

系所課程地圖 Department Curriculum Map

系所概要 Department	
系所名稱 Department Name	土壤環境科學系 Department of Soil and Environmental Sciences
班別 Division	博士班 Ph. D

教育目標 Education Goals	
編號 Number	項目內容 Content
1	提供土壤與環境科學之基礎與應用及跨領域之知識與訓練 Providing foundational and applied knowledge in soil and environmental sciences, as well as interdisciplinary training.
2	培養兼顧基本學理、專業知識及實際操作之土壤與環境科技人才 To cultivate talents in soil and environmental technology who possess a balance of fundamental theoretical knowledge, professional expertise, and practical skills.
3	培養團隊合作精神與溝通協調整合能力 To cultivate a spirit of teamwork and the ability to communicate, coordinate, and integrate effectively.
4	建立多元價值與國際觀 To establish diverse values and a global perspective.
5	強化農業永續經營與環境資源保育教育 To enhance education in sustainable agricultural management and environmental resource conservation.

學生核心能力 Student Core Competencies		
編號 Number	項目內容 Content	對應教育目標編號 Corresponding Education Goal Number
A	具有土壤環境科學之專業知識符合國家專業人才之需求 Possessing professional knowledge in soil and environmental sciences that meets the nation's demand for skilled professionals.	1, 2, 5
B	溝通表達與團隊合作及解決土壤環境問題之能力 Communication skills, teamwork, and the ability to solve soil and environmental issues.	1, 5
C	尊重學術倫理、智慧財產權並具有獨立研究之能力 To respect academic ethics, intellectual property rights, and possess the ability to conduct independent research.	3
D	瞭解國際脈動與培養人文素養 To understand global trends and cultivate cultural literacy.	4

- ※附註 Note:
- 各系所所屬之班別，含學士班、碩士班、博士班等，請分別填寫。1. Complete the map separately for each division, including Bachelor's, Master's, and Doctoral program.
例如：資管學士班需填寫表二及表三；資管碩士班也須填寫表二及表三。For example, Forms 2 and 3 must be completed for Bachelor's program in Management Information Systems, and also for Master's program in for Bachelor's program in Management Information Systems.
 - 教育目標及核心能力之代號皆以英文字母大寫為主。2. Codes for Education Goals and Core Competencies must be in uppercase English alphabet letters.
 - 可依不同班（組）別填寫教育目標及核心能力。3. Education Goals and Core Competencies can be specific to the division in question.

114年1月24日 Date:2025/1/24

課程規畫表 Curriculum Plan

中文課程名稱 Course Title in Chinese	英文課程名稱 Course Title in English	規劃要點 (附註) Plans (Notes)				對應核心能力編號 Corresponding Education Goal Number	建議修課年級 Recommended Year of Study	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
必修課程 Required Courses									
專題討論(一)	Seminar(I)	D	C	Y	2	A(30%) B(30%) C(20%) D(20%)	博一全 First year of doctoral program	土壤所 Department of Soil and Environmental Sciences	分ab二組 Divided into two groups, from a to b.
專題討論(二)	Seminar(II)	D	C	Y	2	A(30%) B(30%) C(20%) D(20%)	博二全 Second year of doctoral program	土壤所 Department of Soil and Environmental Sciences	分ab二組 Divided into two groups, from a to b.
研究方法與論文寫作(一)	Research Method and Thesis Writing(1)	D	C	Y	2	A(60%) B(20%) C(20%)	博一全 First year of doctoral program	土壤所 Department of Soil and Environmental Sciences	分abcd四組 Divided into four groups, from a to d.
研究方法與論文寫作(二)	Research Method and Thesis Writing(2)	D	C	Y	2	A(60%) B(20%) C(20%)	博二全 Second year of doctoral program	土壤所 Department of Soil and Environmental Sciences	分abcd四組 Divided into four groups, from a to d.
博士論文	Dissertation	D	C	Y	12	A(60%) B(20%) C(20%)	博二全 Second year of doctoral program	土壤所 Department of Soil and Environmental Sciences	

※附註：規劃要點填表說明：(1 到 4 各欄位請填正確代表字母)

Note: Instructions for completing this form are provided below (please provide the correct English alphabet letters in fields 1 to 4)

1：U-學士課程、M-碩士課程、D-博士課程。1: U-Bachelor's program, M-Master's program, D-Doctoral program.

2：A-正課、B-實習課、C-台下指導之科目如學生講述或邀請演講之專題討論、專題研究……等。

2: A-Lecture, B-Internship, C-Subjects with private guidance such as student presentations or invited speeches, topic discussions, topic research, etc.

3：S-學期課、Y-學年課。3: S-Semester course, Y-Year-long course.

4：科目(全期或全年)總學分數(請填阿拉伯數字)。4: Total course (full-semester or full-year) credits (in Arabic numerals).

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		1	2	3	4				
選修課程 Elective Courses									
土-根養分移動	Solute Movement in Soil-Root System	D	A	S	3	A(50%) B(30%) C(10%) D(10%)		土環所 Department of Soil and Environmental Sciences	
環境生化研究法	Methodology of Environmental Biochemistry	D	A	S	3	A(50%) B(30%) C(10%) (10%)		土環所 Department of Soil and Environmental Sciences	
高等土壤物理學	Advanced Soil Physics	D	A	S	3	A(40%) B(40%) C(10%) D(10%)		土環所 Department of Soil and Environmental Sciences	
黏土礦物化學	Clay Mineral Chemistry	D	A	S	3	A(40%) B(40%) C(10%) D(10%)		土環所 Department of Soil and Environmental Sciences	
新興有機污染物之環境影響、分析與當前研究	Emerging Organic Contaminants: Environmental Impact, Analysis, and Current Research	D	A	S	3	A(30%) B(30%) C(20%) D(20%)		土環所 Department of Soil and Environmental Sciences	113-2新增 academic year added

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- 3: S-學期課、Y-學年課。3: S-Semester course, Y-Year-long course.
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