

修課別 Required / Elective Course	學群類別 Course Category	科目代號 Subject Code	科目名稱 Subject Name	學分數 Credits	時數 Hours	開課年級學期 Open Grade Semester	開課單位 Open Course Unit	是否有 替代科 目 If Have Replace Subject	備註 Note
系必修 Department Required		應修畢 4 學分 4 門科目 4 Courses (Required 4 Credit)							
		DSCV0469	專題討論(一) Seminar (1)	1	1	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0470	專題討論(二) Seminar (2)	1	1	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0471	專題討論(三) Seminar (3)	1	1	二上 Second Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0472	專題討論(四) Seminar (4)	1	1	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
院選修 College Elective		應修畢 0 學分 Elective 0 Credit							
		DSS00033	生理學 Physiology	3	3	一下 First Grade Next Semester	理工學院 College of Engineering and Science		
		DSS00034	微生物學 Microbiology	3	3	一下 First Grade Next Semester	理工學院 College of Engineering and Science		
系選修 Department Elective		應修畢 24 學分 Elective 24 Credit							
		DSCV0122	結構矩陣 Structure Matrix	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0193	結構動力學 Structure Dynamics	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		

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系選修 Department Elective		應修畢 24 學分 Elective 24 Credit							
		DSCV0273	水文分析在防災上之應用 Application of Hydrological Analysis on Disaster Prevention	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0293	地震工程 Seismic Engineering	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0311	土壤動力學在防災上之應用 Application of Soil Dynamics on Disaster Prevention	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0314	土工數學解析 Analytical Methods in Geotechnical Engineering	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0423	湖泊與水庫水動力 Lake and Reservoir Dynamics	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0496	結構耐震設計與防災補強 Seismic Resistant Design and Retrofit of Structures	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0497	監測技術及應用 Monitoring Technology and Application	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0503	複合材料在土木工程上之應 用 Application of Composite Material for Civil Engineering	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0507	專案管理 Project Management	3	3	一上 First Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		

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系選修 Department Elective		應修畢 24 學分 Elective 24 Credit							
		DSCV0270	數值分析與應用 Numerical Analysis and Application	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0271	彈性力學 Elasticity	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0290	有限元素法 Finite Element Method	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0291	破壞力學 Fracture Mechanics	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0296	應力波動學 Theory of Stress Wave	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0299	統計方法與資料分析 Statistic Methods and Data Analysis	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0312	岩石力學在防災上之應用 Application of Rock Mechanics on Disaster Prevention	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0313	工程地質在防災上之應用 Application of Engineering Geology on Disaster Prevention	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0317	環境流體力學 Environmental Fluid Mechanics	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		

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系選修 Department Elective		應修畢 24 學分 Elective 24 Credit							
		DSCV0337	多變量分析 Application of Multivariable Analysis	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0363	河渠變量流與洪流預報模擬 Modeling of Unsteady Flow and Forecasting in Rivers	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0413	混凝土材料特論 Special Topic on Concrete Materials	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0428	流體動力學 Fluid Dynamics	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0461	集水區規劃與管理 Watershed Planning and Management	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0495	結構振動控制在防災上之應 用 Structural Vibration Control Application in Disaster Prevention	3	3	一下 First Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0301	複變函數分析方法 Complex Variable Analysis Method	3	3	二上 Second Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0310	地理資訊系統在防災上之應 用 Application of Geographic Information System on Disaster Prevention	3	3	二上 Second Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		

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系選修 Department Elective		應修畢 24 學分 Elective 24 Credit							
		DSCV0434	高等土壤力學特論 Special Lecture on Advanced Soil Mechanics	3	3	二上 Second Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0445	營建管理特論 Special Lecture on Construction Management	3	3	二上 Second Grade Last Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0297	波譜分析在防災上之應用 Application of Wave Spectrum Analysis on Disaster Prevention	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0390	地工數值分析 Numerical Analysis in Geotechnical Engineering	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0439	時間序列分析 Time Series Analysis	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0473	環境模擬與分析 Environmental Simulation and Analysis	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0476	土木與水利工程專業實務 Professional Practices in Civil and Hydraulic Engineering	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0498	科技英文寫作 Academic English Writing	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		
		DSCV0504	高等混凝土 Advanced Concrete Design	3	3	二下 Second Grade Next Semester	土木與防災工程學系 Department of Civil and Disaster Prevention Engineering		

畢業條件 Graduation Threshold						
畢業學分數 Graduation Credits	28	學分 Credits				
校必修 University Required	0	學分 Credits				
院必修 College Required	0	學分 Credits				
主系必修 Department Required	4	學分 Credits		4	門科目 Subjects	
校選修 University Elective	0	學分 Credits				
院選修 College Elective	0	學分 Credits				
主系選修 Department Elective	24	學分 Credits				
博雅核心課程 Core Curriculum of Liberal Arts Education	0	學分 Credits	*			
博雅選修課程 Elective Curriculum of Liberal Arts Education	0	學分 Credits	*			
跨院 Cross College	0	學分 Credits				
跨系 Cross Department	0	學分 Credits				
剩餘學分 Remaining Credits	0	學分 Credits				
自由選修 Free Electives	0	學分 Credits				

<p>※本系基本能力指標：</p> <ol style="list-style-type: none"> 1. 具備理論與實務並重之土木與防災工程專業知識。 2. 具備實驗技術、電腦程式語言與應用資訊科技之能力。 3. 具備策劃及執行專題研究之能力。 4. 具備撰寫專業論文及簡報之能力。 5. 具備協調整合能力及敬業之積極態度。 6. 具備基本外語能力及國際視野。 7. 具備終身學習之觀念。 	<p>※Core Competency:</p> <ol style="list-style-type: none"> 1. The ability of professional knowledge of civil and disaster prevention engineering with equal emphasis on theory and practice. 2. The ability of experimental technology, computer programming language and applied information technology. 3. The ability to plan and execute special research. 4. The ability to write professional papers and presentations. 5. The ability for coordination, integration ability, and dedication. 6. The ability of foreign language and international vision. 7. The ability of lifelong learning.
<p>※畢業條件說明：</p> <ol style="list-style-type: none"> 1. 本所碩士班畢業生必須撰寫碩士論文，且通過論文口試。 2. 須依【國立聯合大學學生學術研究倫理教育課程實施要點】規定修畢學術研究倫理教育課程。 	<p>※Graduation threshold Description:</p> <ol style="list-style-type: none"> 1. Graduates of our master's program must write a master's thesis and pass the oral test. 2. Students must complete the academic research ethics education course in accordance with the requirements of [Implementation Points of the National United University Student Academic Research Ethics Education Course].