DOCTOR OF PHILOSOPHY PROGRAM IN ECONOMICS (INTERNATIONAL PROGRAM) PROGRAM REVISION 2013

Institution Name: **National Institute of Development Administration**

School: **Graduate School of Development Economics**

Part 1 General Information

1. Name of Program

Name in Thai: หลักสูตรปรัชญาดุษฎีบัณฑิต สาขาวิชาเศรษฐศาสตร์ (หลักสูตรนานาชาติ)

Name in English: Doctor of Philosophy Program in Economics (International Program)

2. Name of Degree

Full Name: ปรัชญาดุษฎีบัณฑิต (เศรษฐศาสตร์)
Doctor of Philosophy (Economics)

Abbreviated Name: ปร.ด. (เศรษฐศาสตร์)
Ph.D. (Econ.)

3. Major Subject

3.1 Development Economics
3.2 International Economics
3.3 Financial Economics
3.4 Environmental Economics
3.5 Public Economics

4. Number of credits in the curriculum

Plan 1 (1.1) Focuses on research, no requirement for courses, a total of 48 credits
Plan 2 (2.1) Research and course requirements, a total of 66 credits
Plan 2 (2.2) Research and course requirements, a total of 90 credits

5. Characteristic of the Program

5.1 Characteristic

Doctorate degree according to the standard of higher education program.

5.2 Medium of Instruction

English

5.3 Admission

This program is intended to recruit Thai and international students. Their degrees need not be in Economics, but a strong background in Mathematics is important.

5.4 Cooperation with other Institutions

The National Institute of Development Administration is the sole provider of this program. We also have academic partnerships with national and international higher educational institutions.

5.5 Award of the Degree

Upon the completion of study requirements, graduates will be awarded the Degree of Doctor of Philosophy (Economics).

6. Conditions of the Program and the Approval of the program

The revised program B.E. 2012 begins in the first semester of the academic year 2013. The Board of Academic Directors agreed to submit the program to the Council of the Institution in the meeting No. 5/2012 on 24 December 2012. The Council approved the program in the meeting No. 1/2013 on 9 January 2013.

7. Readiness in Publishing the Curriculum with Quality and Standards

The first class of successful Ph.D. candidates should begin their completion by the academic year 2013.

8. Graduate Employment Opportunities

Graduates from this program will find employment in a number of Professional careers such as:

8.1 Lecturers in colleges and universities;

8.2 Researchers in research institutes;

8.3 Policy maker in public and private sectors.

9. Name, Surname, Personal Number and Educational Qualification of Program Administrators

Name - Surname	Personal Number	Position	Degree/ Field of study	Educational Institution	Year
Miss Prasopchoke Mongsawad	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	University of Missouri-Columbia (U.S.A.)	2001
Mr.Medhi Krongkaew	xxxxxxxxxxxxx	Professor	Ph.D. (Economics& Pol.Sci)	Michigan State University (U.S.A.)	1976
Mr. Nattapong Thongpakde	xxxxxxxxxxxxx	Professor	Ph.D. (Economics)	Boston University (U.S.A.)	1987

10. Place for Studying

All teaching will be held at the National Institute of Development Administration.

11. External Factors on Program Planning

The rapid economic changes in various regions of the world such as current economic crises in the United States and Europe as well as the forming of ASEAN economic community (AEC) in 2015, bring about many challenges faced by private and public sectors. Increases in public understanding of economic knowledge together with the expansion of the economic knowledge frontier are so crucial for Thailand to meet those challenges. School of Development Economics foresees the need in creating the workforces that are capable to handle those economic challenges and realizes that this is a good time to update the curriculum of The Doctor of Philosophy in Economics (international), founded in 2004 and had been revised twice in 2010 and 2007. This revision of the program will lead it to correspond more to current economic issues, which will help Thailand to go through economic hurdles during this challenging time.

12. Impact from 11 on the Program Development in Relation to the Institution's Obligations

12.1 Program Development

The Doctor of philosophy in Economics (international) is designed for lecturers, researchers and executives in the organization both in the public and private sectors, who need advanced economic knowledge. The revised program aims to equip advanced economic theory and sophisticated quantitative tools to graduates, so that they can apply such knowledge in their organizations.

12.2 The Connection with the Institution's Obligations

According to the the long-term development plan of the National Institute of development administration 2008 – 2022, approved by the Council of the Institute, one strategy (out of 8 strategies) is to maintain academic excellence in teaching, research and public service. To fulfill this goal, a continual revision of the program is necessity in the dynamic environment. Particularly in the field of advanced Economics, it is very crucial for the Institute to update the program to live up to the international academic standard as the World Class University.

13. Relations (if any) with other programs being offered by other graduate schools of the Institution (i.e. courses being opened by other graduate schools or offered by other schools)

13.1 Courses/Subjects in the Curriculum being offered by other Schools/Departments

English as remedial courses under the School of Language and Communication of NIDA

13.2 Courses/Subjects in this Curriculum that are available for Other Curriculums

Other students from other curriculums of the institution can choose to take all courses offered in the curriculum. Taking such courses must conform to the requirements of the curriculums, and must receive an approval from the advisor and the instructor.

13.3 Administration

The Doctor of philosophy in Economics (international) is under the supervision of the Executive Board of the program. The Broad has responsibilities in all of the teaching and the administrative decisions such as the course content, the teaching technique, the class and exam schedules, and the overall standards to meet the requirement of the Office of the Higher Education and Thailand Qualification Framework for Higher Education.

Part 2 Specific Information of the Program

1. Philosophy of the Program

1.1 Philosophy

Doctor of Philosophy Program in Economics aims to produce graduates with the advanced theoretical knowledge and analytical skills to help expanding the economic research frontier as well as making decisions on complex economic policies. Such contributions are the keys to a sustained economic development in Thailand.

1.2 Objectives

1.2.1 To produce highly qualified graduates with skills in research for the academic community.

1.2.2 To produce highly qualified graduates with skills in implementing an economic theory towards the decision-making on economic policies.

1.2.3 To produce knowledgeable and highly qualified workforce that makes a contribution to the economic development in Thailand.

2. Development Plans

Development Plans/Changes	Strategies	Evidence/Indicators
- Developing the program to meet the standards specified by CHE	- Developing the curriculum in line with other international curriculums	- The program documents - Reports of the program evaluation
- Improving the standard of the program in comparison with similar programs in the international level, also tailoring the program to reflect the changes in the economic, political and social situation and to meet the market's needs.	- Increasing the research in the areas of advanced theoretical knowledge as well as the applied political economy.	- Research grant per full – time lecturer - Research projects per year - Satisfaction evaluation from the employer
- Strengthening faculty members' skills in teaching, doing the research and other academic service.	- Supporting research publication in both national and international level - Operating academic conference in both national and international level - Supporting paper presentation of the faculty members in international conference	- Number of research papers published in journal - Number of national and international conferences - Number of faculty member presenting research paper in the international conference

Part 3 Educational System, Operation and Program Structure

1. Educational Management System

1.1 System

An academic year is based on two 15-week semesters.

1.2 Summer Session Studying

Summer session studying about 8 weeks is provisional and credits for courses in this semester can be compared to regular semesters.

1.3 Comparable Credits in the Bi-semester System

None

2. Program Operation

2.1 Teaching Hours

First semester begins August – December
Second semester begins January – May
Summer semester begins June – July

2.2 Qualifications of Applicants

2.2.1 ***Plan 1 (1.1)*** **and** ***Plan 2 (2.1),*** A master's degree or equivalent from an institution accredited by the following: the Commission on Higher Education, the Office of the Civil Service Commission or the standard organizations is require or by approval of the Council of the institute.

2.2.2 ***Plan 2 (2.2)***, A bachelor's degree or equivalent from an institution accredited by the following: the Commission on Higher Education, the Office of the Civil Service Commission or the standard organizations is require or by approval of the Council of the institute and obtain the GPA. not less than 3.25 or with outstanding records by approval of the Program Committees.

2.2.3 Obtaining a TOEFL score of at least 550* or an IELTS score of at least 6.5 or as specified by the doctoral Executive Committee, except for applicants who either come from English speaking nations or who graduated from undergraduate or graduate program which used English as the medium of instruction.

