

COURSE SYLLABUS

FOR FULL-TIME UNDERGRADUATE PROGRAMS

(Issued under Decision No.1380/QĐ-DHKTQĐ on 15/8/2016 by the University President)

1. COURSE NAME: Statistics for Investment and Construction

Code: **TKKD1108**

Number of Credit: 03

2. DEPARTMENT IN CHARGE OF INSTRUCTION:

Business Statistics Department

Office: Room No.401 – Block 7 – National Economics University

Office Hours: 8:00 – 17:00, from Monday to Friday

Office Telephone: 04.38693275

3. PRE-REQUISITE: Theory of Statistics

4. COURSE DESCRIPTION:

Investment and construction are two different activities, but are closely related to each other. Investment is a finance activity to maintain and create new production capacity for fixed assets. Construction is an activity aimed at simple reproduction and expansion of fixed assets. These are two components of the course. The course provides general theoretical issues related to investment and construction activities; the indicators system of investment and construction activities; Statistical analysis methods on investment and construction data. This course helps students to understand and make good use of statistical information on investment and construction activities. It is also an important tool in students work in the future.

5. COURSE OBJECTIVES:

The course equips students knowledge about the quantitative methods, how to collect and use information in management and administration of investment and construction sectors.

6. COURSE CONTENT:

TENTATIVE SCHEDULE

<i>No</i>	<i>Contents</i>	<i>Total hours</i>	<i>In details</i>		<i>Notes</i>
			<i>Theory</i>	<i>Practice, Discussion, Exams</i>	
1	Chapter 1	2	2	0	
2	Chapter 2	5	3	2	
3	Chapter 3	7	3	4	
4	Chapter 4	8	3	5	
5	Chapter 5	3	3	0	
6	Chapter 6	19	6	13	
7	Mid-course test	1		1	
	Total	45	20	25	

CHAPTER 1– RESEARCH OBJECT, TASKS AND METHODS OF STATISTICS FOR INVESTMENT AND CONSTRUCTION

This chapter introduces the basic content of the course including objects, scope, research methodology and the statistical systems of investment and construction sectors in Vietnam; how to collect statistical information about investment and construction under predefined indicator system (including indicator system according to the level and content of investment).

Content:

- 1.1. Objects of Statistics for Investment and Construction.
- 1.2. The establishment and development of Statistics for Investment and Construction.
- 1.3. The role and tasks of Statistics for Investment and Construction.
- 1.4. The Indicator System in Investment and Construction in Vietnam.
- 1.5. The statistical organization of Investment and construction in Vietnam.
- 1.6. The research method of Statistics for Investment and Construction in Vietnam.

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

- Prof. Dr. Phan Cong Nghia – Assoc. Prof. Dr. Bui Duc Trieu, 2012, Textbook: Statistics in Economics, National Economics of University Publishing House.

CHAPTER 2: STATISTICS FOR INVESTMENT ACTIVITIES

This chapter introduces the basic content of investment activities, especially investment activities for development, and distinguishes between scale of investment capital and scale of disbursed investment capital, and statistical methods to analyze the implementation of investment capital.

Content:

2.1. Investment activities and research tasks of statistics

2.1.1. The concept of investment (investment activities)

2.1.2. Features of investment activities for development

2.1.3. Contents of investment activities for development

2.1.4. The roles of investment for development

2.1.5. The research tasks of Statistics for investment

2.2. The investment capital Indicators System

2.2.1. The volume of investment

2.2.2. Investment capital structure

2.2.3. The volume of disbursed investment capital

2.2.3.1. The essence of disbursed investment capital

2.2.3.2. Calculation the volume of disbursed investment capital

2.3. Statistical analysis the implementation of investment capital

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

- Prof. Dr. Phan Cong Nghia – Assoc. Prof. Dr. Bui Duc Trieu, 2012, Textbook: Statistics in Economics, National Economics of University Publishing House.

CHAPTER 3: STATISTICS FOR INVESTMENT RESULTS

Statistics for investment results includes direct results of investment activities (mobilized fixed assets, mobilized production capacity in service) and indirect results by exploiting the results of investment activity in production and create production and business results. Based on the results of the investment, chapter 3

presents the methods of evaluating the use of investment capital through analyzing incomplete construction volume and level of completed works.

