

Table of Curriculum

| Classification | Subject No. | computation code | Subject Name | Lecture: Experiment: Credit | Semester | Note |
|-----------------|-------------|----------------------------------|--|-----------------------------|----------------------------|---------------------------|
| Common Core | CC511 | 11.511 | Probability and Statistics | 2:3:3 | Spring and Fall | Sub.: BIZ500 |
| Major Mandatory | BAF502 | F5.502 | Financial Accounting | 3:0:3 | Spring and Summer and Fall | |
| | BAF504 | F5.504 | Investment Analysis | 3:0:3 | Spring | |
| | BAF508 | F5.508 | Stochastic Calculus for Finance | 1.5:0:1.5 | Spring | |
| | BAF510 | F5.510 | Analysis of Fixed Income Securities | 1.5:0:1.5 | Spring or Fall | |
| | BAF512 | F5.512 | Applications in Stochastic Calculus for Finance | 1.5:0:1.5 | Spring | Prerequisite: BAF508 |
| | BAF513 | F5.513 | Computer Programming for Financial Engineering I | 1.5:3:1.5 | Spring or Fall | |
| | BAF514 | F5.514 | Computer Programming for Financial Engineering II | 1.5:3:1.5 | Fall | |
| | BAF515 | F5.515 | Computer Programming for Financial Engineering III | 2:3:3 | Spring or Fall | |
| | BAF516 | F5.516 | Computational Finance | 3:0:3 | Fall | |
| | BAF517 | F5.517 | Research Methods in Financial Engineering I | 1.5:0:1.5 | Spring and Fall | |
| | BAF518 | F5.518 | Research Methods in Financial Engineering II | 1.5:0:1.5 | Spring and Fall | Prerequisite: BAF517 |
| Elective | BAF603 | F5.603 | Futures and Options | 3:0:3 | Spring | |
| | BAF611 | F5.611 | Venture Capital Investments | 1.5:0:1.5 | Spring or Summer or Fall | |
| | BAF612 | F5.612 | Private Equity Investments | 1.5:0:1.5 | Spring or Summer or Fall | |
| | BAF613 | F5.613 | Corporate Governance | 1.5:0:1.5 | Spring or Fall | |
| | BAF621 | F5.621 | International Finance | 1.5:0:1.5 | Spring or Fall | |
| | BAF623 | F5.623 | Foreign Exchange Markets and Foreign Exchange Policy | 1.5:0:1.5 | Spring or Fall | |
| | BAF624 | F5.624 | Principles of Insurance and Risk | 1.5:0:1.5 | Spring or Fall | |
| | BAF626 | F5.626 | Modelling in Financial Engineering | 1.5:0:1.5 | Spring | Prerequisite: BAF511 |
| | BAF627 | F5.627 | Portfolio Optimization and Management | 1.5:0:1.5 | Spring | Prerequisite: BAF509 |
| | BAF628 | F5.628 | Term Structure of Interest Rates | 1.5:0:1.5 | Spring | |
| | BAF630 | F5.630 | Analysis of Economic Indicators and Forecasting | 1.5:0:1.5 | Fall | |
| | BAF631 | F5.631 | Estimation of Financial Engineering Models | 1.5:0:1.5 | Fall | |
| | BAF632 | F5.632 | Financial Securities and Their Design | 1.5:0:1.5 | Fall | |
| | BAF633 | F5.633 | Simulation Methods for Finance | 1.5:0:1.5 | Fall | Prerequisite: BAF508, 511 |
| | BAF634 | F5.634 | Advanced Econometric Analysis for Finance | 1.5:0:1.5 | Fall | |
| | BAF635 | F5.635 | Real Estate Investments | 1.5:0:1.5 | Fall | |
| | BAF636 | F5.636 | Interest Rate Derivatives | 1.5:0:1.5 | Fall | Prerequisite: BAF628 |
| | BAF637 | F5.637 | Management of Derivative Positions | 1.5:0:1.5 | Fall | Prerequisite: BAF629 |
| | BAF638 | F5.638 | Operational Risk Management | 1.5:0:1.5 | Fall | |
| | BAF639 | F5.639 | Security Analysis and Trading Strategies | 1.5:0:1.5 | Fall | |
| BAF640 | F5.640 | Financial Market Risk Management | 1.5:0:1.5 | Fall | Prerequisite: | |

