系所課程地圖 Department Curriculum Map

系所概要 Department

系所名稱 Department Name	統計學研究所Graduate Institute of Statistics
班別 Division	碩士班Master

教育目標 Education Goals

編號 Number	項目內容 Content
1	引導學生學習不同領域所提供之數據其背後之科學意涵，架構統計分析模型與計算方法。
1	Students are guided to learn the scientific meaning behind the data provided by different fields, and to structure statistical analysis models and computational methods.
2	具備初步之理論證明能力，能撰寫程式語言以進行模擬及實務分析。
2	Ability to write programming language for simulation and practical analysis.
3	成為統計建模與數據解讀之專才。
3	Become an expert in statistical modeling and data interpretation.

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	統計思維與邏輯推理	123
A	Statistical Thinking and Logic	123
B	資料分析、模型建構與軟體應用	123
B	Data Analysis, Statistical Modeling and Software Application	123
C	統計計算與模擬研究	123
C	Statistical Computing and Simulation Study	123
D	專業知識與外文文獻研討	123
D	Professional Knowledge and Literature Review	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 Responsible Person：

規劃單位主管簽章 Head of Planning Division：

統計學研究所 Graduate Institute of Statistics

□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				
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									
碩士論文	Thesis	M	C	Y	6	A25B25C25D25	2	統計所 Graduate Institute of Statistics	
專題演講（一）	Seminar(I)	M	C	Y	0	A40B30D30	1	統計所 Graduate Institute of Statistics	

※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：

Date：114.01.07

統計學研究所 Graduate Institute of Statistics
□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

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		1	2	3	4				
選修課程 Elective Courses									
專題演講（二）	Seminar(Ⅱ)	M	C	Y	0	A40B30D30	2	統計所 Graduate Institute of Statistics	
專題討論	Seminar on Selected Topics	M	C	Y	2	B40C30D30	1	統計所 Graduate Institute of Statistics	
專題研究	Special Topics	M	C	Y	4	B40C30D30	1	統計所 Graduate Institute of Statistics	
抽樣理論	Sampling Theory	M	A	S	3	A50D50	1	統計所 Graduate Institute of Statistics	
迴歸分析	Regression Analysis	M	A	S	3	A40B30C30	1	統計所 Graduate Institute of Statistics	
統計軟體與計算	Statistical Software and Computing	M	A	S	3	A50C50	1	統計所 Graduate Institute of Statistics	
統計專題（一）	Special Topics in Statistics(Ⅰ)	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
統計專題（二）	Special Topics in Statistics(Ⅱ)	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
統計理論（一）	Statistical Theory（Ⅰ）	M	A	S	3	A50D50	1	統計所 Graduate Institute of Statistics	
統計理論（二）	Statistical Theory（Ⅱ）	M	A	S	3	A50D50	1	統計所 Graduate Institute of Statistics	
實驗設計	Experimental Design	M	A	S	3	A50D50	1	統計所 Graduate Institute of Statistics	
無母數統計	Nonparametric Statistics	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
存活資料分析	Analysis of Survival Data	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
應用機率	Applied Probability	M	A	S	3	A50D50	1	統計所 Graduate Institute of Statistics	
可靠度分析	Reliability Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
應用多變量資料分析	Applied Multivariate Data Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
函數型資料分析	Functional Data Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計圖形辨認（一）	Statistical Pattern Recognition（Ⅰ）	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
統計圖形辨認（二）	Statistical Pattern Recognition（Ⅱ）	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
貝氏資料分析	Bayesian Data Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
財務時間序列分析	Financial Time Series Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
長期資料分析	Longitudinal Data Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計學習與資料探勘	Statistical Learning and Data Mining	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
統計諮詢	Statistical Consulting	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
財務統計	Financial Statistics	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	

承辦人簽章 Signature of Responsible Person：

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課程規畫表 Curriculum Plan

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選修課程 Elective Courses									
資料分析	Data Analysis	M	A	S	3	B40C30D30	1	統計所 Graduate Institute of Statistics	
類別資料分析	Categorical Data Analysis	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
廣義線性模式	Generalized Linear Models	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計品質管制	Statistical Quality Control	M	A	S	3	A40B30D30	1	統計所 Graduate Institute of Statistics	
應用空間統計學	Applied Spatial Statistics	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
巨量資料分析	Big Data Analysis	M	A	S	3	A30B50D20	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
遺傳統計	Genetic Statistics	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
生物資訊學之統計方法	Statistical Methods in Bioinformatics	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計文獻研討（一）	Review of Literature in Statistics（Ⅰ）	M	C	S	1	A25B25C25D25	2	統計所 Graduate Institute of Statistics	
統計文獻研討（二）	Review of Literature in Statistics（Ⅱ）	M	C	S	1	A25B25C25D25	2	統計所 Graduate Institute of Statistics	
隨機過程	Stochastic Processes	M	A	S	3	A30B40C30	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
大數據分析套裝軟體（一）	Big Data Analysis Software Package（I）	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
大數據分析套裝軟體 （二）	Big Data Analysis Software Package（II）	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
大數據分析套裝軟體（三）	Big Data Analysis Software Package（III）	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
數據應用實務	Data Application Practices	M	A	S	3	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
數據應用實務（一）	Data Application Practices(I)	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
數據應用實務（二）	Data Application Practices(II)	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
數據應用實務（三）	Data Application Practices(III)	M	A	S	1	A25B25C25D25	進階課程 advanced courses	統計所 Graduate Institute of Statistics	
遺失資料統計方法	Statistical methods with missing data	M	A	S	3	B50C50	1	統計所 Graduate Institute of Statistics	
統計數據科學與強化學習	Statistical Data Science and Reinforcement Learning	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計數據科學與深度學習	Statistical Data Science and Deep Learning	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	
統計數據科學與機器學習	Statistical Data Science and Machine Learning	M	A	S	3	A25B25C25D25	1	統計所 Graduate Institute of Statistics	

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承辦人簽章 Signature of Responsible Person：

規劃單位主管簽章 Head of Planning Division：