

# EXECUTIVE MS- HKUST (XGF1-GB)

## XGF1-GB 8111 Module 1A (3 Credits)

*Typically offered occasionally*

The aim of this course is to provide students with a comprehensive understanding of how the financing and investment decisions made by firms and their managers impact the overall value of the company. This foundational course lays the groundwork for more advanced corporate finance topics, such as the Applied Corporate Finance and Valuation.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8112 Module 1B (3 Credits)

*Typically offered occasionally*

This course analyzes investments through the lens of risk, focusing on key concepts such as risk definition, diversification, hedging, leverage, and risk premium within the contexts of bonds, stocks, and derivatives. It serves as an introduction to capital markets, covering essential concepts that are crucial for anyone pursuing a career in finance, despite their complexity and the technical tools sometimes required. This course lays the groundwork for more advanced studies in the field.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8121 Module 2A (3 Credits)

*Typically offered occasionally*

The course delves into the applications of artificial intelligence in finance, covering key methodologies such as machine learning, natural language processing, and generative models. Topics include AI's impact on investment strategies, financial management, and business analytics. Students will critically assess where these tools add value, their limitations, and the reasons behind them.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8122 Hong Kong: Module 2B (3 Credits)

*Typically offered occasionally*

This course explores derivatives markets, focusing on their structure, valuation, and strategic applications. It covers the equities, foreign exchange and commodities markets. The key derivatives instruments discussed include Forwards, Futures, ETFs and Options. Readings, cases and examples include the 2008 financial crisis, the 1987 Crash, LTCM 1998 Crisis, Covid 19 turmoil, Metallgesellschaft, etc. This course deals with the structure of derivatives markets, pricing of futures and option contracts and hedging with these instruments. It includes topics like: Short Selling, Value-at-Risk, Exotic Options, Bitcoin Futures, Volatility Derivatives (VIX) and Trading Volatility.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8131 Module 3A (3 Credits)

*Typically offered occasionally*

This course introduces students to the macroeconomic forces that influence global financial markets. The course covers the basic theories of short-run macroeconomics, using the IS-LM equilibrium framework to analyze the major markets that impact the macroeconomy - labor, output, money, and foreign exchange. This framework is then applied to understand the effects of fiscal and monetary policies.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8132 Module 3B (3 Credits)

*Typically offered occasionally*

The course explores the profound impacts of climate change on financial markets and the broader economy. It examines the interplay between climate change, firms, financial markets, energy markets, regulators, and policy makers. Students will analyze these dynamics using economic frameworks to gain a systematic understanding of the relationship between climate change and the economy.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8141 Module 4A (3 Credits)

*Typically offered occasionally*

This course focuses on the valuation of companies and the creation of shareholder value by looking at the interplay of corporate strategy and finance. The course exposes participants to valuation frameworks that can readily be applied to improve business and strategic decision-making.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8142 Hong Kong: Module 2C (1.5 Credits)

*Typically offered occasionally*

A growing strand of research suggests that the standard economic paradigm - rational investors in an efficient market - does not adequately describe behavior in financial markets. Behavioral finance combines the latest findings of behavioral and cognitive psychological theory with conventional economics and finance to provide alternative explanations of financial market behavior. We will examine how psychology of decision making under conditions of risk and uncertainty affects the traditional paradigm, while paying attention to practical applications for portfolio and investment management.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8151 Module 4B (3 Credits)

*Typically offered occasionally*

This course focuses on asset allocation and behavioral finance. It builds on the Foundations of Investments course by delving into advanced asset allocation concepts and methodologies. Students will explore both theoretical frameworks and practical applications, enhancing their ability to make informed investment decisions across various classes and time horizons. Behavioral finance aims to integrate insights from behavioral and cognitive psychology with core principles of traditional economics and finance, offering alternative explanations for investor behavior. This course will also explore how the psychology of decision-making under risk and uncertainty challenges conventional investment paradigms, while also examining the practical implications for portfolio management and investment strategies.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

## XGF1-GB 8161 Module 5A (3 Credits)

*Typically offered occasionally*

This course is divided into three parts. The first part provides an overview of U.S. fixed income markets, market participants, and current issues. The second part teaches the analytic tools required for pricing, hedging, and investing in fixed income securities. The third part dives into selected securities and markets, namely, repo; forwards and futures; swaps; corporate bonds, loans, and credit default swaps; and mortgages and mortgage-backed securities.

**Grading:** Grad Stern Int'l No GPA

**Repeatable for additional credit:** No

**XGF1-GB 8162 Module 5B (3 Credits)***Typically offered occasionally*

As the final module before the integrative project, this course offers students an opportunity to take their learnings from the year and culminate them in a course that focuses on a variety of key topics in global finance. Students attend sessions with multiple faculty members who cover areas of risk management ranging from credit risk and market risk to geopolitical risk in addition to topics on fintech and digital currency.

**Grading:** Grad Stern Int'l No GPA**Repeatable for additional credit:** No**XGF1-GB 8163 New York: Module 5C (1.5 Credits)***Typically offered occasionally*

This session provides an overview of credit derivatives: 1. Definitions of credit default swaps (CDS), total return swaps, basket swaps, credit link notes, credit spread options, and collateralized debt obligations (CDO) 2. Introduction to the pricing and hedging of credit instruments 3. Hazard, recovery rates and correlation across underlying credits 4. The intuition behind the pricing and hedging of tranches of CDO structures with examples 5. The effect of credit derivatives trading on the underlying firms 6. Sovereign and index CDS contracts

**Grading:** Grad Stern Int'l No GPA**Repeatable for additional credit:** No**XGF1-GB 8171 Module 6 (6 Credits)***Typically offered occasionally*

The Integrative Project is the capstone of the program. The objectives are to allow students to apply the financial skills assimilated throughout the program, to use critical thinking (in particular in the process of selecting a suitable topic), to apply effective communication and teamwork skills through the group work, and to showcase their presentation skills in communicating efficiently the result of their work.

**Grading:** Grad Stern Int'l No GPA**Repeatable for additional credit:** No