系所課程地圖 Department Curriculum Map

系所概要 Department

系所名稱 Department Name	應用數學系Department of Applied Mathematics
班別 Division	應用數學組Applied Mathematics Division

教育目標 Education Goals

編號 Number	項目內容 Content
1	以大學基礎數學為核心。
1	A core of basic college mathematics.
2	配合計算數學、統計與數據科學之師資，培養學生使具獨立思考之能力。
2	Students will be able to develop independent thinking skills in conjunction with the computational mathematics, statistics and data science faculty.
3	能從事理論與應用分析、以及與數學相關之跨領域實務工作。
3	Theoretical and applied analysis, as well as cross-disciplinary practical work related to mathematics.

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	數理基礎知識	1
A	Basic Knowledge in Mathematical Sciences	1
B	數學分析專業知識	12
B	Professional Knowledge in Mathematical Analysis	12
C	統計分析專業知識	12
C	Professional Knowledge in Statistical Analysis	12
D	計算科學專業知識	12
D	Professional Knowledge in Scientific Computation	12
E	資訊科學專業知識	12
E	Professional Knowledge in Computer Science	12

系所課程地圖 Department Curriculum Map

系所概要 Department

系所名稱 Department Name	應用數學系Department of Applied Mathematics
班別 Division	應用數學組Applied Mathematics Division

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
F	數學、統計、力學之理論解析	23
F	Theory of Mathematical Analysis, Statistics, and Mechanics	23
G	數學及統計軟體能力	23
G	Mathematical and Statistical software skills	23
H	英文語言能力	3
H	English Language Ability	3

※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 Responsible Person：

規劃單位主管簽章 Head of Planning Division：   Date：114.08.11 - 2 -

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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	建議修課年級 Recommended Cours	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
必修課程 Required Courses									
普通物理學	General Physics	U	A	Y	6	A50D50	1	物理系 Department of Physics	
微積分(一)	Calculus(I)	U	A	S	4	A90H10	1	應數系 Department of Applied Mathematics	
微積分(二)	Calculus(II)	U	A	S	4	A80G10H10	1	應數系 Department of Applied Mathematics	
微積分Python實作	Calculus with Python	U	A	S	1	A10D30G60	1	應數系 Department of Applied Mathematics	
數學導論	Introduction to Mathematics	U	A	S	3	A60B40	1	應數系 Department of Applied Mathematics	
程式設計	Computer Programming	U	A	S	3	E100	1	應數系 Department of Applied Mathematics	
資料結構	Data Structures	U	A	S	3	E70G30	1	應數系 Department of Applied Mathematics	
線性代數(一)	Linear Algebra (I)	U	A	S	4	A30B70	1	應數系 Department of Applied Mathematics	
線性代數(二)	Linear Algebra (II)	U	A	S	4	A30B70	1	應數系 Department of Applied Mathematics	
分析導論(一)	Introduction to Analysis (I)	U	A	S	4	A10B80H10	2	應數系 Department of Applied Mathematics	
分析導論(二)	Introduction to Analysis (II)	U	A	S	4	A10B80H10	2	應數系 Department of Applied Mathematics	
常微分方程	Differential Equations	U	A	S	3	A20B70H10	2	應數系 Department of Applied Mathematics	
代數學(一)	Algebra (I)	U	A	S	3	B90H10	2	應數系 Department of Applied Mathematics	
工業與應用數學專題	Seminar in Industrial and Applied Mathematics	U	A	S	0	A20B20C20D20E20	3	應數系 Department of Applied Mathematics	
數值分析(一)	Numerical Analysis (I)	U	A	S	3	A10B60G30	3	應數系 Department of Applied Mathematics	
向量微積分	Vector Calculus	U	A	S	3	A30B70	2	應數系 Department of Applied Mathematics	
數值分析(二)	Numerical Analysis (II)	U	A	S	3	A10B60G30	3	應數系 Department of Applied Mathematics	
偏微分方程	Partial Differential Equations	U	A	S	3	A70G30	3	應數系 Department of Applied Mathematics	
統計學	Statistics	U	A	S	3	C70F20G10	1	應數系 Department of Applied Mathematics	
機率論	Introduction to Probability	U	A	S	3	C70F30	2	應數系 Department of Applied Mathematics	
代數學(二)	Algebra (II)	U	A	S	3	B90H10	3	應數系 Department of Applied Mathematics	
離散數學	Discrete Mathematics	U	A	S	3	A40B60	2	應數系 Department of Applied Mathematics	
圖論	Graph Theory	U	A	S	3	A40B60	3	應數系 Department of Applied Mathematics	
靜力學	Statics	U	A	S	3	A30D70	2	應數系 Department of Applied Mathematics	

