National Chung Cheng University Department of Economics Bachelor Program General Requirements

For freshmen enrolled in the fall semester of 2023

2023.03

I. Students enrolled in the Bachelor program	mu	st complete a 1	minimum of 12	8 credit hours, inc	luding	
(1) General Education Courses	28	credit hours	i .			
(2) Professional Required Courses	45	credit hours				
(3) Professional Elective Courses	30	credit hours				
(4) Free Elective Courses	25	credit hours				

Required Course List	First	year	Seco	nd year	Third	d year	Four	th year
(1) General Education: 28 credit hours	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Chinese & English language competency: Chinese language knowledge and its application (4 credits) English language skills (4 credits)	2 2	2 2						

Notes:

- ♦ General education courses offered by the Department of Economics and courses on the list of exclusions are not counted towards the required 28 credit hours.
- ♦ For more information, consult the General Education Center and Economics Department Office.

All undergraduate students must complete a **community service learning course** according to National Chung Cheng University guidelines for service learning curriculum implementation.

(2) Professional Required courses: 45 credit hours

Principles of Economics (I) (II)	3	3					
Calculus (I) (II)	3	3					
Accounting (I)	3						
Introduction to Computers	3						
Microeconomics (I) (II)			3	3			
Macroeconomics (I) (II)			3	3			
Statistics (I) (II)			3	3			
Econometrics (I)					3		
International Trade: Theory and Policy (I)					3		
International Finance: Theory and Policy (I)						3	

(3) Professional Elective courses: 30 credit hours

- Students must take and pass at least one course from Money and Banking \(\cdot \) Public
 Finance and Public Economics.
- All elective courses offered by the Department of Economics are included.
- The following courses are also counted as professional elective courses:

 Linear Algebra (offered by the Department of Mathematics), Linear Algebra (I)(II)

 (offered by the Department of Mathematics), Financial Management (I)(II) (offered by the Department of Finance), Chinese Economic History (offered by the Department of History), Commercial Law, Business Ethics and Accounting (II).

(4) Free Elective courses: 25 credit hours

- Students can take free elective courses from the professional elective courses offered by the Department of Economics and the courses offered by other departments. However, the courses offered by other departments that are closely similar to the Economics required courses and overloaded credit hours from the general education courses are excluded.
- Students can take courses in the Economics graduate program once they have reached the second semester of their third year. Those courses are counted as free elective courses.

II. Department Level Interdisciplinary Program Requirements

1. Mathematical Economics Program

- Students must complete all the courses required by the Economics department.
- Students must take five of the following professional elective courses (each course is 3 credit hours): Linear Algebra (I) or Linear Algebra; Econometrics (II); Advanced Statistics (I); Advanced Statistics (II); Mathematical Economics or (I); Mathematical Economics (II); and Game Theory.
- Students must take two of the following free elective courses (each course is 3 credit hours): Statistics Inference; Linear Algebra (II); Introduction to Operational Research (I); Introduction to Operational Research (II); Advanced Calculus (I); and Advanced Calculus (II).

2. International Political Economics Program

- Students must complete all the courses required by the Economics department.
- Students must take five of the following professional elective courses (each course is 3 credit hours): International Finance: Theory and Policy(I); International Trade: Theory and Policy(I); Public Finance; <a
- Students must take two of the following free elective courses (each course is 3 credit hours):

Political Science (I); Political Science (II); International Relations (I); International Relations (II); and International Political Economy.

- 3. Managerial Economics Program
- Students must complete all the courses required by the Economics department.
- Students must take five of the following professional elective courses (each course is 3 credit hours): Financial Management (I); Financial Management (II); Managerial Economics; Regulatory Economics; Industrial Organization; Production Economics; Commercial Law; and Foreign Direct Investment.
- Students must take two of the following free elective courses offered by the Department of Business Management and the Department of Information Management (each course is 3 credit hours except for specially noted courses): Business Ethics or Seminar on Humanistic and Business Ethics (2 credits); Management or Introduction to Business; Logistics Management; Marketing Management; Manpower Management; Introduction to Information Management System or Introduction to Information Management; Strategic Management; Industry Analysis or Global Supply Chain.

4. Financial Economics Program

- Students must complete all the courses required by the Economics department.
- Students must take five of the following professional elective courses (each course is 3 credit hours): Money and Banking; Financial Management (I); Financial Management (II); International Financial Market; and Commercial Law.
- Students must take two of the following free elective courses offered by the Department of Economics, Department of Finance, and Department of Accounting and Information Technology (each course is 3 credit hours): Financial Theory and Policy; Financial Forecasts; Financial Market and Institutions; International Financial Management or Investments; Securities Analysis or Futures and Options; Tax Accounting; Financial Statement Analysis.
- 5. Data Mining and Economic Analysis Program
- Students must complete all the courses required by the Economics department.
- Students must take four of the following professional elective courses (each course is 3 credit hours): R Language Applications and Analytics; Python Data Mining; Econometrics (II); Empirical Methods and Applications; Data Science.
- Students must take one of the following free elective courses (each course is 3 credit hours): Special Project of Data Science; Business Software Applications; and Application of the Statistical Software.

