 Organic Spectroscopy Laboratory	1	—	1	需同時修「有機光譜學」 Taking「Organic Spectroscopy」is required.
	E	微生物天然物 Introduction of Microbial Natural Products	3	—	3	英文授課，理學組選修科目 (taught in English) Elective courses in the science program
	E	微生物天然物實驗 Introduction of Microbial Natural Products Laboratory	1	—	1	英文授課，理學組選修科目 (taught in English) Elective courses in the science program
	E	藥物動物實驗特論 Special Topics in Animal Models in Research of Traditional Chinese Medicine	2	—	2	從110學年開始改為隔年開設(114學年開)Offered bi-annually, starting in 2021(offered in 2026)
	E	藥廠與專利申請實務特論 Special Topics in The Pharmaceutical Factory and Patent Application	2	—	2	藥學組、理學組選修科目，與生物醫學研究所天然藥組碩博合開課程 1.Offered jointly with Division of Natural Products. 2.Elective courses in the pharmaceutical program and in the science program
	E	中藥藥物動力學 Pharmacokinetics of Traditional Chinese Medicine	2	—	2	從110學年開始改為隔年開設(113學年開)offered bi-annually, starting in 2021(offered in 2025)
	E	藥理學特論 Special Topics in Pharmacology	2	—	2	英文授課，與生物醫學研究所合開(隔年開設，113學年開) Offered jointly with Graduate Institute of Biomedical Sciences. (offered bi-annually, offered in 2025)(taught in English)
	E	藥物開發生物技術 Biotechnology of Drug Development	2	—	2	「藥物開發生技管理學程」必修核心課程
	E	體學時代的生物技術與生物標誌 Biotechnology and Biomarkers in the 'Omic Era'	1	—	1	「藥物開發生技管理學程」選修課程，與生物醫學研究所合開 Offered jointly with Graduate Institute of Biomedical Sciences
	E	體學時代的藥物研發 Drug Development in an omic era	1	—	1	「藥物開發生技管理學程」必修基礎課程
E	藥物研發實習 Practice for Drug Development	0.5	—	0.5	「藥物開發生技管理學程」選修課程(隔年開設，114學年開) (offered bi-annually, offered in 2026)	

備註
Remarks

1. 畢業學分：30學分(含畢業論文6學分)，本班畢業可授予理學或藥學碩士學位。
Candidates for the M.S.degree must fulfill a minimum 24 credits in course work and 6 credits for the M.S. Thesis.
(1)必修學分：10學分(含校內實習必修0學分、校外實習必修0學分)，含共同必修4學分，本班必修6學分(修滿四學分且提前通過學位考試者或學碩一貫生修滿四學分者須至少修習「中醫藥專題討論」及「天然藥物專題討論」英文班各一學期，以符合畢業英文門檻，但仍需補足畢業所需學分數。)
Required courses : 10 credits, at least 4 credits of general required courses and 6 credits of Graduate Institute of Natural Products Required Courses.
(2)選修14學分。Elective course : 14 credits.
(3)論文6學分(通過學位考試並繳交通過審核論文後給予)。The 6 credits for the "M.S. Thesis" are given only after completion and passing of the thesis defense.

2. 本班學生畢業前須至少修習一學期全英文授課之「專題討論」課程通過，以符合本班畢業英文門檻方可畢業。
3. 具有藥學學士背景者得選擇藥學組，且該組須於藥學組選修科目中(藥學相關科目)至少修得8學分，使得授予藥學碩士學位。
Individuals with a bachelor's degree in pharmacy may choose the pharmaceutical program, and must earn at least 8 credits from elective courses within the pharmaceutical program (related to pharmacy) in order to be awarded a Master of Pharmacy degree.
4. 選擇理學組者，且該組須於理學組選修科目中至少修得6學分，使得授予理學碩士學位。
Those choosing the science program must earn at least 6 credits from elective courses within the science program in order to be awarded a Master of Science degree.

5. 本班學生需至少選修二門核心選修課程。
Students must choose 2 core elective courses.
6. 選修他所學分以8學分為上限(合開課程之學分不包含在內)。
Choose elective course offered by the other divisions up to 8 credits.
7. 中醫藥系傳統中國醫學碩士班選修課程皆列為本班選修課程。
Graduate Institute of Traditional Chinese Medicine elective courses can be taken to fulfill the requirements for elective courses.
8. 本班課程可開放給大學部三年級選修，除碩博合開課程。
The courses in the list can offered to junior student.
9. 碩二「撰寫論文」為必修課程，全學年0學分，二年級以上之學生必修。
"Thesis Writing" is a required elective course starting in the second year.
10. 本班設有「藥物開發生技管理學程」，修習本學程至少須修滿四門課程，至少6學分。其必修課程為二門「藥物開發生物技術」及「體學時代的藥物研發」，選修課程為四門「體學時代的生物技術與生物標誌」、「中醫藥研究概論」、「藥物研發實習」及「天然藥物學特論」。
11. 本班外籍碩士生畢業要求為24學分(不含論文6學分)，必修科目為書報討論課程(一~二年上下學期計4學分)，其餘可在指導教授協助規畫下選擇本表單上或生物醫學研究所、醫學生物技術研究所等開設相關科目。
For international students in the master program, the 24-credits requirement can be fulfilled by any courses in the above list or any courses in Graduate Institute of Biomedical Sciences and Graduate Institute of Medical Biotechnology and Laboratory Science, plus the seminar courses (4 credits total) and 6 credits of the "Master Thesis". Course selection should be consulted with and approved by the research adviser.