承辦人簽章Signature of Responsible Person：

規劃單位主管簽章 Head of Planning Division：   Date：114.08.11 - 3 -

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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	建議修課年級 Recommended Cours	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
必修課程 Required Courses									
動力學	Dynamics Mechanics	U	A	S	3	A30D70	2	應數系 Department of Applied Mathematics	
幾何學	Geometry	U	A	S	3	A20B80	3	應數系 Department of Applied Mathematics	
拓樸學	Topology	U	A	S	3	A20B80	3	應數系 Department of Applied Mathematics	
數理統計(一)	Mathematical Statistics (I)	U	A	S	3	C40F60	3	應數系 Department of Applied Mathematics	
數理統計(二)	Mathematical Statistics (II)	U	A	S	3	F100	3	應數系 Department of Applied Mathematics	
複變函數論	Functions of Complex Variables	U	A	S	3	A20B80	3	應數系 Department of Applied Mathematics	
熱力學(一)	Thermodynamics (I)	U	A	S	3	D100	3	應數系 Department of Applied Mathematics	
流體力學(一)	Fluid Mechanics (I)	U	A	S	3	A40D60	3	應數系 Department of Applied Mathematics	
系統程式	System Programming	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
作業系統	Operating Systems	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
計算機結構	Computer Architecture	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
數據科學導論	Introduction to Data Science	U	A	S	3	C70G30	2	應數系 Department of Applied Mathematics	
偏微分方程之數值方法	Numerical Methods for Partial Differential Equations	U	A	S	3	B30D35E35	3	應數系 Department of Applied Mathematics	
計算代數幾何	Computational Algebraic Geometry	U	A	S	3	A30B30E40	進階課程 advanced courses	應數系 Department of Applied Mathematics	