Content:

3.1. Mobilized fixed assets and Mobilized production capacity in service.

3.1.1. The concept of Mobilized fixed assets and Mobilized production capacity in service

3.1.2. Indicators representing Mobilized fixed assets and Mobilized production capacity in service

3.1.3. Analysis for Mobilized fixed assets and Mobilized production capacity in service

3.2. Analysis for construction in progress

3.2.1. The indicators of construction in progress

3.2.2. Research on the implementation of the plan of construction in progress

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

CHAPTER 4. STATISTICS FOR INVESTMENT EFFICIENCY

Investment efficiency is an objective economic category of the economy. In perspective of national economy, investment efficiency is reflected in the level of satisfying the needs of economic development, improving living standards and people's spirit. In perspective of each industry, enterprise, investment efficiency is reflected in the level of response of economic, politics and society tasks which have set out when implementing an investment. Chapter 4 presents the content, methods of calculation, evaluating the effectiveness of investment activity including financial efficiency and economic and social efficiency.

Content:

4.1. The concept of investment efficiency and the task of statistics

4.1.1. Concept

4.1.2. Classification of investment efficiency

4.1.3. The task of statistics

4.2. Statistical methods to assess the effectiveness of investment

4.2.1. The general assessment

4.2.2. Specific efficiency assessment

4.2.2.1. Financial efficiency

4.2.2.2. Socio - Economic efficiency.

4.2.3. Statistical methods to assess the effectiveness of the investment project

4.2.3.1. Method of scoring

4.2.3.2. Method of multidimensional average

4.2.3.3. Synthesis effectiveness method on the basis of objectives and resources of the investment project

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

- Assoc. Prof. Dr. Nguyen Bach Nguyet, 2008, Textbook: Planning and evaluation of investment projects, National Economics University Publishing House.

CHAPTER 5: STATISTICS FOR DESIGN AND ESTIMATES IN CONSTRUCTION

Design is an important stage in building activities. Estimation is a significant basis to determine the progress and the investment capital required for the construction. Design - estimates is one of the solutions to improve the effectiveness of construction activities. Therefore, Chapter 5 introduces the basic content of design and estimate in construction, statistical methods to analyze the indicators in design, and methods to build estimate unit price as a basis for calculating total estimate cost in construction.

Content:

5.1. Requirements, principles and the role of design - estimates

5.1.1. Requirements, principles of design - estimates

5.1.2. The role of design – estimates in construction

5.1.3. The task of statistics for design – estimates

5.2. Statistics for design in construction

5.2.1. The content of design

5.2.2. The Indicator System for design-products

5.2.3. The main indicators of the results of the design-organization

5.3. Statistics for estimate price

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

CHAPTER 6. STATISTICS OF CONSTRUCTION ACTIVITIES

Chapter 6 addresses the issues related to manufacturing activities in the construction units including resources for building (labor, capital), the results of production and production costs of the construction organization.

Content:

- 6.1. The overview of statistics for production activities in the construction organization
- 6.2. Statistics for the results of construction activities
 - 6.2.1. The Indicator System for the results of construction activities
 - 6.2.2. Analysis of construction activities
- 6.3. Statistics for labor in the construction organization
 - 6.3.1. Statistics for the use of labor and labor time in the construction organization
 - 6.3.2. Statistics for labor productivity in construction
 - 6.3.3. Statistics for labor income in construction
- 6.4. Statistics for capital goods in construction
 - 6.4.1. Statistics for building materials
 - 6.4.2. Statistics for fixed assets in construction
- 6.5. Statistics for cost and capital in construction organization
 - 6.5.1. Statistics for the capital in construction organization
 - 6.5.2. Statistics for production costs and cost of construction products

Texts and readings for the chapter:

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.
- Prof. Dr. Pham Ngoc Kiem - Assoc. Prof. Dr. Nguyen Cong Nhu, 2004, Textbook: Business Statistics, Statistics Publishing House.

7. REQUIRED TEXTBOOK & COURSE MATERIALS

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.

8. RECOMMENDED TEXTS & OTHER READINGS

- Prof. Dr. Phan Cong Nghia, 2010, Textbook: Statistics in Investment and Construction, National Economics of University Publishing House.
- Prof. Dr. Phan Cong Nghia – Assoc. Prof. Dr. Bui Duc Trieu, 2012, Textbook: Statistics in Economic, National Economics of University Publishing House.
- Prof. Dr. Pham Ngoc Kiem - Assoc. Prof. Dr. Nguyen Cong Nhu, 2004, Textbook: Business Statistics, Statistics Publishing House.
- Assoc. Prof. Dr. Nguyen Bach Nguyet, 2008, Textbook: Planning and evaluation of investment projects, National Economics University Publishing House.

9. ASSESSMENT & GRADING POLICY:

Comply with the current regulations of National Economics University.

- The evaluation of teachers: 10%
- Mid-course test: 30%
- Final test: 60%

(Students are eligible to take the final test if: the evaluation of teachers is at least 5, the minimum of mid-course test score is 3)

Hanoi, 2016

HEAD OF DEPARTMENT

PRESIDENT

(signed)

(signed)

MSc. Do Van Huan

Prof.Dr. Tran Tho Dat