* Internet-based test = 79-80

2.2.4 Consideration for applicants will be made based upon the applicant's scholastic records, statement of purpose and English language proficiency and interview.

2.3 Problems Faced by First Year Students

None

2.4 Strategies to Solve Problems or Students' Limitation in 2.3

None

2.5 Plans for Student Admission and Graduates within 5 Years

Number of the Students	Academic Year				
	2013	**2014**	**2015**	**2016**	**2017**
Number of Admission Plan 1 (1.1)	5	5	5	5	5
Number of Admission Plan 2 (2.1)	15	15	15	15	15
Number of Admission Plan 2 (2.2)	10	10	10	10	10
Total	**30**	**30**	**30**	**30**	**30**
Number of Graduates	**-**	**-**	**-**	**20**	**20**

2.6 Budget

Budget allocation is from the government, the National Institute of Development Administration, and the Graduate School of Development Economics.

2.7 Educational System

- ☑ Classroom
- ☐ Distant study via publications
- ☐ Distant study via the broadcast media
- ☐ Distant study via E-learning
- ☐ Distant study via the internet
- ☐ Others (specify)

2.8 Credit Transfer, Courses and Cross Institution Enrolment (if any)

Credit transfer is subject to the National Institute of Development Administration's regulations on education.

3. Curriculum and Teaching Staff

3.1 Curriculum

3.1.1 Credits

Plan 1 (1.1) Focuses on research, no requirement for courses, a total of 48 credits

Plan 2 (2.1) Research and course requirements, a total of 66 credits

Plan 2 (2.2) Research and course requirements, a total of 90 credits

3.1.2 Program structure

Courses	**Plan 1 (1.1)** Focuses on research, no requirement for courses	**Plan 2 (2.1)** Research and courses requirements	**Plan 2 (2.2)** Research and courses requirements
1. Basic Courses	3 credits (Non credit)	3 credits (Non credit)	12 credits
2. Core Courses	-	18 credits	18 credits
3. Field Courses	-	6 credits	6 credits
4. Elective Courses	-	6 credits	6 credits
5. Dissertation	48 credits	36 credits	48 credits
6. Qualifying Examination	Required	Required	Required
Total	**48 Credits**	**66 Credits**	**90 Credits**

3.1.3 Courses List

a) Plan 1 (1.1)

The formal course requirements for *Plan 1 (1.1)* Focuses on research only. a total of 48 credits.

***Basic Course* (Non credits)**

DE 7000 Mathematics for Economists	3 (3-0-6)

***Dissertation* (48 Credits)**

DE 9900 Dissertation	48 Credits

All candidates for the Ph.D. degree must have an advisor who is a faculty member of the School of Development Economics. The advisor is considered the primary reader of the dissertation. The defense must be open to the academic community of the university and be publicly announced at least one week prior to the occurrence.

Remark: The thesis defense's criterion is accordance with the National Institute of Development Administration academic regulations 2006 and it's revised, and the standard graduate studies criteria 2005.

b) Plan 2 (2.1)

The formal course requirements for *Plan 2 (2.1)* must be met with 66 credits. No credit earned in DE 7000 Mathematics for Economists may be applied toward the Ph.D. degree.

***Basic Course* (Non credits)**

DE 7000 Mathematics for Economists	3 (3-0-6)

This is a required course for all doctoral students in the program. To be exempted from the course, students must petition for the permission from the School Dean.

***Core Courses* (18 Credits)**

DE 8100 Microeconomic Theory	3 (3-0-6)
DE 8200 Advanced Microeconomics	3 (3-0-6)
DE 8300 Macroeconomic Theory	3 (3-0-6)
DE 8400 Advanced Macroeconomics	3 (3-0-6)
DE 8500 Econometrics I	3 (3-0-6)
DE 8600 Econometrics II	3 (3-0-6)

***Field Courses* (6 Credits)**

Students must choose one field courses of specialization from the list below.

1. Development Economics

Required field courses:

DE 9100 Development Economics	3 (3-0-6)
DE 9101 Empirical Issues in Development Economics	3 (3-0-6)

2. International Economics

Required field courses:

DE 9200 International Trade	3 (3-0-6)
DE 9201 International Finance	3 (3-0-6)

3. Financial Economics

Required field courses:

DE 9300 Financial Economics	3 (3-0-6)
DE 9301 Asset Pricing Theory	3 (3-0-6)

4. Environmental Economics

Required field courses:

DE 9400	Environmental Economics	3 (3-0-6)
DE 9401	Environmental Valuation	3 (3-0-6)

5. Public Economics

Required field courses:

DE 9500	Public Economics: Taxation	3 (3-0-6)
DE 9501	Public Economics: Expenditure	3 (3-0-6)

***Elective Courses* (6 Credits)**

Students must choose two Ph.D.-level courses in economics or related to their area of specialization as electives under the guidance of advisor.

DE 9600	Economics of Labor Market	3 (3-0-6)
DE 9601	Wage Determination	3 (3-0-6)
DE 9602	Health Economics	3 (3-0-6)
DE 9603	Game Theory	3 (3-0-6)
DE 9604	Independent Research Paper	3 (0-0-12) – 6 (0-0-24)
DE 9605	Directed Study	3 (3-0-6) – 6 (6-0-12)

***Dissertation* (36 Credits)**

DE 9900	Dissertation	36 Credits

All candidates for the Ph.D. degree must have an advisor who is a faculty member of the School of Development Economics. The advisor is considered the primary reader of the dissertation. The defense must be open to the academic community of the university and be publicly announced at least one week prior to the occurrence.

Remark: The thesis defense's criterion is accordance with the National Institute of Development Administration academic regulations 2006 and it's revised, and the standard graduate studies criteria 2005.

c) Plan 2 (2.2)

The formal course requirements for *Plan 2 (2.2)* must be met with 90 credits.

***Basic Course* (12 Credits)**

DE 6001	Intermediate Microeconomics	3 (3-0-6)
DE 6002	Intermediate Macroeconomics	3 (3-0-6)
DE 6003	Basic Econometrics	3 (3-0-6)
DE 7000	Mathematics for Economists	3 (3-0-6)

***Core Courses* (18 Credits)**

DE 8100	Microeconomic Theory	3 (3-0-6)
DE 8200	Advanced Microeconomics	3 (3-0-6)
DE 8300	Macroeconomic Theory	3 (3-0-6)
DE 8400	Advanced Macroeconomics	3 (3-0-6)
DE 8500	Econometrics I	3 (3-0-6)
DE 8600	Econometrics II	3 (3-0-6)

***Field Courses* (6 Credits)**

Students must choose one field courses of specialization from the list below.

1. Development Economics

Required field courses:

DE 9100	Development Economics	3 (3-0-6)
DE 9101	Empirical Issues in Development Economics	3 (3-0-6)

2. International Economics

Required field courses:

DE 9200	International Trade	3 (3-0-6)
DE 9201	International Finance	3 (3-0-6)

3. Financial Economics

Required field courses:

DE 9300	Financial Economics	3 (3-0-6)
DE 9301	Asset Pricing Theory	3 (3-0-6)

4. Environmental Economics

Required field courses:

DE 9400	Environmental Economics	3 (3-0-6)
DE 9401	Environmental Valuation	3 (3-0-6)

5. Public Economics

Required field courses:

DE 9500	Public Economics: Taxation	3 (3-0-6)
DE 9501	Public Economics: Expenditure	3 (3-0-6)

***Elective Courses* (6 Credits)**

Students must choose two Ph.D.-level courses in economics or related to their area of specialization as electives under the guidance of advisor.

DE 9600	Economics of Labor Market	3 (3-0-6)
DE 9601	Wage Determination	3 (3-0-6)
DE 9602	Health Economics	3 (3-0-6)
DE 9603	Game Theory	3 (3-0-6)
DE 9604	Independent Research Paper	3 (0-0-12) – 6 (0-0-24)
DE 9605	Directed Study	3 (3-0-6) – 6 (6-0-12)

Remark: schedule of elective courses are subject to approval of the school of Development Economics.

