

## The Master of Science in Finance (English Program) - MSF

Department of Banking and Finance Chulalongkorn

Business School

Chulalongkorn University

### Overview of Program Structure

- **Full Time Program:** 1 Year Program
- **Flexible (Part-Time) Program:** 2 Years Program

### Academic Terms:

- **Trimester System From**
  - **Term 1:** August – November
  - **Term 2:** December – March
  - **Term 3:** April – July

### Total Credits Required Completing the Program and Program Study Plan

- **Total 36 Credits**
  - **Plan A (Thesis Plan)**
    - Core Courses 16 credits
    - Elective Courses 8 credits
    - Thesis 12 credits
  - **Plan B (Special Project Plan (Mini Thesis))**
    - Core Courses 16 credits
    - Elective Courses 14 credits
    - Special Project 6 credits
    - Comprehensive Exam Required

### Core Courses

2604639	Finance Theory	3 credits
2604643	Derivatives and Risk Management	3 credits
2604647	Financial Statement Analysis	3 credits
2604674	Financial Econometrics	3 credits
2604680	Ethics in Finance	1 credit
2604697	Financial Markets, Institutions and Instruments**	3 credits

### Elective Courses

2604662	Alternative and Innovation in Investment	2 credits
2604663	Corporate Finance	2 credits
2604664	Strategic Portfolio Management	2 credits
2604665	Portfolio Performance Evaluation and Attribution	2 credits
2604666	Foundation of Behavioral Finance	2 credits
2604667	Market Microstructure	2 credits
2604668	Corporate Governance and Compliance	2 credits
2604669	Selected Topics in Risk Management	2 credits
2604670	Equity Analysis and Valuation	2 credits
2604678	Macro Issues in Finance	2 credits
2604679	Global Finance	2 credits
2604687	Financial Programming	2 credits
2604690	Fixed Income Securities	2 credits
2604692	Special Topics in Finance***	2 credits
2604694	Emerging Capital Markets	2 credits
2604695	Financial Risk Management for Pension Plans	2 credits
2604696	Practical Corporate Financial Modeling	2 credits

\*\*New course

\*\*\* For outgoing exchange students only.

### Required Research

2604811	Thesis (Plan A)	12 credits
2604711	Special Project I (Plan B)	3 credits
2604712	Special Project II (Plan B)	3 credits
2604896	Comprehensive Exam (Plan B)	S/U

### Chulalongkorn University Credits and European ECTS Credits

For an exchange partner whom total credits required to complete the Program are **120 ECTS credits**,

- **10 ECTS credits** are approximately equal to **3 Chulalongkorn University credits**
- **6.67 ECTS credits** are approximately equal to **2 Chulalongkorn University credits**.

For an exchange partner whom total credits required to complete the Program are **60 ECTS credits**,

- **5 ECTS credits** are approximately equal to **3 Chulalongkorn University credits**
- **3.33 ECTS credits** are approximately equal to **2 Chulalongkorn University credits**.

### Chulalongkorn University Credits

- **3 credits** are equal to 48 contact hours (lectures) plus term papers/written assignments/presentations/group work
- **2 credits** are equal to 30 contact hours (lectures) plus term papers/written assignments/presentations/group work
- **1 credit** is equal to 15 contact hours (lectures) plus term papers/written assignments/presentations/group work

## MSF Courses Offered in Each Academic Term

### **Full Time Program**

#### **Year 1 (Term 1)**

2604639	Finance Theory	3 credits
2604647	Financial Statement Analysis	3 credits
2604674	Financial Econometrics	3 credits
2604680	Ethics in Finance	1 credit
2604697	Financial Market, Institutions and Instruments	3 credits

#### **Year 1 (Term 2)**

2604643	Derivatives and Risk Management	3 credits
2604711	Special Project I (Plan B)	3 credits
2604811	Thesis (Plan A) - Proposal	3 credits
2604662	Alternative and Innovation in Investment*	2 credits
2604667	Market Microstructure*	2 credits
2604668	Corporate Governance and Compliance	2 credits
2604670	Equity Analysis and Valuation	2 credits
2604678	Macro Issues in Finance*	2 credits
2604687	Financial Programming	2 credits
2604690	Fixed Income Securities*	2 credits
2604692	Special Topics in Finance*	2 credits
2604694	Emerging Capital Markets*	2 credits
2604696	Practical Corporate Financial Modeling	2 credits

### **Year 1 (Term 3)**

2604712	Special Project II (Plan B)	3 credits
2604811	Thesis (Plan A) – Full Paper	9 credits
2604896	Comprehensive Exam (Plan B)	S/U
2604663	Corporate Finance	2 credits
2604664	Strategic Portfolio Management	2 credits
2604665	Portfolio Performance Evaluation and Attribution	2 credits
2604666	Foundation of Behavioral Finance*	2 credits
2604669	Selected Topics in Risk Management	2 credits
2604692	Special Topics in Finance***	2 credits
2604695	Financial Risk Management for Pension Plans	2 credits

Note: \*Elective Course. The elective courses offered in each academic term are subject to number of students enrolling in the class.

