## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2022 Page 1 of 6

Course					1st y	year			2nd	year			3rd	year			4th y	year	
	Course	Credits	Hours	Fa	all	Spr	ing	Fa	all	Spi	ing	Fall		Spring		Fall		Spi	ring
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
	Chinese Literature:	_	_																
	Appreciation and Creative	4	4	2		2													
	Practical English 1-2	0	4	1	1	1	1												
	Practical English 3-4	0	4					1	1	1	1								
Core Required	English for Business Communication 1	2	3									2	1						
	English for Business Communication 2	2	3											2	1				
	Practical English for Professionals 1	2	3													2	1		
Courses	Practical English for Professionals 2	2	3															2	1
	Introduction to Artificial Intelligence	2	3	2	1														
	Programming Design	2	3			2	1												
	General Education	12	12																
	Physical Education(1)-(6)	0	12	2		2		2		2		2		2					
	Subtotal	28	54																
	Introduction to Information	3	3	3															
	Programming Language	3	5			3	2												
College Required Courses	Introduction to Finance and Financial Ethics	2	2			2													
	Introduction to Financial Technology	2	2	_				2											
	Subtotal	10	12																

Course					1st	year			2nd	year		3rd year					4th	year		
		Course	Credits	Hours	F	all	Spi	ring	F	all	Sp	ring	F	all	Spr	ing	F	all	Spi	ring
					class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
		Statistics(I · II)	6	8	3	1	3	1												
		Calculus(I · II)	6	8	3	1	3	1												
		Economics	3	4	3	1														
		Accounting	3	4					3	1										
		Sample survey	3	3					3											
		Linear Algebra	3	4					3	1										
		Applied Programming Design	3	5					3	2										
		Statistical Databases	3	3							3									
Profess Require		Applied Regression Analysis	3	3							3									
Course		Experimental Design	3	3									3							
		Application design	3	3									3							
		Applied Categorical Data	3	3											3					
		Data Mining	3	3											3					
		Special Topics in Statistical Information	4	4											2		2			
		Financial science and technology work(I \cdot II)	4	4									2		2					
		Subtotal	53	81																
	ed ics	Statistical Computer Softwares3	3	4									3	1						
sory	Applied Statistics	Statistical method application	3	4									3	1						
lndmo		Subtotal	6																	
Group compulsory	ta nent	Internet database design	3	3									3							
Ğ	Big data management	Exploratory data analysis and visualization	3	3											3					
	 	Subtotal	6																	
	culty oulsory	Subtotal	59																	

Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2022 Page 3 of 6 Notes:

Course				19			2n		3rd year				4th						
		Credits	Hours		all	Spri		Fa		Spr		Fa		Spring		Fall		Spri	
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
	Theory of Interest	3	3					3											
	Marketing Survey	3	3					3											
	Market research cases	3	3							3									
	Quality Control( I 、 II )	6	6					3		3									
	Nonparametric Statistics	3	3							3									
	Statistical calculation and drawing	3	3					3											
S	Application probability theory	3	3							3									
urse	Statistical applied mathematics	3	3							3									
ည	E-commerce Web Analytics	3	3							3									
Professional Elective Courses	Financial data analysis and program	3	3									3							
	Financial Information System	3	3									3							
ıal I	Workplace English	3	3									3							
sion	Danger theory	3	3									3							
ofes	Actuarial Mathematics( I \ \ \ \ \ \ \ \ \ \ \ \	6	6									3		3					
Pro	Reliability Methods	3	3									3							
	Linear Programming	3	3									3							
	Advanced Statistics Suite Software	3	3									3							
	Operations Research	3	3											3					
	Quality Engineering	3	3											3					
	Biometric method	3	3											3					
	Epidemiological	3	3											3					
	Health data analysis	3	3											3					

## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2022 Page 4 of 6

				1s	t year			2n	d year	r		3rc	d year			4th year				
		Credits	Hours	F	all	Spri	ing	Fa	11	Spi	ring	Fall		Spring		Fall		Spi	ring	
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
	Mathematical Statistics	3	3											3						
	Application simulation method	3	3											3						
	Time Series Analysis	3	3													3				
S	Marketing management	3	3													3				
ırse	Spatial statistics	3	3													3				
Courses	Curricular Practical Training	3	3													3				
	Advanced chatbot implementation	3	3													3				
lectiv	Machine Learning Practice	3	3													3				
onal E	Digital Marketing Project	3	3															3		
Professional Elective	Application decision method	3	3															3		
Pro	Statistical analysis of	3	3															3		
	Survival analysis	3	3							-								3		

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Wing Chain University Department			л Аррис	1	t year		iation		d year		110 101		d year		111 202	4th year					
	Course	Credits	Hours		all	Spr	ing		all	Spr	ing	Fa	_	Spri	ing		all		ring		
			110 0115	class	lab		lab	class	lab	class				class	lab	class	lab	class	lab		
	National defense education	0	4	2	140	2	140	Class	140	Class	140	Class	140	Class	140	Class	140	Class			
	National defense education		4					2		2											
	Japanese (I & II)	4	6					2	1	2	1										
	Insurance	3	3					3											-		
	Microeconomics	3	3					3													
	Macroeconomics	3	3							3									-		
	Introduction to the Civil	3	3					3													
	Business Law	3	3							3											
	Business Management	3	3					3													
	Money and Banking	3	3									3									
	Practice in International	3	3									3									
	Public Finance	3	3									3									
	Financial Management	3	3													3					
	Investment	3	3															3			
	Physical education	4	4													2		2			
	Basic math	3	3					3													
	Introduction to Mathematic	3	3					3													
	History of mathematics	3	3					3													
	Data analysis	3	3							3											
	Advanced Calculus ( I II )	8	8					4		4											
	Higher Linear Algebra	3	3									3									
	Geometry ( I & II )	6	6									3		3							
	Albebra ( I & II )	6	6									3		3							
	Topology	3	3									3									
	Subtotal Required	97																			
	Course																				
Total	al Credits																				
	Elective Course Credits	31																			
	Grand Total	128																			

- 1. In accordance with MCU General Provisions for Study, all undergraduate students must pass the requirements for Service-Learning, English Proficiency, Information Technology Proficiency, Chinese Proficiency, Sports Ability, and Basic Professional Skills in order to graduate.
- 2. Students are required to take at least 12 credit hours of General Education courses. There are three disciplines within General Education Humanities, Social Science and Natural Science. The courses are categorized into "Core Courses" and "Extended Courses" under each discipline. To meet the graduation requirements, students are required to take at least one 2-credit-hour course in each category of each of the disciplines.
- 3. Credits for education and general education are not included in the credits.
- 4. The credits of interdisciplinary focused course program are not included in course structure diagram that can be regarded as the other department credits.
- 5. Group compulsory censorship can be recognized as another group of professional elective credits.
- 6. Elective courses in this mandatory elective list can be traced back to students enrolled before the 110 academic year.