## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2021 Page 1 of 6

					1st y	/ear			2nd	year	year		3rd	year		4th year			
	Course	Credits	Hours	Fa	all	Spi	ring	Fa	all	Spring		Fall		Spring		F	all	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								
	English for Business Communication 1	2	3									2	1						
	English for Business Communication 2	2	3											2	1				
Core Required Courses	Practical English for Professionals 1	2	3													2	1		
Courses	Practical English for Professionals 2	2	3															2	1
	Applied Information Technology : Office Software	2	3	2	1														
	Dynamic web programming	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	4			3	1												
College Required	Introduction to Finance and Financial Ethics	2	2			2													
Courses	Introduction to Financial Technology	2	2					2											
	Subtotal	10	11																

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						1st	year			2nd	year			3rd	year			4th y	/ear	
		Course	Credits	Hours	Fa	all	Spr	ring	F	all	Sp	ring	Fa	all	Spi	ring	Fa	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	4							3	1								
		Statistical Databases	3	3							3									
Profes Requir		Applied Regression Analysis	3	3									3							
Courses		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 \ II)	4	4									2		2					
		Subtotal	53	80																
	d cs	Statistical Computer Softwares3	3	4									3	1						
sory	Applied Statistics	Statistical method application	3	4									3	1						
mpuls	S ~	Subtotal	6																	
Group compulsory	lata ement	Internet database design	3	3									3							
Gre	Big data management	Exploratory data analysis and visualization	3	3											3					
	] ma	Subtotal	6																	
Fa com	culty pulsory	Subtotal	59																	

## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2021 Page 3 of 6 Notes:

				19	st year			2r	nd yea	r		3rd year				4tł			
	Course	Credits	Hours	F	all	Spr	ing	Fa	ll	Sp	ring	Fall		Spring		Fa	ll	Spr	ring
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
	Theory of Interest	3	3					3											
	Danger theory	3	3									3							
	Actuarial Mathematics( $I \land II$ )	6	6									3		3					
	Marketing Survey	3	3					3											
ş	Market research cases	3	3							3									
urse	Time Series Analysis	3	3													3			
ive Courses	Marketing management	3	3													3			
	Marketing research	3	3															3	
Elect	Application decision method	3	3															3	
ional I	Quality Control(I 、 II)	6	6					3		3								3	
Professional Elective	Reliability Methods	3	3									3							
P	Linear Programming	3	3									3							
	Operations Research	3	3											3					
	Quality Engineering	3	3											3					
	Nonparametric Statistics	3	3							3									
	Biometric method	3	3											3					
	Epidemiological	3	3											3					

## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2021 Page 4 of 6

	1		Hours	1s	t year			2n	d year	ſ		3rc	d year			4t			
	Course	Credits		Fa	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
	Statistical analysis of	3	3															3	
	Survival analysis	3	3															3	
	Health data analysis	3	3											3					
	Spatial statistics	3	3													3			
	Advanced Statistics Suite Software	3	3									3							
	Application simulation method	3	3											3					
	Statistical calculation and drawing	3	3					3											
ective Co	Application probability theory	3	3							3									
	Statistical applied mathematics	3	3							3									
Ele	E-commerce implementation	3	3							3									
nal	Advanced mathematical statistics	3	3											3					
ofessio	Financial data analysis and program trading	3	3									3							
	Financial Information System	3	3									3							
	Workplace English	3	3									3							
	Curricular Practical Training	3	3													3			
	Advanced chatbot implementation	3	3													3			

		Ming Chuan University De	partment o	of Applie	d Statis	tics and	d Inform	nation	Science	e Cour	se Outli	ne foi				in 202	21 Page	5 of 6		
						st year				id year				d year				n year		
		Course	Credits	Hours	F	all	Spri		Fa	all	Spri	ng	Fa	.11	Spring		Fa	.11	Spr	ring
					class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
		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											
ses	s	Money and Banking	3	3									3							
Professional Elective Courses	lse	Practice in International	3	3									3							
Ŭ	no	Public Finance	3	3									3							
ive	e O	Financial Management	3	3													3			
ect	General Elective Courses	Investment	3	3															3	
E	llec	National defense education	0	4	2		2													
nal	ΠE	National defense education	0	4					2		2									
sio	ler?	Physical education	4	4													2		2	
fes	jen	Basic math	3	3					3											
Prc	$\cup$	Introduction to Mathematic	3	3					3											
		History of mathematics	3	3					3											
		Data analysis	3	3							3									
		Higher Linear Algebra	3	3									3							
		Advanced Calculus (I II)	8	8					4		4									
		Geometry (I & II)	6	6									3		3					
		Albebra (I & II)	6	6									3		3					
		Topology	3	3									3							
		Subtotal Required	97																	
		Course																		
T	otal	Credits																		
		Elective Course Credits	31																	
		Grand Total	128																	

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- 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.
- 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.

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- 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.