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 Responsible Person：

規劃單位主管簽章 Head of Planning Division：

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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 Course Division	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									
演算法	Algorithms	U	A	S	3	A20E80	3	應數系 Department of Applied Mathematics	
科學計算	Scientific Computation	U	A	S	3	A20D80	3	應數系 Department of Applied Mathematics	
電腦力學模擬	Simulation of Computational Mechanics	U	A	S	3	A20D80	3	應數系 Department of Applied Mathematics	
計算軟體應用(一)	Applications of Computing Software (I)	U	A	S	3	A10D30G60	3	應數系 Department of Applied Mathematics	
計算軟體應用(二)	Applications of Computing Software (II)	U	A	S	3	A10D30G60	3	應數系 Department of Applied Mathematics	
熱力學(二)	Thermodynamics (II)	U	A	S	3	A20D80	3	應數系 Department of Applied Mathematics	
作業研究(一)	Operations Research (I)	U	A	S	3	C100	3	應數系 Department of Applied Mathematics	
作業研究(二)	Operations Research (II)	U	A	S	3	C100	3	應數系 Department of Applied Mathematics	
隨機過程	Stochastic Processes	U	A	S	3	C100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
生物統計	Biostatistics	U	A	S	3	C100	4	應數系 Department of Applied Mathematics	
數學規劃(一)	Mathematical Programming (I)	U	A	S	3	C100	3	應數系 Department of Applied Mathematics	
數學規劃(二)	Mathematical Programming (II)	U	A	S	3	C100	3	應數系 Department of Applied Mathematics	
數學影像處理	Mathematical Image Processing	U	A	S	3	B40E30G30	進階課程 advanced courses	應數系 Department of Applied Mathematics	
作業系統專題(一)	Special Topics on Operating Systems (I)	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
作業系統專題(二)	Special Topics on Operating Systems (II)	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
線性代數專題	Special Topics in Linear Algebra	U	A	S	3	A20B80	3	應數系 Department of Applied Mathematics	
基礎分析專題	Special Topics in Elementary Analysis	U	A	S	3	F100	4	應數系 Department of Applied Mathematics	
開放系統(一)	Open Systems (I)	U	A	S	3	E100	2	應數系 Department of Applied Mathematics	
開放系統(二)	Open Systems (II)	U	A	S	3	A20E80	3	應數系 Department of Applied Mathematics	
統計模擬	Statistical Simulation	U	A	S	2	C100	3	應數系 Department of Applied Mathematics	
代數與離散數學專題	Special Topics in Algebra and Discrete Mathematics	U	A	S	2	B100	3	應數系 Department of Applied Mathematics	
普通物理學實驗	General Physics Lab	U	B	Y	2	A50D50	1	應數系 Department of Applied Mathematics	
流體力學(二)	Fluid Mechanics (II)	U	A	S	3	A40D60	3	應數系 Department of Applied Mathematics	
應用統計與R語言	Applied Statistics with R Programming	U	A	S	3	C70G30	3	應數系 Department of Applied Mathematics	
資料科學與分析實務	Data Science and Application	U	A	S	3	C20D20E20G20H20	3	應數系 Department of Applied Mathematics	
數據分析與統計計算	Data Analysis and Statistical Computing	U	A	S	2	C50G50	3	應數系 Department of Applied Mathematics	

承辦人簽章Signature of Responsible Person：

規劃單位主管簽章 Head of Planning Division：

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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 Course Division	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									
數學影像處理	Mathematical Image Processing	U	A	S	2	B40E30G30	進階課程 advanced courses	應數系 Department of Applied Mathematics	
SAP實務學習與數據分析	SAP Experiential Learning and Data Analysis	U	A	S	2	D20E30G30H20	進階課程 advanced courses	應數系 Department of Applied Mathematics	
理論中心數學分析A	Mathematical analysis A, National Center for Theoretical Sciences	U	A	S	2	B40E20G30	3	應數系 Department of Applied Mathematics	
理論中心數學分析B	Mathematical analysis B, National Center for Theoretical Sciences	U	A	S	3	B40E20G30	3	應數系 Department of Applied Mathematics	
理論中心應用數學A	Applied mathematics A, National Center for Theoretical Sciences	U	A	S	2	B40E20G30	3	應數系 Department of Applied Mathematics	
理論中心應用數學B	Applied mathematics B, National Center for Theoretical Sciences	U	A	S	3	B40E20G30	3	應數系 Department of Applied Mathematics	
計算科學	Computational Science	U	A	S	3	D100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
計算數學	Computational Mathematics	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
高等微分方程與應用	Advanced Differential Equations and Applications	U	A	S	2	A40B30D30	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據挖掘與視覺化	Data Mining and Visualization	U	A	S	3	A40B30C30	進階課程 advanced courses	應數系 Department of Applied Mathematics	
計算物理	Computational Physics	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
計算平台	Computing Platform	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據科學方法	Data Science	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數學建模與數據分析	Mathematical Modeling and Data Analysis	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
深度學習	Deep Learning	U	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數值最佳化	Numerical Optimization	M	A	S	3	A50D50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
高等常微分方程(一)	Advanced Ordinary Differential Equation（I）	M	A	S	3	A40B30D30	進階課程 advanced courses	應數系 Department of Applied Mathematics	
實變函數論（一）	Real Analysis（I）	M	A	S	3	A50B50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
實變函數論（二）	Real Analysis（II）	M	A	S	3	A50B50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
Matlab程式設計應用	Applied Matlab Programming	U	A	S	3	D10E60G30	3	應數系 Department of Applied Mathematics	
人工智慧與深度學習應用	Artificial Intelligence and Applied Deep Learning	U	A	S	3	C25D25E25G25	3	應數系 Department of Applied Mathematics	
數據分析與機器學習應用	Data Analysis and Applied Machine Learning	U	A	S	3	C25D25E25G25	3	應數系 Department of Applied Mathematics	

