Risk Management
10 Elective Hours

This specialization examines the full spectrum of risk management in today's business environment. Topics include:

- Derivative securities analyses along with their uses in investments, banking, and portfolio management
- Financial Engineering expanding on concepts related to measuring and managing risk
- Developing principles governing valuation of fixed-income securities with special attention to interest rate risk
- Providing an integrated perspective on topics in international financial markets and related securities.

**Required Courses:**

**FIN 5322 | Derivative Securities and Markets** (prerequisite FIN 5302)

Derivative securities, such as futures, forwards, option, and swaps are studied and analyzed along with their uses in investments, banking, portfolio management, and risk management by non-financial businesses. We will study how futures, swap, and option contracts are constructed, how they are valued and how they are used for speculation, hedging, and risk management. Particular attention is paid to energy derivatives and especially natural gas derivatives.

**FIN 5332 | Risk Management and Financial Engineering** (prerequisite FIN 5322)

The Risk Management course focuses on defining, measuring, and managing risk in financial institutions as well as non-financial corporations. The course introduces market (such as price and interest rate) risk, credit (such as default) risk, liquidity risk, and operational risk. The course covers several major techniques of risk management such as hedging with derivatives, calculating Value-at-Risk, stress testing, scenario analysis, and risk allocation. The course also covers regulation of risk management activities in financial institutions and discusses some of the reasons of the financial crisis of 2007-2008 as well as some corporate failures at risk management.

**FIN 5352 | International Financial Management** (prerequisite FIN 5302/5312)

This course will provide an integrated perspective on the topics of foreign currency and exchange rates, international financial linkages, international financial markets, and investment, financing and risk management in a global context. The first half of the course develops the analytical framework required for understanding the interactions between exchange rates, and cross-border trade and capital flows, inflation, interest rates, economic growth, and government policy. This framework will be used to study exchange rate systems and policies, and their implications, especially in the context of
recent exchange rate developments. Related topics such as exchange rate determination and forecasting will also be discussed. The second half of the course examines international financial markets, and the opportunities they present for achieving risk management, financing, and investment objectives. The principal focus will be on financial instruments used for these purposes in international financial markets.

And Any TWO of the Following:

FIN 5342 │ Advanced Corporate Finance (prerequisite FIN 5312)

This course is intended for students aspiring to careers in financial management in corporations, banks and other financial institutions. It is designed to strengthen the corporate finance framework developed in 5312 (Corporate Finance) and extend it into the realm of real world applications. The course will cover a broad range of topics that are relevant to the corporate financial management function, including advanced capital project evaluation, financing, dividends and other corporate financial decisions, corporate risk management, and mergers, acquisitions and corporate restructuring. While the course will be rigorous and solidly grounded in the conceptual aspects of corporate finance, including current research. The course will provide a thoroughly applied perspective on the topics covered.

FIN 5362 │ Fixed Income Fund Management

The aim of this course is to develop an intellectual and practical understanding of the principles governing the valuation of fixed income securities and their derivatives, the main problems and issues relevant in the management of interest rate risk, and the organization and structure of debt markets, all from the perspective of fixed income fund management. The course is at the cutting edge of both theory and practice. Students in the class also manage a $5 million fixed income fund, thanks to an educational project of the Bank of Oklahoma. This sum is invested in accordance with the recommendations of this class.

FIN 5162 │ Energy Assets & Commodities: Financial Instruments, Pricing & Trading (prerequisite FIN 5322)

Provides a comprehensive and in-depth review of the market for energy assets and commodities: including trading platforms, pricing issues, forecasting, role and linkage with associated futures, forwards and options contracts, study of "basis" and spreads, and hedging strategies. The course will be anchored solidly within a theoretical conceptual framework and be supported with relevant case studies.