In term 2, students in both plan A and B are required to choose 3 elective courses

In term 3, students in plan A are required to choose 1 elective course and students in plan B are required to choose 4 elective courses

\*\*\*For outgoing exchange students only.

## **Flexible Time Program**

### **Term 1 (Year 1)**

2604639	Finance Theory	3 credits
2604680	Ethics in Finance	1 credit
2604697	Financial Market, Institutions and Instruments	3 credits

### **Term 2 (Year 1)**

2604647	Financial Statement Analysis	3 credits
2604674	Financial Econometrics	3 credits

### **Term 3 (Year 1)**

2604643	Derivatives and Risk Management	3 credits
2604663	Corporate Finance	2 credits
2604664	Strategic Portfolio Management	2 credits
2604665	Portfolio Performance Evaluation and Attribution	2 credits
2604666	Foundation of Behavioral Finance*	2 credits
2604669	Selected Topics in Risk Management	2 credits
2604692	Special Topics in Finance*	2 credits
2604695	Financial Risk Management for Pension Plans	2 credits

### **Term 4 (Year 2)**

2604896	Comprehensive Exam (Plan B)	
2604664	Strategic Portfolio Management	2 credits
2604670	Equity Analysis and Valuation	2 credits
2604692	Special Topics in Finance***	2 credits

### **Term 5 (Year 2)**

2604711	Special Project I (Plan B)	3 credits
2604662	Alternative and Innovation in Investment*	2 credits
2604667	Market Microstructure*	2 credits
2604668	Corporate Governance and Compliance	2 credits
2604670	Equity Analysis and Valuation	2 credits
2604678	Macro Issues in Finance*	2 credits
2604687	Financial Programming	2 credits
2604690	Fixed Income Securities*	2 credits
2604692	Special Topics in Finance*	2 credits
2604694	Emerging Capital Markets*	2 credits
2604696	Practical Corporate Financial Modeling	2 credits

### **Term 6 (Year 2)**

2604712	Special Project II (Plan B)	3 credits
2604663	Corporate Finance	2 credits
2604664	Strategic Portfolio Management	2 credits
2604665	Portfolio Performance Evaluation and Attribution	2 credits
2604666	Foundation of Behavioral Finance*	2 credits
2604669	Selected Topics in Risk Management	2 credits
2604692	Special Topics in Finance***	2 credits
2604695	Financial Risk Management for Pension Plans	2 credits

Note: \*Elective Course. The elective courses offered in each academic term are subject to number of students enrolling in the class.

In term 3, 4, and 5, students are required to choose 2 elective courses

In term 6, students are required to choose 1 elective course

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## MSF Course Description

### Core Courses

<b>2604639</b>	<b>Finance Theory</b> Financial theories related to investment and consumption decisions under certainty and uncertainty; risk preferences; application of expected utility theory in investment analysis; perfect asset markets; complete asset markets; portfolio theories; asset pricing theories; analysis of key corporate finance issues; capital structure; dividend policy; ownership structure; asymmetric information.	<b>3 credits</b>
<b>2604643</b>	<b>Derivatives and Risk Management</b> Derivative markets; options and trading strategies; option pricing models; option price sensitivities; futures and trading strategies; swaps; forward rate agreements; interest rate options; value at risk (VaR) approaches; real options.	<b>3 credits</b>
<b>2604647</b>	<b>Financial Statement Analysis</b> Techniques for financial statement analysis and their interpretation for decision making; uses of financial statement information in practices; demand and supply of financial statement information; quality of financial statement information; credit analysis; security analysis; risk analysis; corporate valuation.	<b>3 credits</b>
<b>2604674</b>	<b>Financial Econometrics</b> Statistical techniques and econometrics for financial research; linear regression analysis; hypothesis testing; large sample statistical theory; relaxing assumptions of classical linear regression models; univariate time series analysis.	<b>3 credits</b>
<b>2604680</b>	<b>Ethics in Finance</b> Code of ethics; standards of professional conduct; ethics in the investment profession.	<b>1 credits</b>
<b>2604697</b>	<b>Financial Markets, Institutions, and Instruments**</b> Roles of financial markets; structure of financial markets: money and capital markets; primary and secondary markets; types and roles of various financial institutions in intermediation process; determination of interest rates; roles of regulators; central banks; commercial banks; money supply process; debt markets; equity markets; foreign exchange markets; financial instruments; efficient market hypothesis; financial markets in international context.	<b>2 credits</b>
<b>2604711</b>	<b>Special Project I (Plan B)</b> Research in finance topics; presenting the proposal.	<b>3 credits</b>
<b>2604712</b>	<b>Special Project II (Plan B)</b> <b>Prerequisite: 2604711</b> Completing the proposed research topic; presenting the research result.	<b>3 credits</b>
<b>2604811</b>	<b>Thesis (Plan A) - Proposal</b>	<b>3 credits</b>
<b>2604811</b>	<b>Thesis (Plan A) – Full Paper</b>	<b>9 credits</b>

