



Brief course description- Course Plan Development and Updating Procedures Financial Technology Department	QF05/0409-3.0E
--	-----------------------

Faculty	Business	Academic Department	Financial Technology	Number of the course plan (2021-2022)
Number of major requirement courses	69 credit hours	Date of plan approval	23/8/2022	

This form is just for the mandatory requirement courses

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510210	3	Financial management 1	-
<p>This course covers the concept of finance and financial management, types of major business organizations, their characteristics, the main goal of financial management, and the definition of common stocks, bonds, and preferred stocks. It introduces students to the main financial statements (income statement, balance sheet, and cash flow statement) and methods of analyzing them using financial ratios. The course also explores the concepts of return and risk, investor classification based on risk, and statistical measurement methods using range, variance, standard deviation, and coefficient of variation. It explains the concept of the time value of money, the calculation of future and present values, and interest rates, whether simple or compound. Finally, it covers the concept of financial markets and their types (primary, secondary, cash, and capital markets, etc.).</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510153	3	Macroeconomic	Microeconomics
<p>This course covers the principles of economics, market dynamics, supply and demand mechanisms, calculations of Gross Domestic Product (GDP), aggregate demand and supply, consumption and savings theories, investment theory, equilibrium income, and the simple multiplier model. It explores the role of government in the multiplier process, the open economy multiplier, inflation and unemployment, money and banking, fiscal policy, monetary policy, international trade, and economic development.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510312	3	Corporate finance	Financial Management 2
<p>This course delves into capital investments in uncertain future conditions, financing structure, and theories of capital structure. It covers policies and theories related to dividend distribution, bankruptcy, and corporate liquidation. Additionally, it explores the dynamics of corporate mergers.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510321	3	Bank Management and Risk	Financial management 2
<p>This course covers financial and banking concepts, the functions and objectives of banks, their economic importance, and topics related to the financial positions of these institutions. It will explore the sources of their funds and how they use them for investment in various types of assets that suit the nature of the resources and the intended use, balancing the bank's liquidity and profitability.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510322	3	Islamic Banks	Bank Management and Risk
<p>This course covers the definition of Islamic banks, the emergence of Islamic banks, types of Islamic banks, types of investments in Islamic banks, analysis of Islamic banks' budgets, analysis of Islamic banks' risks, supervision of Islamic banks, and case studies.</p>			
Course	Credit	Title of the course	Prerequisite-co-requisite



Brief course description- Course Plan Development and Updating Procedures
Financial Technology Department

QF05/0409-3.0E

number	hours		
0510443	3	Derivatives and Risk Management	Portfolio Management
This course covers financial engineering and financial derivatives in terms of their concepts and types, as well as the mechanisms of investment in them and their role in risk management. Derivatives include options contracts, futures contracts, and swaps.			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510433	3	Portfolio Management	Digital Financial and Banking Services
This course covers the general concept of investment portfolios, returns and risks, risk calculation, investment companies, classification of investment portfolios, evaluation of portfolio management, forming a commercial bank portfolio, equity diversification, and loan portfolio diversification.			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510413	3	Financial Analysis in english	Financial Management 2
This course introduces and develops a framework for financial statement analysis and valuation using financial statement data. This involves the identification of key components of effective financial statement analysis: Business strategy analysis; accounting analysis; financial analysis; and prospective analysis. The next part of the course raises the issue of how business analysis and the valuation framework can be applied to a variety of decision contexts including security analysis, credit analysis, corporate financing policies analysis, merger and acquisition analysis, and governance			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510323		Financial Markets and Institutions	Financial Management 2
This course covers the role of financial markets and institutions, interest rate determinants, the relationship between interest rates and securities prices, interest rate structure, securities markets: money markets, bond markets, stock markets, commercial banks and financial institutions as savings incubators, money companies, and investment funds.			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510442		Field Training	After completing 90 credit hours by the student
This course aims to provide students with knowledge and practical skills related to researching, classifying, and organizing information, as well as acquiring knowledge about financial systems in investment, financing, and the deployment of funds by the company, bank, or financial institution where they are undergoing training. It prepares students to apply the knowledge and information acquired during their academic studies from a theoretical perspective to a practical and applied perspective, enabling them to efficiently and accurately accomplish their required tasks in the real-world work environment.			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510440	3	The Graduation Research in Financial Technology and risk management	After completing 90 credit hours by the student
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510522	3	Fundamentals of Financial Technology	---
This course explores the Financial Technology (FinTech) environment, a dynamic and fast-paced world			



where the development of fast and efficient buying and selling order processing systems and order execution systems (clearing and settlement) is crucial. The course aims to introduce concepts related to financial technology and its importance. It covers the reasons why financial institutions, FinTech companies, and others turn to adopting financial technology. It also examines the benefits derived from adopting financial technology as an alternative to traditional financial methods in various financial areas. The course identifies the role played by leading companies in the FinTech sector, challenging traditional approaches. It outlines key areas of financial technology, including payment systems, digital finance, alternative finance, digital currencies, and more. Additionally, the course covers technologies driving financial technology such as Blockchain, Artificial Intelligence (AI), and Big Data. It explores opportunities and challenges in the FinTech field, the role of creativity and innovation in financial domains, and how financial technology impacts economies, markets, companies, individuals, and capital markets. The course sheds light on the risks associated with using financial technology and how to mitigate them.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510330	3	Information Systems Security	Digital Financial and Banking Services

This course aims to establish the fundamental principles related to the security and protection of information systems and computer security applied in the field of information technology. It covers methods and techniques related to prevention, protection, detection, human factors, technical considerations, administrative processes, and future considerations to ensure the security and protection of information technology systems. The course also involves understanding malware, antivirus programs, and their types, infrastructure and personnel security, as well as risk analysis and software risk management. It includes identifying and testing vulnerabilities, writing secure policies, implementing various controls, and conducting secure audits.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510533	3	Business Models and Innovation in Financial Technology	Digital Financial and Banking Services

This course aims to describe electronic entrepreneurship and its characteristics, with a focus on the impact and role of entrepreneurship and innovation in the financial services industry. It explores the significant radical changes occurring in business entities in various financial fields, where entrepreneurship and innovation serve as their foundation. These changes involve transitioning from traditional financial methods to modern financial approaches in performing functions and activities carried out by banks and financial institutions. This includes payment systems, foreign exchange, targeted lending to individuals, small and medium-sized enterprises, large corporations, and other related activities and functions of insurance companies. The course emphasizes the importance of entrepreneurial and innovative applications in the field of financial technology in addressing market shortcomings, meeting and enhancing customer needs in various financial services and products. It enables students to apply entrepreneurial and innovative thinking through the launch of projects based on financial technology and the application of smart investment techniques.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510444		Digital Transformation Management	Fundamentals of Financial Technology

This course provides an overview of how leading companies plan and execute digital transformation engagements with CEOs and Chief Digital Officers of prominent corporations such as Bulgari, Deutsche Bank, Henkel, Lancôme, L'Oréal, Unilever, Thales, and others. It explores lessons learned and



roadmaps for successful implementation through executive interviews and case studies on the digitization of small and medium-sized enterprises. It delves into advanced academic research on business models, organizational capabilities, and performance effects of digital transformation tools. The course provides insights on overcoming internal resistance, building digital capabilities, aligning the organization, developing the ecosystem, and creating customer value to implement digital strategies that increase profits. Digital transformation management is unique in its approach, combining rigorous academic theory with practical insights and contributions from companies that, according to top academic thinkers, are at the forefront of effectively navigating the digital shift. Recommended for practitioners looking to implement digital strategies within their organizations, as well as academics and graduate students studying digital transformation, strategy, and marketing.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510441	3	Data Science Applications in Finance	Fundamentals of Financial Technology

This course aims to identify the fundamental concepts and techniques related to databases such as computer networks and the internet and their applications. It covers the qualitative characteristics of databases, introduces the basics of database structure, explores the physical components of the system, and focuses on database management systems in the field of financial technology. The course also covers principles and methodologies for designing databases, database models, database development techniques, as well as identifying various inputs and operating systems and how to operate suitable databases.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510432	3	Financial Modeling	Introduction to Management Information Systems

This course aims to enable effective and efficient financial decision-making within businesses through the process of preparing and constructing effective financial models. It covers the necessary steps for preparing and building financial models, the financial data flowchart that enhances the financial modeling process, and the use of input tables, nested tables, and Excel tools for the analysis and understanding of financial data to aid in the creation of financial models. The course includes practical applications using suitable software such as Microsoft Excel and others. It involves using basic financial modeling techniques and working on developing comprehensive financial and investment models to support financial and investment decisions within business entities.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0506335	3	Programming Basics	Introduction to Management Information Systems

This course aims to introduce the concept of algorithms, their types, methods of expressing algorithms, and programming in the C++ language. It covers an overview of C++, data types, operators, control structures (conditional and iterative structures), arrays (single-dimensional and multi-dimensional), and functions.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510316	3	Small Business finance	Financial Management 1

The nature of small projects and their characteristics and life cycle, financial and non-financial problems, the main risks they face, the role of banks in financing small projects, types of loans and guarantees, reasons for the failure of these projects, and how to address them.



Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510532	3	Financial Data Management and Applications	Macroeconomics
<p>This course aims to equip students with the necessary skills in the field of financial and banking data management and analysis. This is achieved through the use of spreadsheet programs such as MS Excel and database management programs like MS Access. Students will learn how to utilize these programs in managing and analyzing financial and banking data and information. The goal is to evaluate both financial and managerial performance, obtain financial and banking data and information to facilitate informed managerial decisions, and streamline the decision-making process. These programs are also employed for planning and financial forecasting, as well as for preparing budgetary plans. The course teaches how to transform numbers into conclusions and recommendations.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510531	3	Technological Financial Legislation	Fundamentals of Financial Technology
<p>This course aims to familiarize students with the legislations and laws that operate under the umbrella of financial technology, particularly those established by the Central Bank of Jordan. It involves comparing local legislations with international ones, highlighting the role and importance of these legislations in being catalysts and supporters in the field of financial technology. Additionally, the course sheds light on various clauses of these legislations that regulate or operate through financial technology companies. It also identifies obstacles facing financial technology companies in terms of legislations and laws and assesses the recognition gained through legislations and laws in certain transactions, especially those involving digital currencies, where financial technology plays a pivotal role.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510211	3	Financial Management 2	Financial Management 1
<p>Capital Budgeting and its Concept and Criteria, Evaluation of Long-Term Projects and Securities, Calculation of Cost of Capital, Weighted Average Cost of Capital, Working Capital Management and its Models, and Management of Current Liabilities.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510447	3	Blockchain and Financial Applications	Artificial Intelligence in Finance
<p>The Blockchain and Artificial Intelligence (AI) technologies have the ability to transform how financial and accounting service sectors interact with businesses and consumers. This course offers a blend of technical analysis with current and future applications, providing professionals with a business plan to embrace these new technologies and move forward with them in financial and accounting enterprises.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510521		Artificial Intelligence in Finance	Data Science Applications in Finance
<p>The Latest Adoption of Artificial Intelligence and Machine Learning on a Wide Scale: A Revolution in Many Sectors Today. Integrating these technologies with historical and real financial data fundamentally changes the financial sector. Through this practical course, you will learn how to use artificial intelligence and machine learning to discover statistical anomalies in financial markets and exploit them through algorithmic trading.</p>			



Brief course description- Course Plan Development and Updating Procedures Financial Technology Department	QF05/0409-3.0E
--	-----------------------

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510340	3	Financial Information Systems	Introduction to Management Information Systems
<p>This course aims to assist the student in understanding and familiarizing themselves with the information that serves as the main driver for business activities. The importance of information lies in its role in decision-making. There has been an increasing need to provide the necessary information promptly to enable decision-makers to make correct and appropriate decisions in various business sectors. Therefore, it is essential to develop and update integrated information systems in the business world characterized by change, speed, and intense competition. Keeping up with computer systems and other information technologies is crucial in terms of speed, cost, and capability.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510332	3	Digital Financial and Banking Services	Macroeconomics
<p>This course aims to assist students in deepening their skills, applying them practically, and utilizing their knowledge and capabilities to understand various aspects of electronic banking services and details of electronic banking operations. It also sheds light on the banking system, banks, and electronic banking in Jordan, as well as electronic services, electronic cards, and their types. The course further focuses on exploring electronic financial payment systems and their methods.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510333	3	Special issues in Financial Technology	Financial Management 2
<p>This course aims to select new topics that have not been covered in other courses in the field of financial technology. These topics are characterized by their modernity to align with any developments in this field.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510331	3	Investment Management	Financial Management 2
<p>This course aims to introduce students to fundamental concepts of investment, financial markets, and money markets. It covers areas and tools of investment, foreign exchange markets, financing and selling transactions, financial derivatives markets, and methods for evaluating securities.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510342	3	Mathematics OF FINANCE	Business Mathematics
<p>The course covers the theory of simple interest, including present value and discounting, debt settlement, commercial paper discount, and short-term loan consumption. It also covers the theory of compound interest, including the basic laws of applying compound interest, calculating duration and rate, present value and discount, debt settlement, payments, and long-term loan consumption.</p>			
Course number	Credit hours	Title of the course	Prerequisite-co-requisite
0510314	3	International FINANCE IN ENGLISH	Macroeconomics
<p>International finance, and international business finance in particular, is all about making decisions in the context of international financial environment. This course focuses on developing some of the tools that are necessary for students to be able to frame and solve the basic problems in international financial decision -making. We will confine our study to the topics of international financial environment,</p>			



exchange rate behavior and its management, and investment financing decisions of multinational corporations.

Course number	Credit hours	Title of the course	Prerequisite-co-requisite
05084313	3	Digital marketing in English	Principles of Marketing

The course includes the basic concepts of digital marketing and the most important terms and practices contained in digital -marketing as well as the benefits and advantages of digital -marketing and stages of development of digital -marketing and strategy and elements of the digital -marketing mix in addition to the methods of digital - marketing and the nature and importance of social networks.

Approved by department council	23/8/2022	Date of approval	23/8/2022
--------------------------------	-----------	------------------	-----------