承辦人簽章Signature of Responsible Person：

規劃單位主管簽章 Head of Planning Division：

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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 Course Division	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									
深度強化學習實作	Applied deep reinforcement learning	U	A	S	3	C25D25E25G25	3	應數系 Department of Applied Mathematics	
巨量資料分析	Big Data Analysis	U	A	S	3	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
微積分專業英文	English for Specific Academic Purposes (ESAP): Calculus	U	A	S	1	A50H50	1	應數系 Department of Applied Mathematics	
資料庫系統設計	Database System	U	A	S	3	E100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
電腦網路	Computer Network	U	A	S	3	E100	3	應數系 Department of Applied Mathematics	
線性代數(三)	Linear Algebra (III)	U	A	S	3	A20B80	2	應數系 Department of Applied Mathematics	
數據應用實務	Data Application Practices	U	A	S	3	C10D20E20G30H20	進階課程 advanced courses	應數系 Department of Applied Mathematics	
離散數學專題(一)	Special Topics in Discrete Mathematics (I)	U	A	S	3	A40B60	進階課程 advanced courses	應數系 Department of Applied Mathematics	
科技產業校外實習	Internship in Technology Industry	U	B	S	3	B20C20E20F40	進階課程 advanced courses	應數系 Department of Applied Mathematics	
專題研究	Special Topics Research	U	C	S	3	B20C20E20F40	4	應數系 Department of Applied Mathematics	
醫療數據應用實務	Medical Data and Clinical Appliances	U	A	S	3	C40E40G20	3	應數系 Department of Applied Mathematics	
醫療影像實務專題	Medical Imaging in Practice	U	C	S	3	C40E40G20	進階課程 advanced courses	應數系 Department of Applied Mathematics	

※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 Responsible Person：

規劃單位主管簽章 Head of Planning Division：

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)

■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program

□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program

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 Course Division	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									
資料庫系統設計（一）	Database System(I)	U	A	S	1	E100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
資料庫系統設計（二）	Database System (II)	U	A	S	1	E100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
資料庫系統設計（三）	Database System(III)	U	A	S	1	E100	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據結構化程式設計（一）	Big Data Structured Programming (I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據結構化程式設計（二）	Big Data Structured Programming (II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據結構化程式設計（三）	Big Data Structured Programming (III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧應用在教育數據（一）	Fundamentals for AI Applications in Educational Data (I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧應用在教育數據 （二）	Fundamentals for AI Applications in Educational Data (II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧應用在教育數據（三）	Fundamentals for AI Applications in Educational Data (III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧在適性化學習應用 （一）	Artificial Intelligence in Adaptive Learning(I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧在適性化學習應用（二）	Artificial Intelligence in Adaptive Learning(II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
人工智慧在適性化學習應用（三）	Artificial Intelligence in Adaptive Learning(III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據科學在教育數據分析理論與應用（一）	Theory and Application of Data Science for Educational Data(I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據科學在教育數據分析理論與應用（二）	Theory and Application of Data Science for Educational Data(II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據科學在教育數據分析理論與應用（三）	Theory and Application of Data Science for Educational Data(III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據分析套裝軟體（一）	Big Data Analysis Software Package (I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據分析套裝軟體 （二）	Big Data Analysis Software Package (II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
大數據分析套裝軟體（三）	Big Data Analysis Software Package (III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據應用實務（一）	Data Application Practices(I)	U	A	S	1	C10D20E20G30H20	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據應用實務（二）	Data Application Practices(II)	U	A	S	1	C10D20E20G30H20	進階課程 advanced courses	應數系 Department of Applied Mathematics	
數據應用實務（三）	Data Application Practices(III)	U	A	S	1	C10D20E20G30H20	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據專題（一）	Special Course for Big Data on Education(I)	U	C	S	1	A50H50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據專題（二）	Special Course for Big Data on Education(II)	U	C	S	1	A50H50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據專題（三）	Special Course for Big Data on Education(III)	U	C	S	1	A50H50	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據在教育之應用(一)	Educational Big Data Applications in Education(I)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據在教育之應用(二)	Educational Big Data Applications in Education(II)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	
教育大數據在教育之應用(三)	Educational Big Data Applications in Education(III)	U	A	S	1	C25D25E25G25	進階課程 advanced courses	應數系 Department of Applied Mathematics	

