◙ Digital Finance MBA Course Description

Subject No.	Subject Name	Lecture: Experiment: Credit
BIZ500	Management Statistical Analysis	2:3:3

This course is designed to provide the framework for statistical analysis to study management. Topics such as statistical inference, hypothesis testing, and regression analysis will be discussed.

BAF501	Corporate Finance	3:0:3

This course is designed to help you develop the conceptual foundations as well as the basic tools for making optimal financial decisions. The issues addressed in this course include time value of money, discounted cash flows analysis, relation between risk and return, cost of capital, capital budgeting analysis, capital structure decisions, dividend policy, and options.

BAF502	Financial Accounting	3:0:3

This course examines basic concepts of financial accounting. This course provides a basic framework to understand and interpret the financial statement from the perspective users. It also provides overview of the basic financial statements - income statement, balance sheets, and cash flow statement, and the detailed elements of those statements.

BAF504	Investment Analysis	3:0:3

This course is designed to help students better understand the basic principles behind investment theories and be exposed to various empirical evidence on investments. The topics to be covered include introduction to financial markets, asset allocation, various empirical asset pricing models, performance evaluation, and various equity investment strategies.

BAF507	Financial Databases	1.5:0:1.5

This course introduces various financial databases that are used to analyze various financial issues. The databases covered include Bloomberg, Datastream, FnGuide's DataGuide, Reuters, CRSP and others.

BAF500	Ethics and Social Responsibility of Finance	1.5:0:1.5

This course is intended to nurture sound financier/financial managers who study and understand both ethics and social responsibility of finance industry should be important and educated for future development and growth of the industry.

BAF521	Digital Finance Programming	3:0:3

The goal is to learn the basics of R and Python. In particular, the goal is to be able to perform statistical programming, data manipulation, and data visualization using R and Phython.

BAF522	Financial Data Analytics	3:0:3

This is a subject to learn basic skills related to data science. For example, students will learn data science concepts and skills, as well as data collection, integration, data exploration, predictive models, explanatory models, and evaluation.

BAF523	Financial Data Mining	1.5:0:1.5

The goal is to learn about the main theories of financial data mining and the latest related research. Students will learn how to generate key information through financial data mining.

BAF524	Fintech Startup and New Business Development	1.5:0:1.5

This course is a course in which students prepare for a fintech startup by establishing a mission, reviewing accounting and legal issues, and creating a business model. This is a subject that applies the theories learned at school and the practical results of various subjects to actual work.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF525	**Digital Finance Case Analysis and Business Model Development**	**1.5:0:1.5**

This course is a process in which students develop a practical digital financial business model. To this end, we propose a new business model through case analysis of existing business models. This is a course that applies existing theories and practice results from various courses to actual work.

BAF670	**Artificial Intelligence and Recommendation System**	**3:0:3**

The goal of this class is to learn about various artificial intelligence algorithms and recommendation systems. And ultimately, the goal is to learn and discuss how these artificial intelligence algorithms and recommendation systems can be applied to the financial market.

BAF671	**Startup and Law**	**3:0:3**

The goal of this course is to guide you on the path to successful startups by understanding the legal and institutional procedures and corporate management precautions that you need to know when starting a business based on innovative technology.

BAF672	**Digital Business Strategy**	**3:0:3**

This course teaches electronic, mobile and AI business phenomena. This course will discuss two opposing perspectives on market power: how dominant providers can expand their positions and respond to threats, and how startups can advance.

BAF673	**Algorithmic Trading and High Frequency Finance**	**3:0:3**

This course introduces the types and methodologies of high-frequency data, then uses the methodology to develop factor models and asset allocation. Create algorithmic trading strategies in various asset classes such as futures and options.

BAF674	**Cloud Computing and Unstructured Data Analysis**	**3:0:3**

This subject aims to learn the basics of cloud computing and, in particular, how to analyze big data using cloud computing. Additionally, you will learn how various techniques commonly used in structured data can be used when analyzing unstructured data.

BAF675	**Financial Big Data Analysis**	**3:0:3**

This subject aims to learn various technologies related to big data. In particular, the goal is to learn big data statistical analysis methodology and machine learning through R and Python, and implement these analysis tools through cloud computing tools such as Hadoop (Spark 2.0).

BAF676	**Blockchain Technology and Application Service**	**3:0:3**

This subject aims to provide a basic understanding of blockchain technology and learn how to utilize it. Focusing on recent blockchain technology for digital assets, we study application cases such as DeFi, NFT, and Metabus.

BIZ610	**Venture Firm and Venture Capital**	**3:0:3**

This course is about understanding the market for financing new entrepreneurial ventures mainly through venture capital. The course is appropriate for students interested in gaining a broader view of the financing landscape for young innovative startups. Also, invited venture capitalists and entrepreneurs will discuss their experiences and issues they faced in practice.

BAF677	**Fintech M&A**	**3:0:3**

This course teaches business valuation, securities pricing, corporate finance transactions, and mergers and acquisitions. In particular, this course addresses issues related to Fintech M&A.

BAF678	**Management of Derivatives and Trading Strategy**	**3:0:3**

Through this course, you will learn not only various practical trading strategies based on the overall theory of futures, options, and swaps, which are the basic units of derivatives, but also the theory of the dynamic hedging process and a complete hedging strategy as an ability to produce structured products. We seek to improve understanding of various elements for speaking fluently.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF679	**Quant and Factor Investment Strategy**	3:0:3

This course introduces quantitative strategies and factor strategies, which are investment strategies currently used in the financial market. Through the knowledge learned in class, we aim to implement our own strategies and develop capabilities to implement them in the actual market. In addition, it shows how risk management should be carried out in parallel when executing a strategy, and presents examples of success and failure.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF680	**Pension Fund Management Strategy and Performance Evaluation**	3:0:3

The National Pension Service's asset management scale is the largest in the world, and the retirement pension's asset management scale is growing every year. Through this course, students learn various investment strategies and performance evaluation techniques to systematically manage such large assets.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF806	**Special Topics in Digital Finance**	1.5:0:1.5

This is a special course for new topics in digital finance area with special interest and potential for development as a regular course.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF807	**Special Topics in Fintech**	1.5:0:1.5

This is a special course for new topics in fintech area with special interest and potential for development as a regular course.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF808	**Advanced Topics in Digital Finance**	3:0:3

This is a special course for new topics in digital fiance area with the latest trends in digital finance or timely research and advanced practical topics and potential for development as a regular course.

Subject No.	Subject Name	Lecture: Experiment: Credit
BAF968	**Global Finance Field Research**	0:6:1.5

In order to develop global business capabilities and improve international competitiveness, conducting a one-week overseas field study to provide learning opportunities in line with global financial and fintech industry trends. Field training conducted in Singapore, a powerhouse in the fintech and ICT industries.