

**National Chung Cheng University**  
**Department of Economics**  
**Bachelor Program General Requirements**

**For freshmen enrolled in the fall semester of 2019**

I. Students enrolled in the Bachelor program must complete a minimum of 128 credit hours, including

- (1) **General Education Courses**                    **28 credit hours**
- (2) **Professional Required Courses**            **48 credit hours**
- (3) **Professional Elective Courses**            **30 credit hours**
- (4) **Free Elective Courses**                    **22 credit hours**

Required Course List	First year		Second year		Third year		Fourth year	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
<b>(1) General Education: 28 credit hours</b>								
Chinese & English language competency:								
● Chinese language knowledge and its application (4 credits)	2	2						
● English language skills (4 credits)	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 **department service learning course** and a **community service learning course** according to National Chung Cheng University guidelines for service learning curriculum implementation.

**(2) Professional Required courses: 48 credit hours**

Principles of Economics (I) (II)	3	3						
Accounting (I) (II)	3	3						
Calculus (I) (II)	3	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 and Public Finance.
- 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) (offered by the Department of Mathematics); Linear Algebra (II) (offered by the Department of Mathematics); Financial Management (I) and Financial Management (II) (offered by the Department of Finance); Chinese Economic History (offered by the Department of History); Commercial Law (offered by the Department of Financial and Economic Law); and Business ethics.

### **(4) Free Elective courses: 22 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 (I) or (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): Public Finance; Development Economics; Public Economics; Asia-Pacific Economics; Economy of Mainland China; International Economic Organizations (I); and International

## Economic Organizations (II).

- 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 Management 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 three of the following professional elective courses (each course is 3 credit hours): R Language Applications and Analytics; Python Data Mining; and Econometrics (II).
- 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)	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 (5 courses, 15 credits)	Economics (2 courses)	Mathematics (3 courses)
	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 (3 courses, 9 credits)	Principles of Economics (I) Principles of Economics (II)	Students must complete both courses offered by the Economics department.
	Microeconomics (I) Microeconomics (II) Macroeconomics (I) Macroeconomics (II)	Students must complete one of the listed courses offered by the Economics department.
Elective courses (5 courses, 15 credits)	Economics (2 courses)	Political Science (3 courses)
	1.Public Finance 2.Development Economics 3.Public Economics 4.Asia-Pacific Economics 5.Economy of Mainland China 6.International Economic Organizations (I) 7.International Economic Organizations (II)	1.Political Science (I) 2.Political Science (II) 3.International Relations (I) 4.International Relations (II) 5.International Political Economy

#### 3. Managerial 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.
	Microeconomics (I)	Students must complete one of

	Microeconomics (II) Macroeconomics (I) Macroeconomics (II)	the listed courses offered by the Economics department.
Elective courses (5 courses, 15 credits)	Economics (2 courses)	Management (3 courses)
	1.Financial Management (I) 2.Financial Management (II) 3.Managerial Economics 4.Regulatory Economics 5.Industrial Organization 6.Production Economics 7.Commercial Law 8.Foreign Direct Investment	1.Management or Introduction to Business 2.Strategic Management 3.Marketing Management 4.Manpower Management 5.Introduction to Information Management System or Introduction to Information Management 6.Reading in Business News (I) or Reading in Business News (II) 7.Global Supply Chain
<b>4. Financial Economics Program</b>		
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 (5 courses, 15 credits)	Economics (2 courses)	Finance (3 courses)
	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
<b>5. Data Mining and Economic Analysis Program</b>		
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 (II) Econometrics (I)	Students must complete one of the listed courses offered by the Economics department.
Elective courses	Economics (2 courses)	Information (3 courses)

(5 courses, 15 credits)	<ol style="list-style-type: none"> <li>1. R Language Applications and Analytics</li> <li>2. Python Data Mining</li> <li>3. Business Software Applications</li> <li>4. Application of the Statistical Software</li> <li>5. Special Project of Data Science</li> <li>6. Econometrics (II)</li> </ol>	<ol style="list-style-type: none"> <li>1. Probability Theory</li> <li>2. Data Structure; Database</li> <li>3. System</li> <li>4. Programming (I)</li> <li>5. Programming Language</li> <li>6. Numerical Analysis</li> </ol>
-------------------------	--	---