***Dissertation* (48 Credits)**

DE 9900	Dissertation	48 Credits

All candidates for the Ph.D. degree must have an advisor who is a faculty member of the School of Development Economics. The advisor is considered the primary reader of the dissertation. The defense must be open to the academic community of the university and be publicly announced at least one week prior to the occurrence.

Remark: The thesis defense's criterion is accordance with the National Institute of Development Administration academic regulations 2006 and it's revised, and the standard graduate studies criteria 2005.

d) Master of Economics

This alternative set of requirements for the Master's Degree must be met with 36 credits if students change their plans or fail to satisfy the Ph.D. requirements.

***Basic Courses* (12 Credits)**

DE 6001 Intermediate Microeconomics	3 (3-0-6)
DE 6002 Intermediate Macroeconomics	3 (3-0-6)
DE 6003 Basic Econometrics	3 (3-0-6)
DE 7000 Mathematics for Economists	3 (3-0-6)

***Core Courses* (9 Credits)**

DE 8100 Microeconomic Theory	3 (3-0-6)
DE 8300 Macroeconomic Theory	3 (3-0-6)
DE 8500 Econometrics I	3 (3-0-6)

***Field Courses* (6 Credits)**

Students must choose one field courses of specialization from the list below.

1. Development Economics

Required field courses:

DE 9100 Development Economics	3 (3-0-6)
DE 9101 Empirical Issues in Development Economics	3 (3-0-6)

2. International Economics

Required field courses:

DE 9200 International Trade	3 (3-0-6)
DE 9201 International Finance	3 (3-0-6)

3. Financial Economics

Required field courses:

DE 9300 Financial Economics	3 (3-0-6)
DE 9301 Asset Pricing Theory	3 (3-0-6)

4. Environmental Economics

Required field courses:

DE 9400 Environmental Economics	3 (3-0-6)
DE 9401 Environmental Valuation	3 (3-0-6)

5. Public Economics

Required field courses:

DE 9500 Public Economics: Taxation	3 (3-0-6)
DE 9501 Public Economics: Expenditure	3 (3-0-6)

***Elective Courses* (6 Credits)**

Students shall choose any course from elective courses under the guidance of advisor to complete the requirement.

DE 8xxx/9xxx Elective Course (#1)	3 (3-0-6)
DE 8xxx/9xxx Elective Course (#2)	3 (3-0-6)

***Independent Studies* (3 Credits)**

DE 8900 Independent Studies	3 (3-0-6)

3.1.4 Study Plan

A typical program of a Ph.D. student consists of the following sequence:

a) Plan 1 (1.1) Dissertation only no requirement for courses

First Summer (8 weeks)

DE 7000	Mathematics for Economists	Non credit

First Year, 1st Semester

DE 9900	Dissertation	6 Credits

First Year, 2nd Semester

DE 9900	Dissertation	6 Credits

Following Semesters

DE 9900	Dissertation	36 Credits

b) Plan 2 (2.1) Dissertation and course requirements

First Summer (8 weeks)

DE 7000	Mathematics for Economists	Non credit

First Year, 1st Semester

DE 8100	Microeconomic Theory	3 Credits
DE 8300	Macroeconomic Theory	3 Credits
DE 8500	Econometrics I	3 Credits

First Year, 2nd Semester

DE 8200	Advanced Microeconomics	3 Credits
DE 8400	Advanced Macroeconomics	3 Credits
DE 8600	Econometrics II	3 Credits

Second Year, 1st Semester

DE 9xxx	Field Course (#1)	3 Credits
DE 9xxx	Elective Course (#1)	3 Credits
DE 9xxx	Elective Course (#2)	3 Credits

Second Year, 2nd Semester

DE 9xxx	Field Course (#2)	3 Credits
DE 9900	Dissertation	6 Credits

Third Year, 1st Semester

DE 9900	Dissertation	12 Credits

Third Year, 2nd Semester

DE 9900	Dissertation	12 Credits

Fourth Year, 1st Semester

DE 9900	Dissertation	6 Credits

c) Plan 2 (2.2) Dissertation and course requirements

First Summer (16 weeks)

DE 6001	Intermediate Microeconomics	3 Credits
DE 6002	Intermediate Macroeconomics	3 Credits
DE 6003	Basic Econometrics	3 Credits
DE 7000	Mathematics for Economists	3 Credits

First Year, 1st Semester

DE 8100	Microeconomic Theory	3 Credits
DE 8300	Macroeconomic Theory	3 Credits
DE 8500	Econometrics I	3 Credits

First Year, 2nd Semester

DE 8200	Advanced Microeconomics	3 Credits
DE 8400	Advanced Macroeconomics	3 Credits
DE 8600	Econometrics II	3 Credits

Second Year, 1st Semester

DE 9xxx	Field Course (#1)	3 Credits
DE 9xxx	Elective Course (#1)	3 Credits
DE 9xxx	Elective Course (#2)	3 Credits

Second Year, 2nd Semester

DE 9xxx	Field Course (#2)	3 Credits
DE 9900	Dissertation	6 Credits

Third Year, 1st Semester

DE 9900	Dissertation	12 Credits

Third Year, 2nd Semester

DE 9900	Dissertation	12 Credits

Fourth Year, 1st Semester

DE 9900	Dissertation	12 Credits

Fourth Year, 2nd Semester

DE 9900	Dissertation	6 Credits

There is an alternative set of requirements that can be used for the Master's Degree if students change their plans or fail to satisfy the Ph.D. requirements:

d) Master of Economics

First Summer

DE 6001	Intermediate Microeconomics	3 Credits
DE 6002	Intermediate Macroeconomics	3 Credits
DE 6003	Basic Econometrics	3 Credits
DE 7000	Mathematics for Economists	3 Credits

First Year, 1st Semester

DE 8100	Microeconomic Theory	3 Credits
DE 8300	Macroeconomic Theory	3 Credits
DE 8500	Econometrics I	3 Credits

First Year, 2nd Semester

DE 9xxx	Field Course (#1)	3 Credits
DE 9xxx	Elective Course (#1)	3 Credits
DE 9xxx	Elective Course (#2)	3 Credits

Second Year, 1st Semester

DE 9xxx	Field Course (#2)	3 Credits
DE 8900	Independent Studies	3 Credits

3.1.5 Course Description

A. Basic Course

Plan 1 (1.1) and Plan 2 (2.1)

DE 7000 Mathematics for Economists **3 (3-0-6)**
(Non Credits)

The course reviews/introduces mathematical concepts and techniques commonly used in economic analysis and the graduate theory courses.

Plan 2 (2.2)

DE 6001 Intermediate Microeconomics **3 (3-0-6)**

The course offers fundamental approaches to explain rational decisions of economic agents. Economic analysis of consumer behavior and demand for goods, production theory and costs, market structure, and price determination mechanism are the core focus. Basic concepts in general equilibrium theory, welfare economics and market failure, and remedies mechanism are topics to be discussed.

DE 6002 Intermediate Macroeconomics **3 (3-0-6)**

Mainstream theoretical model in macroeconomics analysis is introduced. Fundamental theories such as Classical theory, Keynesian theory, Monetarist, Rational expectations and modern macroeconomic theory are explored. Assessing and forecasting economic situation under different circumstances as well as macroeconomic policy determination are included.

DE 6003 Basic Econometrics **3 (3-0-6)**

The study of fundamental and advanced probability theory and probability distribution function in applied statistics. Moreover, the course covers an introduction to random variables, large sample theory, point estimation, interval estimation and hypothesis/hypotheses testing. A simple bivariate and multi-variate linear regression model is also introduced.

DE 7000 Mathematics for Economists **3 (3-0-6)**

The course reviews/introduces mathematical concepts and techniques commonly used in economic analysis and the graduate theory courses.

B. Core Courses

Plan 2 (2.1) and Plan 2 (2.2)

DE 8100 Microeconomic Theory **3 (3-0-6)**

Microeconomic theory with an emphasis on analysis of consumer behavior, theory of firm, decision making under uncertainty, perfect competition, monopoly and monopsony, and imperfect competition. Game theory will also be introduced.

