Guidelines for Students Enrolling in the

Non-Degree Conferring Program in Financial Engineering

Amended and approved by a meeting of the Department of Finance on September 9, 2003

Approved by a meeting of the School of Management Curriculum Committee on September 23, 2003

Approved by a meeting of the National Central University Curriculum Committee on October 2, 2003

Approved by a meeting of the Academic Affairs Committee on October 7, 2003

Amended and approved by a meeting of the Department of Finance Curriculum Committee and a meeting of the Department of Finance on April 13, 2005

- Amended and approved by a meeting of the School of Management Curriculum Committee on September 27, 2005
- Amended and approved by a meeting of the National Central University Curriculum Committee on October 4, 2005
 - Amended and approved by a meeting of the Academic Affairs Committee on October 12, 2005
- Amended and approved by a meeting of the Department of Finance Curriculum Committee on December 12, 2006

Amended and approved by a meeting of the School of Management Curriculum Committee on December 19, 2006

Amended and approved by a meeting of the National Central University Curriculum Committee on December 28, 2006

Amended and approved by a meeting of the Academic Affairs Committee on January 19, 2007

- 1. This program is designed to enhance the quality of research and instruction in financial engineering in Taiwan and to help produce outstanding specialists in this area. Distinguished students of related departments are encouraged to enroll in this program.
- 2. Only students enrolled in the University's Department of Finance master's program, the Graduate Institute of Statistics, and Department of Mathematics master's program may apply for entry into this program.
- 3. This program is designed to provide students with a thorough understanding of the theories for pricing model of financial derivative products. More importantly, it is designed to help students fully understand different valuation models (pricing models?), hypotheses, applicability and restrictions (requirements?), as well as various methods to avoid risks.
- 4. This program covers the fields of mathematics, statistics and finance and teaches students how to use computer simulation to illustrate subjects, with the objective being to enable students to apply at each stage the theories they learn.
- 5. University students will be regarded as having completed this program after earning the required number of credit hours from the program curriculum. They shall have the name of the program as well as the number of credit hours earned clearly indicated on their transcript and shall also be awarded a certificate of completion.
- 6. The course requirements of this program are as follows:
 - (1) three core courses (nine credit hours total).
 - (2) three elective courses (nine credit hours total).

(3) students in the Department of Finance or Graduate Institute of Statistics must ensure that at least two of the aforementioned courses are taken from a department or institute in which they are not enrolled.

Table of Course Requirements for the Non-Degree Conferring

Program in Financial Engineering

| Category | Course Titles | Credit Hours | Course Codes |
|-----------------|------------------------|--------------|---|
| | | | (Institute or department offering the course) |
| Core Courses | Futures and Options | 3 | FM6016 (Department of Finance) |
| | Quantitative Methods I | 3 | FM6005 (Department of Finance), |
| | or | | ST6035 (Graduate Institute of Statistics) |
| | Quantitative Finance I | | |
| | Probability Models I | 3 | ST6003 (Graduate Institute of Statistics) |

| Category | Course Titles | Credit Hours | Course Codes |
|----------|--|--------------|---|
| | | | (Institute or department offering the course) |
| | Special Topic on Financial Calculation | 3 | FM6076 (Department of Finance) |
| | Special Topic on Fixed Income Securities | 3 | FM6090 (Department of Finance) |
| | Financial Innovation | 3 | FM6078 (Department of Finance) |
| | Risk Management | 3 | FM6071 (Department of Finance) |
| | Financial Random Processes | 3 | ST7047 (Graduate Institute of Statistics), |
| | or | | MA6055 (Department of Mathematics) |
| Elective | Random Financial Mathematics I | | |
| Courses | Financial Time Series I | 3 | ST7061 (Graduate Institute of Statistics) |
| | Advanced Financial Engineering | 3 | ST7048 (Graduate Institute of Statistics) |
| | Numerical Solutions of Differential | 3 | MA7007 (Department of Mathematics) |
| | Equations I | | |
| | Financial Econometrics or Quantitative | 3 | FM6072 (Department of Finance), |
| | Finance II | | ST6036 (Graduate Institute of Statistics) |

7. These guidelines shall be implemented and entered into force upon approval by a meeting of the Academic Affairs Committee. The same procedure applies to any amendment of these guidelines.