承辦人簽章Signature of Responsible Person：

規劃單位主管簽章 Head of Planning Division：

■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program

□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program

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 Course Division	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4				
選修課程 Elective Courses									

※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 Responsible Person：

規劃單位主管簽章 Head of Planning Division：

應用數學系應用數學組Department of Applied Mathematics(Applied Mathematics Division)
■學士班 Bachelor's Program □碩士班 Master's Program □博士班 Doctoral Program
□碩專班 Master's Degree Program □國際專班 International Program □進修學士班 Bachelor Part-Time Program
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(含百分比) Corresponding Education Goal Number (including percentage)	開課單位 Course Offering Unit	備註 Remarks
		1	2	3	4			
微積分銜接課程	Micro-course on precalculus	U	A	6	選 elective	A100	應數系 Department of Applied Mathematics	
科學計算編程實戰	Practical programming for Scientific Computing	U	A	6	選 elective	A100	應數系 Department of Applied Mathematics	
計算軟體於微積分的應用	Applications of Computational Software in Calculus	U	A	6	選 elective	A100	應數系 Department of Applied Mathematics	
數值偏微分方程的編程實戰	Practical computer programming for Numerical Partial Differential Equations	U	A	6	選 elective	A100	應數系 Department of Applied Mathematics	

※附註：專業領域微課程規劃要點填表說明 Note: Instructions for completing this form are provided below.

　　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-講演課、B-實習課（請擇一表示）。2: A-Lecture course, B-Internship (choose one).

　　3：授課時數（6小時）。Class duration (6 hours).

　　4：必/選修別。Required/elective.

※本表單編號 F3-41專業領域微課程規劃表，可由課務組表格下載/課程規劃用相關表格，
　或網址：/https://www.oaa.nchu.edu.tw/zh-tw/course-form/download-list.86直接下載用。

　Click here to access and download this form (F3-41).

※依本校「專業領域微課程實施要點」第一點及第二點，日間學制各學院、系、所、學位學程、室(中心)等教學單位，得依其教學特色或專業，每學期以每門課6小時課程時數，設計微課程內容，供學生組合式選擇學習，激發學生探索學習動機，培育跨領域知能。由教學單位提出微課程規劃表，經各級課程委員會審議通過後實施，於每學期18週內彈性安排上課。　According to Articles 1 and 2 of the University's *Micro-Courses in Professional Fields Implementation Regulations*, academic units within the full-time program system—such as colleges, departments, graduate institutes, degree programs, and centers—may, according to the characteristic of their teaching style or profession, design micro-courses with a course duration of 6 hours per course each semester. These micro-courses are intended for students to learn in a theme-oriented style, to stimulate their motivation, and to cultivate cross-disciplinary knowledge and skills. The academic units must submit a micro-course plan, which will be implemented upon approval by the respective curriculum committees at various levels. Classes will be flexibly arranged within the 18 weeks of each semester.

承辦人簽章Signature of Responsible Person：
規劃單位主管簽章 Head of Planning Division：

　　　　　　　　　　　　　　　　　　　　　　　　　Date：114.08.11