DE 8200 Advanced Microeconomics 3 (3-0-6)
The course is emphasis on the basic topics of classical microeconomic theory including market equilibrium, individual decision making, traditional market failure, and general equilibrium theory.

Prerequisite: DE 8100 Microeconomic Theory

DE 8300 Macroeconomic Theory 3 (3-0-6)
This course aims to introduce the students to the most relevant issues and developments of dynamic modern macroeconomics. Economies are therefore modeled as dynamic equilibrium systems based on inter-temporal decisions. This framework is then used to study social security systems, growth, macroeconomic fluctuations (business cycles), and economic policy.

DE 8400 Advanced Macroeconomics 3 (3-0-6)
Advanced topics in Macroeconomics with emphasis on economic fluctuations. The competitive equilibrium business cycle and deviations from the competitive model are the main focus. Topics include consumption and investment theories, real business cycle theory, and new Keynesian theory.

Prerequisite: DE 8300 Macroeconomic Theory

DE 8500 Econometrics I 3 (3-0-6)
Econometric methods for economic analysis. Topics include the theory and application of the LS and ML estimators of the linear single equation, nonlinear econometric methods, and structural models for cross-sectional and panel data, specification analysis, and model choice issues and analysis of limited dependent variables.

DE 8600 Econometrics II 3 (3-0-6)
The course focuses on advanced and recent topics in econometrics. Topics include time series econometrics, non-parametric estimation, asymptotic theory, unit roots and co-integration, and methods for measurement error.

Prerequisite: DE 8500 Econometrics II

C. Field Courses

Plan 2 (2.1) and Plan 2 (2.2)

1. Development Economics

DE 9100 Development Economics 3 (3-0-6)
This course covers advanced topics of development economics spanning micro-development and macro-development economics. Topics include dual economy, inter-linkage in rural markets, structural transformation,

economic roles of institutions, social welfare, poverty and income distribution, international trade and economic development and computable general equilibrium analysis of development policy scenarios.

DE 9101 Empirical Issues in Development Economics 3 (3-0-6)
A variety of current issues pertaining to economic development will be explored. Students will also be encouraged to apply analytical tools in discussing development issues.

2. International Economics

DE 9200 International Trade 3 (3-0-6)
The theory and evidence concerning causes and consequences of international trade with attention focused on the interplay of economic theory and empirical descriptions of foreign trade and foreign direct investment. Topics include comparative advantage on the imperfectly competitive markets, income distribution and the gains from trade, and the impact of taxes, tariff, and subsidies on international trade.

DE 9201 International Finance 3 (3-0-6)
Analysis of international capital markets, exchange rates, interest and prices. International monetary economics covering topics like exchange rate and balance of payment determination, speculative attacks and target zones, monetary approaches to the adjustment mechanism, portfolio and asset market approaches, monetary integration and policy coordination.

3. Financial Economics

DE 9300 Financial Economics 3 (3-0-6)
A synthesis of finance theory from the perspective of continuous-time analysis. It examines the microeconomic foundations of individual financial behavior, the financial market, and financial intermediation with some emphasis on risk and uncertainty. Topics include portfolio selection theory and investment decision, market signaling, market imperfection, capital pricing models, option pricing, arbitrage pricing, securitization, derivatives, hedge funds and agency theory.

DE 9301 Asset Pricing Theory 3 (3-0-6)
Dynamic models in finance and modern asset-pricing theory are examined: discrete-time models for portfolio choice and security prices, and continuous-time models. Models of the term structure of interest rates and the pricing of derivative claims are also explored.

4. Environmental Economics

DE 9400 Environmental Economics **3 (3-0-6)**

Conceptual, methodological and policy issues associated with environmental protection. It illustrates the use of economic theories to analyze public policy measures designed to preserve and improve environments. Topics include modeling externalities and common property resources, regulation, taxes, and subsidies, tradable permits and environmental risk.

DE 9401 Environmental Valuation **3 (3-0-6)**

Investigating various types of environmental values: use value, non-use value and option value. Methods developed in the course are contingent valuation method, hedonic price model, travel cost methods, averting behavior, replacement cost method, and benefit transfer approach. Empirical issues on the use of environmental values are discussed.

5. Public Economics

DE 9500 Public Economics: Taxation **3 (3-0-6)**

The course starts with the introduction of welfare economics. Then, the focus is on the roles of government and taxation. The fundamentals of public economics are to examine the impact of taxations on resource allocation and distribution in conjunction with the economic efficiency and equity, and, to determine the optimal taxation as to balance government expenditure and stabilize the economic growth. The course also analyzes the effects of fiscal policies on the decisions of economic agents and the economic stability. A priori objective of the course is for students to development their own economic tools as to analyze and evaluate the tax systems.

DE 9501 Public Economics: Expenditure **3 (3-0-6)**

The economic roles of government, the public expenditure theory, and how government policies affect social welfare will be examined. The evaluation of public expenditure with reference to the Thai economy will be discussed.

D. Elective Courses

Plan 2 (2.1) and Plan 2 (2.2)

DE 9600 Economics of Labor Market **3 (3-0-6)**

Theoretical models and current empirical issues in labor economics. Topics include analysis of labor markets; labor supply and allocation of time; behavior of unemployment, vacancies, and wages; endogenous job destruction and job creation; labor turnover and on-the-job search; job matching.

DE 9601 Wage Determination 3 (3-0-6)

Current research in wage determination and the functioning of labor markets. Effects of investments in information and human capital on wage growth and mobility. Topics include female labor supply and wage structure; credit constraints and human capital investment decisions; within-firm wage growth; tradeoff between risk and incentives.

DE 9602 Health Economics 3 (3-0-6)

The course offers an analysis of the economics of health care and health care reform with respect to allocation efficiency and equity. Topics include the economic determinants of health, market for medical care, insurance market, interaction between health and other markets, investment in health sector, and government regulation and public financing in health care.

DE 9603 Game Theory 3 (3-0-6)

The behavior of economic agent and the analysis of optimal decisions being dependent upon other agents' actions. Various models of equilibrium are explored to capture various ways economic agents make their decisions under different games: static games, dynamic games, or games of incomplete information.

DE 9604 Independent Research Paper 3 (0-0-12) – 6 (0-0-24)

Students write a substantial research paper under supervision of a faculty member approved by Dean of School of Development Economics.

DE 9605 Directed Study 3 (3-0-6) – 6 (6-0-12)

Topics not offered as a regular course but are of individual interests to students could be offered as a directed course under guidance of a faculty member.

E. Dissertation

Plan 2 (2.1)

DE 9900 Dissertation 36 Credits

All candidates for the Ph.D. degree must have an advisor who is a faculty member of the School of Development Economics. The advisor is considered the primary reader of the dissertation. The defense must be open to the academic community of the university and be publicly announced at least one week prior to the occurrence.

Remark: The thesis defense's criterion is accordance with the National Institute of Development Administration academic regulations 2006 and it's revised, and the standard graduate studies criteria 2005.

Plan 1 (1.1) and Plan 2 (2.2)

DE 9900 Dissertation 48 Credits

All candidates for the Ph.D. degree must have an advisor who is a faculty member of the School of Development Economics. The advisor is considered the primary reader of the dissertation. The defense must be open to the academic community of the university and be publicly announced at least one week prior to the occurrence.

Remark: The thesis defense's criterion is accordance with the National Institute of Development Administration academic regulations 2006 and it's revised, and the standard graduate studies criteria 2005.

F. Independent Studies

Master of Economics

DE 8900 Independent Studies 3 (3-0-6)

Students develop research proposal and write a substantial research paper (or thesis) related to economic issues. The work shall be done under supervision of a faculty member approved by the Dean of School of Development Economics.