III. University Level Interdisciplinary Program Requirements

1. Mathematical Economics Program

Required courses (3 courses, 9 credits)	Principles of Economics (I) Principles of Economics (II) Statistics (I); Statistics (II); Econometrics (II)	Students must complete both courses offered by the Economics department. Students must complete one of the listed courses offered by
Elective courses	Economics (2 courses)	the Economics department. Mathematics (3 courses)
(5 courses, 15 credits)	1.Advanced Statistics (I) 2.Advanced Statistics (II) 3.Mathematical Economics (I) 4.Mathematical Economics (II) 5.Game Theory (I) 6.Game Theory (II) 7.Econometrics (II)	1.Inference in Statistics or Statistical Science 2.Linear Algebra or Linear Algebra (I) 3.Linear Algebra (II) 4.Advanced Calculus (I) 5.Advanced Calculus (II) 6.Introduction to Operational Research (I) or Introduction to Linear Programming 7.Introduction to Operational Research (II)

2.International Political Economics Program

Required courses	Principles of Economics (I)	Students must complete both			
(3 courses, 9 credits)	Principles of Economics (II)	courses offered by the			
		Economics department.			
	Microeconomics (I)	Students must complete one of			
	Microeconomics (II)	the listed courses offered by the			
	Macroeconomics (I)	Economics department.			
	Macroeconomics (II)				
Elective courses	Economics (2 courses)	Political Science (3 courses)			
(5 courses, 15 credits)	1. International	1.Political Science (I)			
	Finance :Theory and Policy(I)	2.Political Science (II)			
	2. International Trade :Theory and Policy(I)	3.International Relations (I)			
	3. Public Finance	4.International Relations (II)			
	4.Development Economics	5.International Political			
	5. Public Economics				
	6.Asia-Pacific Economics	Economy			
	7. Economy of Mainland China				

3. Managerial Economics Program

Required courses	Principles of Economics (I)	Students must complete both		
(3 courses, 9 credits)	Principles of Economics (II)	courses offered by the		
		Economics department.		
	Microeconomics (I)	Students must complete one of		
	Microeconomics (II)	the listed courses offered by the		
	Macroeconomics (I)	Economics department.		
	Macroeconomics (II)			
Elective courses	Economics (2 courses)	Management (3 courses)		
(5 courses, 15 credits)	1.Financial Management (I)	1.Management or Introduction		
	2. Financial Management (II)	to Business		
	3. Managerial Economics	2.Strategic Management		
	4.Regulatory Economics	3.Marketing Management		
	5.Industrial Organization	4.Manpower Management		
	6.Production Economics	5.Introduction to Information		
	7.Commercial Law	Management System or		
	8. Foreign Direct Investment	Introduction to Information		
		Management		
		6.Reading in Business News (I)		
		or Reading in Business News		
		(II)		
		7.Global Supply Chain		

4. Financial Economics Program

Required courses (3 courses, 9 credits)	Principles of Economics (I) Principles of Economics (II)	Students must complete both courses offered by the Economics department.
	Statistics (I); Statistics (II); Econometrics (II)	Students must complete one of the listed courses offered by the Economics department.
Elective courses	Economics (2 courses)	Finance (3 courses)
(5 courses, 15 credits)	1.Financial Management (I) 2.Financial Management (II) 3.Money and Banking 4.International Financial Market 5.Commercial Law 6.Econometrics (II)	1.Financial Management Theory and Policy 2.Financial Forecasts 3.Financial Market and Institutions 4.International Financial Management or Investments 5.Securities Analysis or Futures and Options 6.Financial Statement Analysis

Required courses	Principles of Economics (I)	Students must complete both
(3 courses, 9 credits)	Principles of Economics (II)	courses offered by the
		Economics department.
	Statistics (II)	Students must complete one of
	Econometrics (I)	the listed courses offered by the
		Economics department.
Elective courses	Economics (3 courses)	Information (3 courses)
(6 courses, 18 credits)	1. Python Data Mining	1. Financial Computer
	2. Econometrics (II)	Programming
	3. Application of the Statistical	2. Data Structure
	Software	3. Database System
	4. Special Project of Data	4. Programming (I)
	Science	5. Programming Language
	5. Data Science	6. Numerical Analysis
	6. Empirical Methods and	
	Applications	
	7. R Language Applications	
	and Analytics	