


engineering

B.Eng. in Financial Engineering, conferred by KMITL

M.Sc. in Financial Engineering, conferred by NIDA

program structure



The program intends to train a new generation of financial engineers who have a strong foundation in the theories of economics and finance mathematical methods for quantitative data analysis and computer programming and technologies that are useful in finance, and are capable of integrating and utilising all those knowledge and skills in order to solve complex financial problems faced by organisations.

The graduates are expected to be able to skilfully analyse huge amount financial data support the planning of the firm 's investment strategies and the management of risks and be able to design financial tools, products, and innovations that meet the needs of the industry.

The program also aims to train its students to be ready to work confidently in the international environment integrity and professional ethics.

KMITL-NIDA Double Degree Program in Financial Engineering

is a combined Bachelor's and Master' degree program jointly offered by Faculty of Engineering, KMITL, and School of Development Economics, NIDA.

A five-year study plan that enables students to graduate from both programs (and obtain one Bachelor's degree from KMITL and one Master's degree from NIDA) is provided.

Total 143 credits

General Education 30 credits
Major courses 107 credits
Free electives 6 credits

tuition fee

3,700 USD/semester

(29,100 USD for the entire program)

** 120,000 baht/semester (960,000 baht for the entire program)



Financial engineering study plan

Semester 1

Semester 2

Year 1

Introduction to Economics
English for Business studies
Logic and Critical Thinking
Introduction to Calculus Linear Algebra
Introduction to Programming

Technical Writing
Differential Equations
Discrete Mathematics
Object-Oriented Concepts and Programming
Financial Reporting & Analysis
Microeconomic for Financial Analysis

Year 2

Business Communication
Probability and Statistics 1
Numerical Methods
Data Structures and Algorithms
Financial Management
Macroeconomics and Financial System

(GEN-ED Electives) 1
Probability and Statistics 2
Optimisation Methods
Information Systems and Databases
Financial Markets & Institutions
Introduction to Econometrics

Year 3

(GEN-ED Electives) 1
Probability and Statistics 2
Optimisation Methods
Information Systems and Databases
Financial Markets & Institutions
Introduction to Econometrics

(GEN-ED Electives) 2
Machine Learning
Computer and Network Security
Financial Derivatives
International Financial Markets
Financial Risk Management



Year 3

Summer (All Tracks) - Industrial Training

Year 4

(GEN-ED Electives) 3
Financial Engineering Project 1
Seminar 1
Ethics and Law for Financial Engineers
Financial Econometrics and Forecasting
Financial Technology
Financial Engineering Elective 1

Financial Engineering Project 2
Seminar 2
Financial Engineering
Financial Engineering Elective 2
Free Elective 3
Free Elective 4

The students will then enter into the **Master of Science Program in Financial Engineering at NIDA** and spend one more year (or longer if necessary) to complete the program and be awarded with the Master of Science degree in Financial Engineering from NIDA.

Alternatively, after finishing the Bachelor's Program, students may choose not to enter the Master's program and thus obtain only the Bachelor's degree from KMITL.

