	Course	Credits	Hours	1st year Fall		Spring		2nd year Fall		Spring		3rd year Fall		Spring		4th year Fall		Spring	
				class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
Core Required Courses	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				
	Practical English for Professionals 1	2	3													2	1		
	Practical English for Professionals 2	2	3															2	1
	Applied Information Technology：Office Software	2	3	2	1														
	Applied Information Technology：Data Processing	2	3			2	1												
	General Education	12	12																
	Physical Education(1)-(6)	0	12	2		2		2		2		2		2					
	Subtotal	28	54																
College Required Courses	Introduction to Information	3	3	3															
	Programming Language	3	3			3													
	Introduction to Finance and Financial Ethics	2	2			2													
	Introduction to Financial Technology	2	2					2											
	Subtotal	10	10																

Course			Credits	Hours	1st year				2nd year				3rd year				4th year			
					Fall		Spring		Fall		Spring		Fall		Spring		Fall		Spring	
					class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
Professional Required Courses		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								
		Statistical Database	3	3							3									
		Applied Regression Analysis	3	3							3									
		Application of multivariate data	3	3									3							
		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	2	2											1		1			
		Financial science and technology work(I、II)	4	4									2		2					
		Industrial Practice	2	2													2			
		Subtotal	53	79	9		6		6		9		8		12		3			
Group compulsory	Applied Statistics	Statistical Computer Softwares3	3	4					3	1										
		Statistical method application	3	4									3	1						
		Subtotal	6																	
	Big data management	Exploratory data analysis and visualization	3	3					3											
		Internet database design	3	3											3					
		Subtotal	6																	
Faculty compulsory		Subtotal	59																	

Notes:

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 107 academic year.

Course			Credits	Hours	1st year				2nd year				3rd year				4th year			
					Fall		Spring		Fall		Spring		Fall		Spring		Fall		Spring	
					class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab
Professional Elective Courses	Business Statistics Information Group	Theory of Interest	3	3					3											
		Risk Theory	3	3									3							
		Danger theory	3	3									3							
		Actuarial Mathematics(I、II)	6	6									3		3					
		Marketing Survey	3	3											3					
		Time Series Analysis	3	3													3			
		Marketing management	3	3													3			
		Marketing research	3	3															3	
		Application decision method	3	3															3	
	Industrial Statistics Information Group	Introduction to Industrial Statistics	3	3					3											
		Quality Control(I、II)	6	6					3		3									
		Reliability Methods	3	3									3							
		Linear Programming	3	3									3							
		Operations Research	3	3											3					
		Quality Engineering	3	3											3					
		Special Topics in Practices of Industrial Statistics	3	3													3			

Ming Chuan University Department of Applied Statistics and Information Science Course Outline for all students entering in 2018 Page 5 of 6

	Course	Credits	Hours	1st year Fall class	lab	Spring class	lab	2nd year Fall class	lab	Spring class	lab	3rd year Fall class	lab	Spring class	lab	4th year Fall class	lab	Spring class	lab
Biology Statistics Information Group	Nonparametric Statistics	3	3							3										
	Bioinformatics	3	3									3								
	Application of stochastic	3	3									3								
	Biometric method	3	3											3						
	Epidemiological	3	3											3						
	Medical statistics method	3	3													3				
	Pharmaceutical statistical	3	3													3				
	Statistical analysis of	3	3															3		
	Survival analysis	3	3															3		
	Health data analysis	3	3											3						
	Spatial statistics	3	3													3				
Common course	Advanced Statistics Suite	3	3									3								
	Application simulation method	3	3											3						
	Statistical calculation and drawing	3	3					3												
	Application probability theory	3	3							3										
	Statistical applied mathematics	3	3							3										
	E-commerce	3	3							3										
	Advanced mathematical statistics	3	3											3						

The above professional courses should be selected for at least 18 credits.

		Course	Credits	Hours	1st year Fall class	1st year Fall lab	1st year Spring class	1st year Spring lab	2nd year Fall class	2nd year Fall lab	2nd year Spring class	2nd year Spring lab	3rd year Fall class	3rd year Fall lab	3rd year Spring class	3rd year Spring lab	4th year Fall class	4th year Fall lab	4th year Spring class	4th year Spring lab
Professional Elective Courses	General Elective Courses	Japanese (I& II)	4	4					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							
		Special Topics in	3	3											3					
		Special Topics in	3	3													3			
		Financial Management	3	3													3			
		Investment	3	3															3	
		Military Training	0	4	2		2													
		Nursing Education (I& II)	0	4	2		2													
		Military Training II	0	4					2		2									
		Physical Education	4	4													2		2	
		Fundamental Mathematics	3	3					3											
		Introduction to	3	3					3											
		Mathematics History	3	3					3											
		Numerical Analysis	3	3							3									
		Geometry	3	3									3							
		Topology	3	3									3							
Total		Subtotal Required Course Credits	97																	
		Elective Course Credits	31																	
		Grand Total	128																	