## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2023 Page 1 of 6

					1st	year			2nd	year			3rd	year		4th year			
CourseChinese Literature :Appreciation and CreativeWritingPractical English 1-2Practical English 3-4English for BusinessCommunication 1English for BusinessCore RequiredCoursesPractical English forProfessionals 1Practical English forProfessionals 2	Credits	Hours	Fa	all	Spi	ring	Fa	all	Sp	ring	Fa	all	Spring		Fall		Sp	ring	
				class	lab	class		class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
	Appreciation and Creative	4	4	2		2													
		0	4	1	1	1	1												
		0	4	-	-	-	-	1	1	1	1								
	English for Business	2	3									2	1						
		2	3											2	1				
	Practical English for Professionals 1	2	3													2	1		
		2	3															2	1
	Introduction to Artificial Intelligence	2	3	2	1														
	Programming Design	2	3			2	1												
	General Education	12	12																
	Physical Education(I)-(IV)	0	8	2		2		2		2		2		2					
	Subtotal	28	54																<u> </u>
	Introduction to Information Science	3	3	3															
Callaga	Programming Language	3	5			3	2												
College Required Courses	Introduction to Finance and Financial Ethics	2	2			2													
Courses	Introduction to Financial Technology	2	2					2											
	Subtotal	10	12																

## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2023 Page 2 of 6

						1st	year			2nd	year			3rd	year			4th y	vear	
		Course	Credits	Hours	Fa	all	Spr	ring	F	all	Sp	ring	Fa	all	Spr	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										
		Advanced Programming	3	5					3	2										
		Statistical Databases	3	3							3									
Profess	sional	Applied Regression Analysis	3	3							3									
Requir	ed	Experimental Design	3	3									3							
Course	S	Application design	3	3									3							
		Applied Categorical Data Analysis	3	3											3					
		Data Mining	3	3											3					
		Special Topics in Statistical Information	4	4											2		2			
		Financial science and technology work(I  vid II)	4	4									2		2					
		Subtotal	53	81																
	sd	Statistical Computer Softwares3		4									3	1						
sory	Applied Statistics	Statistical method application	3	4									3	1						
oup compulsory	~ S	Subtotal	6																	
onp cc	ta nent	Internet database design	3	3									3							
Gro	Big data management	Exploratory data analysis and visualization	3	3											3					
	I ma	Subtotal	6																	
	culty oulsory	Subtotal	59																	

## Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2023 Page 3 of 6

					st year			2n	d yea			3rc	l year			4th	n year	year		
	Course		Hours	Fa	all	Spri		Fa	11	Spi	ring	Fa	.11	Spr	ing	Fa	.11	Spr	ing	
				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												
	Quality Control( I 、 II )	6	6					3		3										
	Marketing																			
	Nonparametric Statistics	3	3							3										
	Application probability theory	3	3							3										
es	Statistical applied mathematics	3	3							3										
Courses	E-commerce Web Analytics	3	3							3										
e Co	Dynamic web programming	3	3							3										
ctive	Financial data analysis and program	3	3									3								
Elec	Financial Information System	3	3									3								
Professional Elective	Workplace English	3	3									3								
ssio	Danger theory	3	3									3								
ofe	Actuarial Mathematics(I   II)	6	6									3		3						
$\mathbf{Pr}$	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 2023 Page 4 of 6

			1s	t year			2n	d year	r		3rc	d year			4t			
Course	Credits	Hours	Fa		Spri		Fa			ring	Fa		Spr		Fa			ring
			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
Data simulation analysis	3	3											3					
Application simulation method	3	3											3					
creative visual images	3	3											3					
Data dynamic report design	3	3											3					
Time Series Analysis	3	3													3			
Marketing management	3	3													3			
Spatial statistics	3	3													3			
Curricular Practical Training	3	3													3			
Advanced chatbot implementation	3	3													3			
Machine Learning Practice	3	3													3			
Digital Marketing Project	3	3															3	
Application decision method	3	3															3	
Statistical analysis of	3	3															3	
Survival analysis	3	3															3	
Smart data analysis practice	3	3											3					
social media marketing	1	1							1									
Marketing data analysis	1	1							1									
E-commerce market environment analysis	1	1							1									
E-commerce logistics and payment	1	1							1									
AI prediction model	1	1									1							
Questionnaire structure model	1	1									1							

				1s	st year			2n	d year			3r	d year			4t	h year		
	Course	Credits	Hours	Fa		Spri	ng	Fa		Spr	ing	Fall		Spring			all		ing
				class	lab	class		class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
	National defense education	0	4	2		2													
	National defense education	0	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					
	- op 01085	3	3									3							
<b>T</b> - 4 - 1	Subtotal Required Course Credits	97																	
Total	Elective Course Credits	31																	
	Grand Total	128																	

Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2023 Page 6 of 6

- 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.
- 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.