

系所課程地圖 Department Curriculum Map

系所概要 Department	
系所名稱 Department Name	水土保持學系The Department of Soil and Water Conservation
班別 Division	碩士班 Master's Program

教育目標 Education Goals	
編號 Number	項目內容 Content
1	培養水土保持理論與技術之研究能力。 英文：Developing research abilities in soil and water conservation theory and technology.
2	培養水土災害防治的分析與管理能力。 英文：Developing the ability to analyze soil and water disasters and manage their prevention and control.
3	拓展國際視野與國際接軌。 英文：Expanding international perspectives and aligning with global standards.

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	具備水土保持實務分析與設計應用能力。 Analyzing and designing practices of soil and water conservation.	12
B	強化水土災害防治觀念與技術。 Concepts and techniques of prevention-and-cure approaches for soil- and water-related disasters.	12
C	提升水土保持學術水準及創新水土保持技術。 Enhanced academic research abilities and innovation of new techniques for soil and water conservation.	123
D	嫻熟跨領域問題之綜整能力及解決之技巧與策略。 Being well acquainted with interdisciplinary problems and acquiring abilities for integrating and solving these problems.	123

※附註 Note:

1.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.

2.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.

3.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.

承辦人簽章 Signature of Processing
Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date:

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				
院核心課程(若無免填，請加註必修、選修) College Core Courses (not required if none, otherwise please indicate Required Courses and Elective Courses)									
必修課程 Required Courses									
高等應用數學(一)	Advanced Applied Mathematics (I)	M	A	S	3	A(10%) B(10%) C(30%) D(50%)	1	水保系DSWC	
碩士班專題討論	Master Seminar	M	C	S	0	A(15%) B(15%) C(15%) D(55%)	1	水保系DSWC	
碩士論文	Thesis	M	C	Y	6	A(25%) B(25%) C(25%) D(25%)		水保系DSWC	

※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).

承辦人簽章 Signature of Processing Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date:

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				
選修課程 Elective Courses									
水土保持論文寫作	Academic writing on Soil and Water Conservation	M	A	S	2	A(20%) B(20%) C(30%) D(30%)	1	水保系DSWC	1150108系課程會新增 Added in Department Curriculum Meeting on 1150108
農村發展特論	Advanced Topics in Rural Development	M	A	S	3	A(20%) B(20%) C(20%) D(40%)	1	水保系DSWC	1140620系課程會新增 Added in Department Curriculum Meeting on 1140620
地形學特論	Special Topics in Geomorphology	M	A	S	3	A(30%) B(20%) C(30%) D(20%)	1	水保系DSWC	112-1學期起改為進階 課程 (advanced courses)
泥砂運動力學	Sediment Transport	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	111-1學期起改為進階 課程 (advanced courses)
河床演變學	River Morphology	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	111-1學期起改為進階 課程 (advanced courses)
工程地質特論	Special Topics in Engineering Geology	M	A	S	3	A(20%) B(30%) C(20%) D(30%)	1	水保系DSWC	進階課程 (advanced courses)
土壤力學特論	Special Topics on Soil Mechanics	M	A	S	3	A(30%) B(20%) C(30%) D(20%)	1	水保系DSWC	進階課程 (advanced courses)
大地工程特論	Special Topics on Geotechnical Engineering	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	進階課程 (advanced courses)
計算水力學	Computational hydraulics	M	A	S	3	C(50%) D(50%)	1	水保系DSWC	進階課程 (advanced courses)
水土保持試驗設計	Experiment Design for Soil and Water Conservation	M	A	S	3	A(15%) B(15%) C(40%) D(30%)	1	水保系DSWC	進階課程 (advanced courses)
迴歸分析	Regression Analysis	M	A	S	3	B(20%) C(80%)	1	水保系DSWC	
資料分析與應用	Data analysis and application	M	A	S	3	A(20%) C(20%) D(60%)	1	水保系DSWC	
水土保持植物特論	Special Topics on Plants for Soil and Water Conservation	M	A	S	3	A(20%) C(40%) D(40%)	1	水保系DSWC	
水土保持研究方法特論	Special Topics on Research Methods for Soil and Water Conservation	M	A	S	2	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	
自然保育特論	Conservation of Nature and Environment	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	
坡地工程電腦輔助設計	Computer-Aided Design for Slopeland Engineering	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	
水土保持規劃與實務	Planning and Practices for Soil and Water Conservation	M	A	S	3	B(50%) D(50%)	1	水保系DSWC	
野外地質學	Field Geology	M	A	S	3	B(50%) D(50%)	1	水保系DSWC	
環境規劃與管理	Planning and Management of Environment	M	A	S	3	A(30%) B(20%) C(30%) D(20%)	1	水保系DSWC	
植生調查與分析	Vegetation Investigation and Analysis	M	A	S	3	A(40%) B(25%) C(25%) D(10%)	1	水保系DSWC	
防砂工程特論	Special Topics on Sabo Engineering	M							