\*\*New course



### Elective Courses

- 2604662**      **Alternative and Innovation in Investment**      **2 credits**  
Alternative investment strategies: hedge funds, real estate, and private equity; risk-return characteristics of various alternative investments; use of alternative investments to enhance portfolio risk-return trade-offs.
- 2604663**      **Corporate Finance**      **2 credits**  
**Prerequisite: 2604639**  
Initial public offerings; seasoned equity offerings; rights offerings; private placement of equity; debt offerings; convertible debt; venture capital financing; mergers and acquisitions; corporate diversification; securities market regulations and corporate governance; event-study methodology.
- 2604664**      **Strategic Portfolio Management**      **2 credits**  
Concepts, process and construction of investment portfolios; portfolio management strategies and diversification; portfolio performance evaluation; portfolio management for individual and institutional investors; asset allocation.
- 2604665**      **Portfolio Performance Evaluation and Attribution**      **2 credits**  
Basic and advanced portfolio performance evaluation models; applications of performance evaluation and attribution techniques; measuring portfolio performance without knowledge of the proper model; measuring market timing; measuring hedge fund performance.
- 2604666**      **Foundation of Behavioral Finance**      **2 credits**  
Theoretical foundations of behavioral finance; overconfidence; representative heuristic; attribution theory; anchoring; prospect theory; limits to arbitrage; market anomalies; corporate behavior.
- 2604667**      **Market Microstructure**      **2 credits**  
Market microstructure models; order types; order submission strategies; trader types; behavior of informed traders; probability of informed trading; price discovery; origins of liquidity and volatility; transaction cost measurement.
- 2604668**      **Corporate Governance and Compliance**      **2 credits**  
Corporate governance; compliance and other related issues; strategic compliance management; integration of corporate governance, risk management and compliance.
- 2604669**      **Selected Topics in Risk Management**      **2 credits**  
**Prerequisite: 2604643**  
Advanced tools of financial risk management; credit derivatives; credit risk modeling; credit scoring; option-based models; credit migration models; reduced form models; applications of risk management for financial institutions; developments and current issues in risk management.

- 2604670 Equity Analysis and Valuation 2 credits**  
Market efficiency and valuation; discounted cash flow valuation; relative valuation; residual income valuation and economic value added; option application for stock valuation; technical analysis.
- 2604678 Macro Issues in Finance 2 credits**  
Financial system and institutions; aggregate demand and supply; money creation; roles of expectation on markets and policy; monetary and fiscal policies; economic indicators.
- 2604679 Global Finance 2 credits**  
International monetary systems; the balance of payments; international parity conditions; exchange rate determination; exchange rate forecast; foreign exchange markets; international financial markets; measuring and managing exposure to exchange rate risk.
- 2604687 Financial Programming 2 credits**  
Introduction to programming; data manipulation techniques; software project management; spreadsheet application.
- 2604690 Fixed Income Securities 2 credits**  
Fixed income securities and markets; bond valuation; risk measurement of bonds; term structure of interest rate; yield curve fitting; bond portfolio management; interest rate derivatives.
- 2604692 Special Topics in Finance\*\*\* 2 credits**  
Current issues and topics in finance; current development in financial theories, practice and finance markets; interesting topics in finance; current research in finance.
- 2604694 Emerging Capital Markets\*\***  
**Condition: Prerequisite 2604639**  
Development of emerging capital markets; cross-border capital flows; governance and regulations; valuation challenge in emerging markets; risk analysis and assessment; issues in emerging equity and bond markets.
- 2604695 Financial Risk Management for Pension Plans 2 credits**  
Fundamentals of pension plans; pension plan valuation concepts; pension funding concepts; solvency concepts; asset and liabilities management of pension funds; optimal asset allocation and risk management for pension plans; capital requirements and economic capital.
- 2604696 Practical Corporate Financial Modeling 2 credits**  
**Condition: Prerequisite 2604639**  
Financial planning and assessment of financing needs; cost of capital estimation and capital budgeting; discounted cash flow valuation model; weighted average cost of capital; adjusted present value model; corporate financial decisions and their impact on firm valuation.

\*\*New elective course

\*\*\*For outgoing exchange students only