3.2 Name, Surname, Personal Identification Number, Position, Education of Program Faculty

3.2.1 Program's responsible staffs

Name - Surname	Personal Identification Number	Position	Degree / Field of study	Educational Institution	Year
Mr.Nattapong Thongpakde	xxxxxxxxxxxxx	Professor	Ph.D. (Economics)	Boston University (U.S.A.)	1987
Mr.Thiraphong Vikitset	xxxxxxxxxxxxx	Professor	Ph.D. (Economics)	West Virginia University (U.S.A.)	1974
Mr.Medhi Krongkaew	xxxxxxxxxxxxx	Professor	Ph.D. (Economics&Pol.Sci)	Michigan State University (U.S.A.)	1976
Miss Amornrat Apinunmahakul	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	University of Ottawa (Canada)	2001
Miss Prasopchoke Mongsawad	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	University of Missouri-Columbia (U.S.A.)	2001
Miss Niramol Ariyaarpakamol	xxxxxxxxxxxxx	Lecturer	Ph.D. (Economics)	University of Bristol (U.K.)	2010

3.2.2 Full-time faculty members

Name Lists	Personal Identification Number	Position	Degree / Field of study	Educational Institution	Year
Mr.Komain Jiranyakul	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	Texas A&M University (U.S.A.)	1986
Mrs.Nada Chunsom	xxxxxxxxxxxxx	Assistant Professor	D.B.A. (Finance)	United States International University, California (U.S.A.)	1995
Mr.Direk Patmasiriwat	xxxxxxxxxxxxx	Professor	Ph.D. (Economics)	The University of Georgia (U.S.A.)	1977
Miss Nuanphan Maithongdee	xxxxxxxxxxxxx	Lecturer	M.Econ. (Development Economics)	NIDA (Thailand)	2012

Name Lists	Personal Identification Number	Position	Degree / Field of study	Educational Institution	Year
Mrs.Pariyada Sukcharoensin	xxxxxxxxxxxxx	Lecturer	D.B.A. (Finance)	Thammasat University (Thailand)	2003
Mr.Piriya Pholphirul	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	Georgia State University (U.S.A.)	2002
Mrs. Pornpen Vorasittha	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	University of Notre Dame (U.S.A.)	1984
Mr. Yuthana Sethapramote	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	University of Warwick (U.K.)	2002
Mr.Wisit Chaisrisawatsuk	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	The Florida State University (U.S.A.)	2004
Mr.Sasatra Sudsawasd	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	Georgia State University (U.S.A.)	2004
Mr.Santi Chaisrisawatsuk	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	Southern Illinois University (U.S.A.)	1999
Mr. Sorasart Sukcharoensin	xxxxxxxxxxxxx	Assistant Professor	D.B.A. (Finance)	Thammasat University (Thailand)	2003
Miss Suchittra Chamnivickorn	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Economics)	University of Illinois at Chicago (U.S.A.)	1988
Mr.Adis Israngkura	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	North Carolina State University (U.S.A.)	1994
Mr.Anan Wattanakuljarus	xxxxxxxxxxxxx	Assistant Professor	Ph.D. (Agricultural and Applied Economics)	University of Wisconsin-Madison (U.S.A.)	2006
Mr.Udomsak Seenprachawong	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Business Adminstration)	The University of Memphis (U.S.A.)	1994
Miss Apirada Chinprateep	xxxxxxxxxxxxx	Lecturer	Ph.D. (Applied Economics)	University of Minnesota (U.S.A.)	2004

3.2.3 Visiting professors

Name Lists	Personal Identification Number	Position	Degree / Field of study	Educational Institution	Year
Mr.Vimut Vanitcharearnthum	xxxxxxxxxxxxx	Associate Professor	Ph.D. (Economics)	University of Chicago (U.S.A.)	1996
Mr.Manop Udomkerdmongkol	xxxxxxxxxxxxx	Lecturer	Ph.D. (Economics)	University of Nottingham (U.K.)	2007
Miss Kannika Thampanishvong	xxxxxxxxxxxxx	Lecturer	Ph.D. (Economics)	University of Warwick (U.K.)	2006

4. Field Works (Apprenticeship or Cooperative Education, if any)

None

5. Regulations on Research Projects (if any)

5.1 Concise Description

Students must propose a dissertation topic within 1 – 2 semesters after passing the qualification examination. After receipt of approval on the dissertation topic, the students must register 3 – 6 credits of the dissertation per semester. Only for the last semester before graduation, the students can register the remaining credits.

5.2 Learning standards

The work of the dissertation must be published in the international journals listed in recognized international databases.

5.3 Timetable

Students will start in the second year, 2nd semester**.**

5.4 Number of Credits

5.4.1 Plan 1(1.1) Dissertation 48 credits
5.4.2 Plan 2(2.1) Dissertation 36 credits
5.4.3 Plan 2(2.2) Dissertation 48 credits

5.5 Preparation

Students should begin developing a dissertation topic starting from the 1st semester of registration as a student under the guidance of a thesis advisor.

5.6 Evaluation Process

Students must present the dissertation proposal and get approval from their dissertation committee, report dissertation progress every semester, and pass dissertation final examination with the appointment of an external examiner according to the criteria of the institute.

Part 4 Learning Outcomes, Teaching Strategies and Evaluation

1. Development of Students' Special Characteristics

Special Characteristics	Strategies or Students' Activities
- Personality	- Include topics about dressing styles, way to present article or academic projects, have a good relationship, well behaved while working into some courses or activities.
- Leadership and being responsible as well as self discipline	- Offering courses with debate and presenting works that have been self-studied. - Promoting discipline such as attending the class on time and regularly, participating in class and commenting.
- Moral and professional ethics	- Providing knowledge on moral and professional ethics in some courses and related activities.

2. Development of Learning Outcomes on Each Aspect

2.1 Ethics

2.1.1 Learning Outcomes on Ethics

1) Awareness of values and virtues of ethics, sacrifice and honesty;
2) Being disciplined, punctual and responsible regarding themselves, their profession and society;
3) Having the leadership and interpersonal skill in teamwork, and also the ability to resolve conflicts and know how to prioritise;
4) Respect and listen to people's opinions and also respect the value the dignity of fellow human beings;
5) Respect rules and regulations of their respective organizations and society;
6) Ability to analyse economic impact on individual and society;
7) Maintaining their respective professional ethics.

2.1.2 Teaching Strategies in Development of Moral and Ethical Learning

Setting corporate culture to instill the students with discipline, for instance, emphasizing on class attendance on time, Students must learn to work with in groups, be trained to become a group leader and/or a group's member. They are to be honest, such as not committing fraud in examination or copying someone else's homework, etc. In addition, every instructor may add moral and ethical issues in course syllabuses.

2.1.3 Strategies in Evaluating Moral and Ethical Learning Outcomes

Assessment can be performed on timeliness of the students in class attendance, submitting the assignment within the given date, involvement in activities, amount of fraudulent acts in the examinations, and responsibilities to duties as assigned.

2.2 Knowledge

2.2.1 Knowledge Outcomes

knowledge from learning must cover the following:

1) Have knowledge and understanding of the principles and theories of the field
2) Have knowledge of macroeconomic and able to use economics as tool in applying to solve economic problems and additional self – study
3) Able to keep on tract of academic progress and synthesis of advanced economics
4) Able to analyze and research on economic issues and able to present research paper

The outcome can be assessed by examinations and test as well as research outcomes of the dissertation.

2.2.2 Teaching Strategies for Learning and Knowledge Development

Use teaching methods in various ways by focusing on theoretical and practical applications that are up – to changes in economics, and according to the nature of the course.

2.2.3 Strategies in Learning and Knowledge Evaluation

Assessment of achievement and performance of students in various ways, such as:

1) Subtests
2) Mid – term and Final examinations
3) Evaluation of the student's report
4) Qualification examination
5) Dissertation proposal examination
6) Dissertation final examination

2.3 Intellectual Skills

2.3.1 Learning Results on Intellectual Skills

Students need to develop intellectual skills along with ethics and knowledge of the economics. While teaching, the lecturer has to focus on students' ability to reason causes of problems and to solve the problems. The students must have following qualifications in order to achieve the intellectual skills:

1) Systematic and critical thinking
2) Ability to detect, interpret, and evaluate information on economics to solve problems creatively
3) Able to collect, analyze, and summarize the issues and needs
4) Able to apply knowledge and skills to solve problems in economics appropriately

Intellectual skill on this regard can be assessed by testing out the students' concept of problem solving and how to solve problems by applying the knowledge learned

2.3.2 Teaching Strategies Used in the Learning Development of Intellectual Skills

1) Case study of advanced economic and current issues
2) Discussion
3) Independent study

2.3.3 Strategies Evaluation on Learning Results on Intellectual Skills

Evaluation of the learning results can be done based on actual works and performance of the students i.e. evaluation on the presentation in the class, test or interview.