水土保持問題分析	Problem Analyses for Soil and Water Conservation	M	A	S	3	A(50%) B(50%)	1	水保系DSWC	
植物生態分析方法	Method of Analysis in Plant Ecology	M	A	S	3	A(25%) B(25%) C(25%) D(25%)	1	水保系DSWC	
流體動力學	Fluid Dynamics	M	A	S	3	A(20%) B(20%) C(30%) D(30%)	1	水保系DSWC	
地理資訊系統特論	Special Topics in Geographic Information Systems	M	A	S	3	A(30%) B(40%) C(30%)	1	水保系DSWC	
地下水學	Groundwater	M	A	S	3	B(50%) C(50%)	1	水保系DSWC	
高等應用數學(二)	Advanced Applied Mathematics (II)	M	A	S	3	C(50%) D(50%)	1	水保系DSWC	
坡地資源調查特論	Directed Studies in Slopeland Resources Investigation	M	A	S	3	A(50%) B(20%) C(20%) D(10%)	1	水保系DSWC	
高等生態工程	Advanced Ecological Engineering	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	1	水保系DSWC	
有限元素法	Finite Element Methods	M	A	S	3	A(100%)	1	水保系DSWC	
土壤物理學特論	Special Topics in Soil Physics	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	1	水保系DSWC	
地球物理探勘學	Geophysical exploration	M	A	S	3	A(50%) B(10%) C(40%)	1	水保系DSWC	
高等教育教學實務(一)	Teaching Practice in Higher Education (I)	M	C	S	0	A(30%) B(20%) C(25%) D(25%)	1	水保系DSWC	
高等教育教學實務(二)	Teaching Practice in Higher Education (II)	M	C	S	0	A(30%) B(20%) C(25%) D(25%)	1	水保系DSWC	
氣候變遷與災害風險管理	Climate Change and Disaster Risk Management	M	A	S	3	B(40%) C(30%) D(30%)	1	水保系DSWC	
岩石邊坡工程	Rock Slope Engineering	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	2	水保系DSWC	
坡地工程特論	Special Topics on Slope Engineering	M	A	S	3	A(50%) C(50%)	2	水保系DSWC	
特殊地植生工學特論	Special Topics on Vegetation Engineering for Specific terrain	M	A	S	3	A(50%) C(50%)	2	水保系DSWC	
沖蝕與環境	Erosion and Environment	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	2	水保系DSWC	
崩塌地治理原理	Principles of Landslide Mitigation	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	2	水保系DSWC	
水文學特論	Special Topics in Hydrology	M	A	S	3	A(40%) B(30%) C(30%)	2	水保系DSWC	
高等防風定砂	Advanced Wind Erosion Control	M	A	S	3	A(50%) B(30%) C(20%)	2	水保系DSWC	
生態水力學	Ecohydraulics	M	A	S	3	A(50%) D(50%)	2	水保系DSWC	
電腦輔助坡地規劃	Computer-Aided Slopeland Planning	M	A	S	3	A(30%) B(20%) C(25%) D(25%)	2	水保系DSWC	
高等河川力學	Advanced Mechanics in River Flow	M	A	S	3	A(20%) B(20%) C(30%) D(30%)	2	水保系DSWC	112學年度第2學期起由博士班課程改為碩士班課程 112-2 semester, change from the doctoral program to the master's program
特殊環境保育研究	Study on Special Environmental Conservation	M	A	S	3	A(30%) B(30%) C(30%) D(10%)	2	水保系DSWC	112學年度第2學期起由博士班課程改為碩士班課程 112-2 semester, change from the doctoral program to the master's program

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承辦人簽章 Signature of Processing
Clerk:

規劃單位主管簽章 Head of Planning Unit:

年 月 日 Date:

