

Applied Finance Certificate

2022-2023 Course Listing

Course Name	Credits	Course Description
Required Core Classes – 6 credits		
BUS 601 Quantitative Business Analysis	2	<p>In BUS 601, students learn about the quantitative research process, data interpretation and translation, and model selection and analysis. Student takeaways include:</p> <ul style="list-style-type: none"> • A comprehensive decision matrix for model/test identification • Fundamentals of empirical tests and interpretation • The “what next” of statistical tests and outcomes • Using your findings to make decisions and tell stories that enable social responsibility and sustainability
BUS 640 Financial Principles and Practice	2	<p>In BUS640, students will look at how organizations make decisions regarding resources, with a focus on the financial component of how they create value for their owners and stakeholders. The purpose is to introduce students to the basics of financial decision-making in organizations and to help them develop ways to apply these concepts in problem solving. Many of these principles can and should be applied to decision-making, not only in corporations but all organizations and even in one’s personal life. The course builds from a foundation of basic accounting and explores valuation concepts, capital budgeting, and selected advanced topics such as risk management. Course objectives include:</p> <ul style="list-style-type: none"> • Evaluate the financial health of the firm and strategies it employs to create shareholder value. • Apply basic Time Value of Money (TVM) concepts. • Value equity and debt securities utilizing discounted cash flow models. • Identify the cash flow to stockholders and cash flow to bondholders associated with a new project. • Calculate an estimate of the cost of capital for a publicly held firm. • Evaluate the profitability of a capital project based on discounted cash flow analysis. • Describe option related features of capital projects.
BUS 641 Financial Markets and Investments	2	<p>In BUS641, students learn about operation of financial markets, techniques for security valuation and portfolio management. Student takeaways include:</p> <ul style="list-style-type: none"> • Analyzing and evaluating active and passive portfolios • Understanding the structure and valuation of stocks, bonds, mutual funds, exchange traded funds and options. • Measuring risk and return in investments • Examining and analyzing company’s financial statements

Course Name	Credits	Course Description
Elective Courses – Choose 5 credits from the following courses		
FIN 602 Options and Futures	1	In FIN 602, students learn about introduction to option pricing concepts, tools, and applications. Student takeaways include: <ul style="list-style-type: none"> • foundations and mechanics of derivatives markets • types of available derivative investments • most popular and some advanced options strategies • an introduction to determination of derivative product values including the Black-Scholes model and binomial tree model
FIN 605 Enterprise Valuation	2	In FIN 605, students will learn several quantitative approaches to valuing companies and projects. These valuation techniques are useful both to managers inside of firms in corporate finance settings, as well as to investors and financial analysts outside of firms trying to evaluate whether specific stocks are undervalued. Student takeaways include: <ul style="list-style-type: none"> • An understanding of how to think about financial statements from a valuation perspective. • An understanding of how to make reasonable forecasts of firms' future cash flows. • An understanding of how to use discounted cash flow and multiples approaches in valuation. • An understanding of how financial analysts create their value estimates.
FIN 606 Fundamentals of International Finance	1	FIN606 presents the economic and institutional backdrop that underlies currency markets and international trade. Topics covered include financial globalization, balance of payments accounting, international monetary systems, exchange rate behavior and determination, and international parity conditions. At the end of the course, students will be able to: <ul style="list-style-type: none"> • Discuss the causes and consequences of globalization and international transactions account balances • Analyze arbitrage opportunities, real world exchange rate changes, and international investment returns
FIN 609 Fundamentals of Personal Finance	1	FIN609 addresses issues dealing with the financial planning process which involve formulating, implementing and monitoring multifunctional decisions that enable an individual or family to achieve financial goals. Topics of focus: <ul style="list-style-type: none"> • Time Value of Money • Personal financial statements and analysis of current financial position • Retirement plans • Government sponsored benefits • Education planning • Economic factors affecting financial planning decisions • The financial planning process

FIN 613 Alternative Investments	2	<p>In FIN 613, students learn how alternative investments can affect the risk and return characteristics of portfolios. Examples of alternative investments covered in the course include hedge funds, ETFs, private equity, futures, commodities, and real estate. Student takeaways include:</p> <ul style="list-style-type: none"> • An understanding of the risk and return characteristics of traditional portfolios created using stocks and bonds. • An understanding of how adding alternative investments can improve portfolio outcomes. • An understanding of how the different alternative investments tend to perform over time as the economy goes through periods of growth and recession.
FIN 650 Behavioral Finance	2	<p>In FIN650, students learn about how human emotions and psychological factors influence financial decision-making and financial markets. Student takeaways include:</p> <ul style="list-style-type: none"> • Understanding differences between traditional and behavioral schools of thought\ • Analyzing behavioral patterns in asset returns that relate to mood, sentiment and anomalies • Examining asset price bubbles • Examining heuristics, cognitive errors, and emotional biases that affect financial decisions
REL 602 Real Estate Finance and Investments	2	<p>REL602 provides an introduction to various aspects of real estate finance and investment. The course covers a broad spectrum of real estate principles and terms including legal concepts, financing methods, calculations and decisions, valuation and investment. This course is an excellent elective for all students as it provides practical and important material relevant to the students' personal and professional lives.</p> <ul style="list-style-type: none"> • Explain the nature and basic characteristics of real estate and its markets. • Recognize and apply time value of money concepts as they relate to market value, borrower decisions and investment analysis. • Utilize and apply the appraisal process to determine market value. • Demonstrate understanding of basic real estate financing methods such as applicable laws, contracts and financing decisions.

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