2.4 Interpersonal Skills and Responsibilities

2.4.1 Learning results on interpersonal skills and responsibilities

Incorporated learning related with the following qualifications of the students into course:

1) Ability to communication foreign language effectively
2) Ability to assist and facilitate problem – solving both as a team leader and a team member
3) Ability to use the knowledge learned with the society appropriately
4) Responsible for personal actions and work within the group
5) Able to propose ways to resolve a situation, as well as present the position appropriately to both themselves and the group
6) Responsible for professional learning development continuously

2.4.2 Teaching Strategies Used in the Development on Interpersonal Relationships Skills and Responsibilities

Using instruction with assignment for a work group, that has to coordinate with others, or to collect data from interviews with expert people. The expected learning outcomes on the interpersonal relationship skills and responsibilities are as follows:

1) Have leadership
2) Able to work well with others
3) Responsible for the work assigned
4) Adapability to the situation and organization culture at work place
5) Have good interpersonal skills with colleagues in organization and the general public

2.4.3 Evaluation Strategies of Learning on Interpersonal Relationships Skills and Responsibilities

Evaluate the behavior and performance of students in group presentation in class, and observation of behavior manifested in the activities.

2.5 Skills in Numerical Analysis, Communication and Use of Information Technology

2.5.1 Outcomes of Skills Development in Numerical Analysis, Communication and Information Technology

1) Have the skills to use necessary tools available to work with the computer
2) Can suggest the solution using mathematics, econometrics to related problems creatively
3) Able to communicate effectively both orally and in writing as well as selecting appropriate presentation media
4) Able to use information and communication technologies appropriately

The learning outcome may be assessed during courses by having the students solve problems, analyse effectiveness of the solutions, and to introduce the concepts of the solutions, and also academic discussion between the lecturer and the students

2.5.2 Teaching Strategies that Enhance Skills in Numerical Analysis, Communication and Information Technology

Arrange learning activities in the course for students to analyze various scenarios and realistic situations so that they can offer appropriate solutions, learn techniques in applying information technology in a variety of situations.

2.5.3 Evaluation Strategies concerning Skills in Numerical Analysis, Communication and Information Technology

1) Evaluate from student presentations that use information technology tools, or mathematics and related statistics
2) Evaluate the ability to explain the reasons on using various tools and from discussion of case studies that were presented to classes

3. Curriculum Mapping

Mapping indicating responsibility of learning standards from curriculum to courses (Curriculum Mapping)
• Major Responsibility O Minor Responsibility

Courses	1. Ethics				2. Knowledge				3. Intellectual Skill				4. Interperson Skill and Responsibility				5. Skills in communication, numerical analysis and implementation of information technology			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DE 6001 Intermediate Microeconomics	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 6002 Intermediate Macroeconomics	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 6003 Basic Econometrics	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 7000 Mathematics for Economists	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8100 Microeconomic Theory	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8200 Advanced Microeconomics	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8300 Macroeconomic Theory	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8400 Advanced Macroeconomics	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8500 Econometrics I	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8600 Econometrics II	O	O	O	O	•	•	•	•	•	•	•	•	O	O	O	O	•	•	•	•
DE 8900 Independent Studies	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Mapping indicating responsibility of learning standards from curriculum to courses (Curriculum Mapping)
• Major Responsibility O Minor Responsibility

Courses	1. Ethics				2. Knowledge				3. Intellectual Skill				4. Interperson Skill and Responsibility				5. Skills in communication, numerical analysis and implementation of information technology			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DE 9100 Development Economics	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9101 Empirical Issues in Development Economics	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9200 International Trade	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9201 International Finance	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9300 Financial Economics	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9301 Asset Pricing Theory	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9400 Environmental Economics	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9401 Environmental Valuation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9500 Public Economics: Taxation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9501 Public Economics: Expenditure	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Mapping indicating responsibility of learning standards from curriculum to courses (Curriculum Mapping)
• Major Responsibility O Minor Responsibility

Courses	1. Ethics				2. Knowledge				3. Intellectual Skill				4. Interperson Skill and Responsibility				5. Skills in communication, numerical analysis and implementation of information technology			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
DE 9600 Economics of Labor Market	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9601 Wage Determination	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9602 Health Economics	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9603 Game Theory	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9604 Independent Research Paper	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9605 Directed Study	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DE 9900 Dissertation	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Part 5 Educational Evaluation and Grading System

1. Regulation and Grading Criteria

All courses in the program will be evaluated in accordance with the rules and regulations stipulated by the National Institute of Development Administration.

Evaluation of all the courses stated in the curriculum will be graded into various levels. The mean per credit will be shown using the following system:

A	= 4.0	equivalent to	Excellent
A-	= 3.7	equivalent to	Very good
B+	= 3.3	equivalent to	Good
B	= 3.0	equivalent to	Fairly good
B-	= 2.7	equivalent to	Almost good
C+	= 2.3	equivalent to	Fair
C	= 2.0	equivalent to	Almost Fair
C-	= 1.7	equivalent to	Poor
D	= 1.0	equivalent to	Very poor
F	= 0	equivalent to	Failure
W		equivalent to	Withdrawal
I		equivalent to	Incomplete
S		equivalent to	Satisfactory
U		equivalent to	Unsatisfactory
AU		equivalent to	Audit
P		equivalent to	Pass
IP		equivalent to	In Progress
T		equivalent to	Terminated
TR		equivalent to	Transfer, work with which there is no comparable grade

2. The Verification Process of a Student's Academic Achievement

2.1 Verification of Student's Achievement on Learning While Studying

A verification system to determine the achievement of student's learning needs to be set up as part of the internal qualify assurance of higher education institution. The system must be successfully implemented and also allow the external assessors to be able to verify.

2.2 Verification of Student's Achievement on Learning After Students Have Graduated

In setting up a verification system on student's achievement on learning after students have graduated, research may be conducted on the achievement of employment of the graduates and the research results can be used to improve the teaching and learning process. Research may be carried out by the following examples:

2.2.1 The employment situation of the graduates is evaluated from each graduated class based on how long to get a job, employer's comments on knowledge, ability and confidence of the graduates in the career

2.2.2 Checking out the employer of graduates by interviews or sending questionnaires to assess employer's satisfaction with the graduates

2.2.3 Evaluating the position and/or process in the career path of the graduates
2.2.4 Evaluating of graduates who have in the profession, in terms of the preparedness and knowledge as well as a allowing the graduates to comment to improve the curriculum
2.2.5 Comments from external experts to evaluate the curriculum
2.2.6 Tangible works of the students such as the works published in international journals or presented at academic conferences

3. Criteria for Graduation

3.1 Students Eligible for Graduation From the Program Must Have the Following Qualifications

3.1.1 Students complete credits and courses as prescribed in the curriculum
3.1.2 A cumulative GPA of at least 3.00 throughout the course
3.1.3 Pass the qualification examination within two years after the registration as a student for students of Plan 1 (1.1) Plan 2 (2.1) and Plan 2 (2.2). Students who studied in each plan will be entitled for the qualification examination up to three times.
3.1.4 Pass the dissertation proposal
3.1.5 Pass the dissertation final examination
3.1.6 Results of the dissertation have been published in international journals listed in the recognized international databases

Part 6 Faculty Development

1. Preparation for New Lecturers

1.1 Have orientation for new lecturers to get to know and understand the school policies, and the curriculum

1.2 Encouraging the instructors to broaden their knowledge and experiences to promote teaching and research continually, supporting further education, training, and professional visits to the various academic, attending academic conferences both locally and/or internationally, or taking leave to gain additional experience

2. Knowledge and Skills Development to the Lecturers

2.1 Development of Teaching Skills, Assessment and Evaluation

2.1.1 Encouraging the instructors to broaden their knowledge and experiences to promote teaching and research continually supporting further education, training, and professional visits to the various academic, attending academic conferences both locally and/or internationally, or taking leave to gain additional experience

2.1.2 Improving and updating the skills in teaching and evaluation

2.2 Academic and Professional Development

2.2.1 Participating in academic service activities to the community related to knowledge and ethics development

2.2.2 Motivating the lecturers to create the academic work

2.2.3 Promoting research primarily for new knowledge and improving the teaching, as well as proficient in profession as secondary

2.2.4 Budget allocation for researching

2.2.5 Encouraging all lecturers to participate with the various research groups of the school

Part 7 Quality Assurance of the Curriculum

1. Program Management

A committee, with consists of the Dean, the Program Director and instructors responsible for the curriculum, will take charge of managing the curriculum. The committee will be supervised and advised by the Executive Board for Doctoral Study of the school.

