FINANCIAL ENGINEERING GRADUATE CREDIT CERTIFICATE PROGRAM

Learning Outcomes

1. Have a clear understanding of the theoretical background and classical assumptions for standard econometric methods, explain their significance, and describe the effects of violations of classical assumptions.

2. Be able to use econometric software to perform an empirical analysis.

3. Be able to examine the essential financial characteristics of derivative securities such as swaps, forward, futures, and options contracts and their roles in managing individual and corporate financial risk, and apply these concepts to integrate a comprehensive risk management approach.

4. Explain the theoretical arbitrage relationships that form the basis for all derivatives pricing.

5. Be able to analyze real-world finance data, apply advanced skills such as Data Analysis tools, Advanced reporting, Monte Carlo simulation, and user-defined functions via spreadsheet and scripting programming language to make financial decisions.