| Classification | Subject No. | computation code | Subject Name | Lecture: Experiment: Credit | Semester | Note |
|----------------|-------------|------------------|--|-----------------------------|--------------------------|--------------------------|
| | | | | | | BAF511 |
| | BAF641 | F5.641 | Numerical Methods in Finance | 1.5:0:1.5 | Fall | Prerequisite: BAF514 |
| | BAF642 | F5.642 | Financial Time Series Analysis | 1.5:0:1.5 | Fall | |
| | BAF643 | F5.643 | Behavioral Finance | 1.5:0:1.5 | Fall | |
| | BAF644 | F5.644 | Credit Risk Modeling and Credit Derivatives | 1.5:0:1.5 | Fall | Prerequisite: BAF628 |
| | BAF645 | F5.645 | Derivatives Trading Strategies | 1.5:0:1.5 | Fall | Prerequisite: BAF629 |
| | BAF646 | F5.646 | Statistical Arbitrage | 1.5:0:1.5 | Fall | |
| | BAF647 | F5.647 | Artificial Intelligence and Machine Learning for Financial Engineering | 3:0:3(5) | Fall | |
| | BAF648 | F5.648 | Mathematics for Insurance | 1.5:0:1.5 | Fall | |
| | BAF649 | F5.649 | Advanced Financial Time Series Analysis | 1.5:0:1.5 | Fall | Prerequisite: BAF642 |
| | BAF650 | F5.650 | Financial Market Microstructure | 1.5:0:1.5 | Fall | |
| | BAF651 | F5.651 | Mortgage Backed Securities & Other Structured Securities | 1.5:0:1.5 | Fall | Prerequisite: BAF510 |
| | BAF652 | F5.652 | Contemporary Topics in Derivatives | 1.5:0:1.5 | Fall | Prerequisite: BAF629 |
| | BAF653 | F5.653 | Algorithmic Trading and Quantitative Trading | 1.5:0:1.5 | Fall | |
| | BAF654 | F5.654 | Alternative Investment | 1.5:0:1.5 | Fall | |
| | BAF655 | F5.655 | Fixed Income Portfolio Management | 1.5:0:1.5 | Fall | Prerequisite: BAF510,627 |
| | BAF656 | F5.656 | Commodity Trading | 1.5:0:1.5 | Fall | |
| | BAF657 | F5.657 | Introduction to FinTech | 1.5:0:1.5 | Spring or Fall | |
| | BAF658 | F5.658 | Financial Information and Security Design | 1.5:0:1.5 | Fall | |
| | BAF659 | F5.659 | Cross-Sectional Financial Data Analysis | 1.5:0:1.5 | Fall | |
| | BAF660 | F5.660 | Financial Data Analysis with Big Data | 1.5:0:1.5 | Fall | |
| | BAF661 | F5.661 | Big Data Analysis on Credit Risks | 1.5:0:1.5 | Fall | |
| | BAF662 | F5.662 | Foreign Currency Investment | 1.5:0:1.5 | Fall | |
| | BAF663 | F5.663 | Estimation of Asset Pricing Models | 1.5:0:1.5 | Fall | |
| | BAF679 | F5.679 | Quant and Factor Investment Strategy | 0.125034 7 | Spring | |
| | BAF687 | F5.687 | Cases in Asset Management | 1.5:0:1.5 | Fall | |
| | BAF688 | F5.688 | Cases Studies on Risk Management | 1.5:0:1.5 | Fall | |
| | BAF805 | F5.805 | Special Topics in Financial Engineering | 1.5:0:1.5 | Spring or Summer or Fall | |
| | BAF811 | F5.811 | Distinguished Lectures in Asset Management | 1.5:0:1.5 | Fall | |
| | BAF812 | F5.812 | Distinguished Lectures in Financial Engineering | 1.5:0:1.5 | Fall | |
| | BIZ537 | G1.537 | Green Business Theory | 3:0:3 | Spring or Fall | |
| | BIZ538 | G1.538 | Green Technologies and Green Industries | 3:0:3 | Spring or Fall | |
| | BIZ637 | G1.637 | Studies on Green Growth Strategy | 3:0:3 | Spring or Fall | |
| | BIZ643 | G1.643 | Green Firm Valuation and Social Finance | 1.5:0:1.5 | Spring or Fall | |
| Research | BAF960 | F5.960 | Thesis for Graduate Students | 0:0:9 | Spring and Fall | |
| | BIZ950 | G1.950 | Sustainability Projects | 2:3:3 | Spring or Fall | |
| | BIZ951 | G1.951 | Green Finance Projects | 2:3:3 | Spring or Fall | |

※ Prerequisite: Classification, course title could be different according requirements year.