The director of the curriculum, the school administrators and the lecturers will plan for the teaching, monitoring and gathering data for improvement and development on a yearly basis continually.

Goals	Implementation	Evaluation
1. Developing and updating the curriculum so that the instructors and the students can follow or be a leader to create new knowledge in advanced economics 2. Encouraging the students to be curious, with learning approaches that allow students to learn by themselves 3. Monitoring and improving the curriculum to meet the qualify standards 4. Evaluation of the curriculum on a regular basis	1. Arranging the curriculum be in accordance with professional standards in information technology both international and national level. (if required) 2. Always update the curriculum under a review/consideration every 3 – 4 year 3. Providing learning in courses both theory and applications, as well as class activities that promote self learning 4. Providing personal teaching assistants to support students; learning 5. Encouraging the lecturers to have leadership in academic and/or expertise in profession 6. Encouraging the lecturers in the curriculum to pay academic visits both domestic and abroad 7. The curriculum is evaluated and updated periodically 8. Setting up a database containing information on students, lecturers, research equipment, budgets, international collaboration, and academic works. The database will be used for curriculum evaluation	1. The curriculum can be referenced to standards set by the professionals in information technology and regularly updated 2. Number of courses in the curriculum are courses that students can study and research for new knowledge on their own 3. Number and names of the lecturers profiles, qualifications/training and development of the lecturers 4. Number of personnel who support the learning, and number of activities in support of leaning 5. Evaluation results of teaching and learning by students 6. Evaluation and curriculum criticism by external expert committee 7. Evaluation by the graduates

2. Teaching Resource Management

2.1 Budget Management

The school will allocate the annual budget from the governmental budget and its income to purchase textbooks, instruction media, audio – visual aids, computer equipment and supplies adequately to support teaching and learning in the class as well as create an appropriate environment for self – learning.

2.2 The Existing Teaching Resources

The NIDA's Library provides students and instructors with necessary books, textbooks, as well as digital library for learning and doing their researches. The school also provides a study room and software to support teaching and learning for the curriculum.

2.3 Providing Additional Resources for Teaching and Learning

The school will coordinate with NIDA's Library in the purchase of books, and related publications to support the teaching, learning and research. In the coordination of purchasing books and media, the instructors will participate in suggesting a list of books as well as other necessary media. The school and the institute will supply the audio – visual equipments for teaching and learning such as multimedia projectors, computers, etc.

2.4 Evaluating the Adequacy of Instructional Resources

In evaluating the adequacy of instructional resources, the school and staffs of the school will coordinates the procurement of books and media for the NIDA's Library.

3. Lecturers Management

3.1 Recruiting New Instructors

New instructors are recruited by the rules and regulations of the Institute. The new faculty members will have doctoral degree in the field of economics, or related disciplines.

3.2 Participation of Lecturers in the Planning, Monitoring and Review of the Curriculum

Lecturers responsible for the curriculum will hold regular meeting in planning for teaching and learning, data collection, and discuss ways to improve the curriculum to achieve the goal and produce qualified graduates as desired.

3.3 Special Lecturers Appointment

In inviting special lecturers and guest speakers for courses or part of courses, they must have direct experience related to the courses or at least hold a doctorate degree.

4. Administration for Supporting Personnel on Learning and Teaching

4.1 Specific Requirements for the Support Personnel

Supporting staffs should have a bachelor degree related to the responsible jobs with knowledge and skills in regulation on education or educational technology.

4.2 Increasing Practical Skills and Knowledge for the Supporting Personnel

The personnel need to understand the structure and nature of the curriculum, and to be able to provide services to the lecturers with easy access to educational resources.

5. Supporting and Advising the Students

5.1 Counseling to the Students

The school has appointed academic advisor to all students. Students who have difficulty in learning can consult with their academic advisor. Each academic advisor must hold office hours for advising students. In addition, the school also appointed student activity advisor to provide advice to the students on handling extra curriculum activities.

5.2 Students' Appeal

If students have questions about the assessment in taken courses, they will be able to request to see their answer sheet of the examination paper as well as view the evaluation results and methodology.

6. The Needs of Labour Market, Society and/or the Satisfaction of the Employers

High demand of the doctorate personnel in economics is expected. The school with the cooperation of the Institute will conduct surveys on the demand of the graduates and employer satisfaction on the graduates to improve the implementation of the curriculum.

7. Key Performance Indicators (KPI)

Performance of curriculum implementation must fulfill passing criteria for 5 academic years consecutively. The passing criteria is to accomplish the implementations according to KPI number 1 – 5 and fulfill at least 80 percent of KPI identified for each year.

Key Performance Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
1) At least 80% of Lecturers of the program have participated in the planning, monitoring and review of program performance.	X	X	X	X	X
2) Having curriculum details according to the From MOR KHOR OR 2 which meets qualification standards of the disciplines.	X	X	X	X	X
3) Having at least details of the courses and field experience (if any) according to the From MOR KHOR OR 3 and 4 before opening for all courses in each semester.	X	X	X	X	X
4) Report the results of all courses and field experience (if any) according to the From MOR KHOR OR 5 and 6 within 30 days after the end of semester.	X	X	X	X	X
5) Report the results of the curriculum according to the From MOR KHOR OR 7 within 60 days after the end of the academic year.	X	X	X	X	X
6) At least 25% of individual courses in each academic year must have Students' achievement review according k to the From MOR KHOR OR 3 and 4		X	X	X	X

Key Performance Indicators	Year 1	Year 2	Year 3	Year 4	Year 5
7) Development /improvement of teaching /learning, strategies or assessment of learning outcomes must be performed according to the evaluation report in the Form MOR KHOR OR 7 of last years.		X	X	X	X
8) All new lecturers (if any) have been given orientation or recommendation on teaching and learning management.	X	X	X	X	X
9) All regular lecturers have been trained to develop an academic and /or profession at least once a year.	X	X	X	X	X
10) At least 50% of supporting personnel (if any) have been trained to develop academic and /or profession each year.	X	X	X	X	X
11) Satisfaction level of the final year students/new graduates on the qualify of curriculum has an average of at least 3.5 out of 5.0.				X	X
12) Satisfaction level of graduate users toward new graduates of the program has an average of at least 3.5 out of 5.0.				X	X
13) Graduates being employed receive starting salary not less than the criteria of CSC.				X	X
Total key performance indicators (number)	8	10	10	13	13
The mandatory key performance indicators (sequence)	1-5	1-5	1-5	1-5	1-5
Total of must pass indicators (number)	8	10	10	13	13

Part 8 Evaluation and Improvement of the Implementation of the Curriculum

1. The Evaluation of the Teaching Effectiveness

1.1 Evaluation of Teaching Strategies

Prior to teaching, teaching strategies should be evaluated by instructors or department. During the course, evaluation of teaching, as well as evaluation of student learning performance must be performed for the future improvement.

1.2 Assessment skills of Lecturers in Teaching

Such skill assessment can be made by the students in each course, and an assessment for the skill in overall of the curriculum can be made by students who are graduating.

2. The Overall Curriculum Evaluation

The overall curriculum evaluation can be done by using the information acquired from new graduates, graduate employers and external experts.

3. Evaluation of the implementation of the curriculum

Qualify assurance and the teaching standards of the curriculum is required including the above indicators, as well as the assessment of the internal quality assurance (IQA).

4. Review of Evaluation Results, Curriculum Planning and Teaching Strategies

4.1 Collecting suggestions/information from the evaluation of the graduates, the graduate employers and external experts

4.2 Analysis and review the above information are to be done by the lecturers responsible for the curriculum

4.3 Offers improvement on the curriculum and strategic plan (if any).

COMPARISON OF THE PREVIOUS AND THE REVISED 2012 CURRICULA

Previous	Revision 2012	Remark
-	**Plan 1 (1.1)** Focuses on research, no requirement for courses, a total of 48 credits	Additional Plan 1 (1.1)
Qualifications of Applicants ***Plan 2 (2.2)***, a Bachelor's degree from an institution accredited by the Commission on Higher Education is required with the GPA. not less than 3.25. At the Ph.D. level, the study of economics requires a year of college calculus (at a minimum).	**Qualifications of Applicants** ***2.2.2 Plan 2 (2.2)***, A bachelor's degree or equivalent from an institution accredited by the following: the Commission on Higher Education, the Office of the Civil Service Commission or the standard organizations is require or by approval of the Council of the institute and obtain the GPA. not less than 3.25 or with outstanding records by approval of the Program Committees.	
Specialized Field Courses (6 Credits) Students must choose one field of specialization from the list below.	***Field Courses (6 Credits)*** Students must choose one field of specialization from the list below.	
1) Development Economics	**1) Development Economics**	
Required field courses:	*Required* field courses:	
ECON 910 Development Economics 3 Credits	DE 9100 Development Economics 3 Credits	Change code
ECON 911 Empirical Issues in Development Economics 3 Credits	DE 9101 Empirical Issues in Development Economics 3 Credits	Change code
Elective field *course*:		
ECON 912 Research in Thai Economy 3 Credits	Canceled	-
2) International Economics	**2) International Economics**	
Required field courses**:**	*Required* field courses**:**	
ECON 920 International Trade 3 Credits	DE 9200 International Trade 3 Credits	Change code
ECON 921 International Finance 3 Credits	DE 9201 International Finance 3 Credits	Change code
Elective field courses:		
ECON 922 Advanced Topics in International Trade 3 Credits	Canceled	-
ECON 923 Advanced Topics in International Finance 3 Credits	Canceled	-
ECON 924 Empirical Issues in International Economics 3 Credits	Canceled	-
3) Financial Economics	**3) Financial Economics**	
Required field courses:	*Required* field courses:	
ECON 930 Financial Economics 3 Credits	DE 9300 Financial Economics 3 Credits	Change code
ECON 931 Asset Pricing Theory 3 Credits	DE 9301 Asset Pricing Theory 3 Credits	Change code
Elective field courses:		
ECON 932 Empirical Issues in Finance 3 Credits	Canceled	-
ECON 933 Advanced Topics in Corporate Finance 3 Credits	Canceled	-
ECON 934 Advanced Topics in Monetary Economics 3 Credits	Canceled	-

Previous		Revision 2012		Remark
4) Labor Economics and Human Capital				
Required field courses:				
ECON 940 Economics of Labor Market	3 Credits	Change to be Elective courses		-
ECON 941 Wage Determination	3 Credits	Change to be Elective courses		-
Elective field courses:				
ECON 942 Inequality, Human Capital and Macroeconomy	3 Credits	Canceled		-
ECON 943 Economics of Education	3 Credits	Canceled		-
ECON 944 Health Economics	3 Credits	Change to be Elective courses		-
5) Environmental Economics		**4) Environmental Economics**		
Required field courses:		*Required* field courses:		
ECON 950 Environmental Economics	3 Credits	DE 9400 Environmental Economics	3 Credits	Change code
ECON 951 Environmental Valuation	3 Credits	DE 9401 Environmental Valuation	3 Credits	Change code
Elective field courses:				
ECON 952 Advanced Topics in Environmental Economics	3 Credits	Canceled		-
ECON 953 Empirical Issues in Environmental Economics	3 Credits	Canceled		-
6) Public Economics		**5) Public Economics**		
Required field courses:		*Required* field courses:		
ECON 960 Public Economics: Taxation	3 Credits	DE 9500 Public Economics: Taxation	3 Credits	Change code
ECON 961 Public Economics: Expenditure	3 Credits	DE 9501 Public Economics: Expenditure	3 Credits	Change code
Elective field course:				
ECON 962 Public Choice	3 Credits	Canceled		-
***Elective Courses* (6 Credits)**		***Elective Courses* (6 Credits)**		
Students must select two Ph.D.-level courses in economics or related to their area of specialization as electives.		Students must choose two Ph.D.-level courses in economics or related to their area of specialization as electives.		
ECON 970 History of Economic Thought	3 Credits	Canceled		-
ECON 971 Game Theory	3 Credits	DE 9603 Game Theory	3 Credits	Change code
ECON 972 Economics of Cost-Benefit Analysis	3 Credits	Canceled		-
ECON 973 Independent Research Paper	3-6 Credits	DE 9604 Independent Research Paper	3-6 Credits	Change code
ECON 974 Directed Study	3-6 Credits	DE 9605 Directed Study	3-6 Credits	Change code
		DE 9600 Economics of Labor Market	3 Credits	Change code
		DE 9601 Wage Determination	3 Credits	Change code
		DE 9602 Health Economics	3 Credits	Change code

Previous	Revision 2012	Remark
C) Master of Development Economics This alternative set of requirements for the Master's Degree must be met with 36 credits if students change their plans or fail to satisfy the Ph.D. requirements.	**D) Master of Economics** This alternative set of requirements for the Master's Degree must be met with 36 credits if students change their plans or fail to satisfy the Ph.D. requirements.	
Basic Courses (12 Credits)		
ECON 601 Intermediate Microeconomics 3 Credits	No change.	-
ECON 602 Intermediate Macroeconomics 3 Credits	No change.	-
ECON 603 Basic Econometrics 3 Credits	No change.	-
ECON 700 Mathematics for Economist 3 Credits	No change.	-
Core Courses (9 Credits)		
ECON 810 Microeconomic Theory 3 Credits	No change.	-
ECON 830 Macroeconomic Theory 3 Credits	No change.	-
ECON 850 Econometrics I 3 Credits	No change.	-
Required Course (3 Credits)	***Field Courses (6 Credits)***	Replace required course with the field courses and adjust to 6 credits
ECON 910 Development Economics 3 Credits	Students must choose one field course of specialization from the list below.	
	1) Development Economics	
	Required field courses:	
	DE 9100 Development Economics 3 Credits	Change code
	DE 9101 Empirical Issues in Development Economics 3 Credits	Change code and additional course
	2) International Economics	
	Required field courses**:**	
	DE 9200 International Trade 3 Credits	Change code and additional course
	DE 9201 International Finance 3 Credits	Change code and additional course
	3) Financial Economics	
	Required field courses:	
	DE 9300 Financial Economics 3 Credits	Change code and additional course
	DE 9301 Asset Pricing Theory 3 Credits	Change code and additional course
	4) Environmental Economics	
	Required field courses:	
	DE 9400 Environmental Economics 3 Credits	Change code and additional course
	DE 9401 Environmental Valuation 3 Credits	Change code and additional course
	5) Public Economics	
	Required field courses:	
	DE 9500 Public Economics: Taxation 3 Credits	Change code and additional course
	DE 9501 Public Economics: Expenditure 3 Credits	Change code and additional course

Previous		Revision 2012		Remark
Elective Courses *(6 Credits)*		***Elective Courses*** *(6 Credits)*		
ECON 8xx/9xx Elective Course (#1)	3 Credits	Students shall choose any course from elective courses under the guidance of advisor to complete the requirement.		
ECON 8xx/9xx Elective Course (#2)	3 Credits			
		DE 8xxx/9xxx Elective Course (#1)	3 Credits	Change code
		DE 8xxx/9xxx Elective Course (#2)	3 Credits	Change code
Independent Studies *(6 Credits)*		***Independent Studies*** *(3 Credits)*		Reduce to 3 Credits
ECON 890 Independent Studies	6 Credits	DE 8900 Independent Studies	3 Credits	Change code