

جامعة عجلون الوطنية

Faculty of Business

Department of

Financial Technology and Banking

Study Plan for the Bachelor's Degree in

Financial Technology and Banking Academic year 2023/2024



جامعة عجلون الوطنية

Vision

To be a model in providing financial and banking knowledge and skills through.

Mission

To innovate advanced and diverse programs and curricula to enrich the labor market, especially in the financial and banking sector, with highly competent and professional outputs, contributing to the achievement of economic development in Jordan.

Goals

- 1) Provide students with scientific expertise and the accounting process to meet the changing accounting environment.
- 2) To continuously develop the intellectual and professional skills of students of the Accounting Department.
- 3) Supporting the scientific and research production and other scientific activities of faculty members.
- 4) Interacting with the local community and meeting its demands by providing qualified staff to work in the Jordanian market and abroad.



جامعة عجلون الوطنية

Learning Outcomes

Knowledge

Understand the fundamentals of finance and economics.

Have comprehensive knowledge of the banking system, types of financial institutions, and the nature of financial markets and various financial instruments.

Understand the importance of legal and regulatory compliance in the banking and financial technology sectors.

Skills

Grasp the foundations of finance, investment, and various financial tools.

Keep up with innovations and recent developments in the field of financial technology and understand their impact on the banking industry.

Realize the importance of information security in financial and banking domains, and how to protect sensitive data and prevent cyber breaches.

Competencies

Utilize technology in banking and financial systems.

Apply programming and analytical skills and use software and computer tools in financial data analysis.

Learn to analyze and manage large financial datasets and use them in making financial decisions. Have a practical understanding of project management in the field of financial technology, from project planning to execution and monitoring.



جامعة عجلون الوطنية

Contents of the Study Plan

Study plan for the bachelor's degree in Financial Technology and Banking consists and Cloud Computing of (132) credit hours distributed as follows:

Certified On Campus learning (1+1, An hour and a half of on campus learning + one half hour of campus learning).

Certified Electronic (1+1, An hour and a half synchronous Electronic + campus learning).

Certified Blended (1+1, An hour and a half synchronous Blended + campus learning).

Number	Type of Requirement	Credit Hours	percentage%
First	University Requirements	27	20.5 %
Second	Faculty Requirements	21	15.91 %
Third	Compulsory Requirements	75	56.82%
Thira	Elective Requirements	06	4.55%
Fourth	Free Elective Requirement	03	2.27%
Total		132	100%

University Coding System

Faculty Code Department Code

02

4

(Level Year) Knowledge Area

Course sequence

0 Remedial

- 1 First
- 2 Second 3 Third
- 4 Fourth



جامعة عجلون الوطنية

Knowledge Area

Knowledge Number	Knowledge Area	Number of Credit Hours
0	Financial Management and Financial Analysis	12
1	Financial Markets, Institutions, and Banking	9
2	Financial Information Systems and their Applications	12
3	Risk Management and Investment	9
4	Financial Technology	21
5	Graduation Project + Field Training	3+8 weeks



جامعة عجلون الوطنية

First: University Requirements (27) Credit Hours

A. University Compulsory Requirement (12) Credit Hours

Course	Course Name	Credit	Prerequisite	Learning Type		e
code		Hour		Electronic	Blended	On Campus
704200	Military Sciences	3	-			
704107	Entrepreneurship and Innovation	1	-			
704109	Leadership and Social Responsibility	1	-			
704116	Life Skills	1	-			
704117	English Language Skills (1)	2	714099			
704118	Arabic Language Skills (1)	2	704099			
704119	National Education	2	-			

B. University Elective Requirements (15) Credit Hours

Course	Course Name	Credit	Prerequisite	Learning Type		e
code		Hour		Electronic	Blended	On Campus
201101	The Law in our Lives	3				
202132	Human Rights	3				
401100	Principles of Administration	3				
701140	Arab Library and Lexicography	3	-			
704103	International and Arab Contemporary Issues	3				\checkmark
704104	Islamic Culture	3	-			
704108	Integrity and Transparency	3				
704110	Digital Culture	3				
704112	Arabic Language Skills (2)	3	704118			
704113	Art of Rhetoric and Dialogue	3				\checkmark
704115	Development and Family Planning in Islam	3				
704141	History of Jerusalem	3				
704151	Computer Skills (1)	3	724099			
704152	Computer Skills (2)	3	704151			
704163	Foreign Language other than English	3				
704172	Sports and Health	3				



جامعة عجلون الوطنية

Second: Faculty Requirements (21) Credit Hours

Course	Course Name	Credit	Prerequisite	Learning Type		2
code		Hour		Electronic	Blended	On Campus
401100	Principles of Management	3	-			
401115	Mathematics for Business Students	3	-			
402101	Principles of Accounting (1)	3	-			\checkmark
403107	Principles of Management Information	3	-			
	Systems					
405101	Principles of Microeconomics	3	-			
405202	Principles of Financial Management	3	401100+			\checkmark
			402101			
406101	Principles of Marketing	3	-			



جامعة عجلون الوطنية

Third: Department Requirements (78) Credit Hours A. Department Compulsory Requirements (69) Credit Hours

Course	Course Name	Credit	Prerequisite	Learning Type		e
code		Hour		Electronic	Blended	On Campus
403100	Introduction to Information Technology	3	_			
403129	E-commerce	3		•		
404216	Islamic Banks	3	_		N N	
405102	Principles of Macroeconomics	3	-		v v	
405120	Markets and Financial Institutions	3	_			
405124	Electronic Financial and Banking Services	3	-			
405141	Fundamentals of Financial Technology	3	-			
405215	Bank Management	3	-			
405240	Data Management and their Applications	3	-			
405246	Applications of Data Science in Finance	3	3			
405247	Technology Transformation Management	3	-			
405303	Financial Analysis	3	-			
405309	Financial Information Systems	3	-			
405311	Statistics for Business Administration Students	3	-		V	
405342	Financial Technology Legislations	3	1			
405343	Artificial Intelligence in Financial Sciences	3	-			
405344	Blockchain and Financial Applications	3	-		\checkmark	
405348	Business Models and Innovation in Financial Technology	3	-		\checkmark	
405356	Corporate Finance	3	-			
405422	Portfolio Management	3	-			\checkmark
405431	Risk Management and Financial Derivatives	3	3		\checkmark	
405451	Graduation Project	3	-			\checkmark
405453	Practical Training	3	-			\checkmark
405455	Security and Protection of Information Systems	3	-		V	
405460	Financial Modeling	3	-		\checkmark	



جامعة عجلون الوطنية

Course Name Credit Course Prerequisite Learning Type code Hour Electronic Blended On Campus 201121 Principles of Commercial Law 3 $\sqrt{}$ _ Change and Crisis Management $\sqrt{}$ 401105 3 3 $\sqrt{}$ 401108 Human Resource Management -401111 Scientific Research Methods 3 $\sqrt{}$ 3 $\sqrt{}$ 401209 **Business Ethics and Social Responsibility** _ **Insurance Management** 3 $\sqrt{}$ 401334 _ Islamic Banking Accounting 3 $\sqrt{}$ 402231 Contemporary Accounting Issues 3 $\sqrt{}$ 402416 _ Accounting of Financial Institutions 3 402436 $\sqrt{}$ _ International Trade 3 $\sqrt{}$ 405105 _ 405106 Small Business Financing 3 $\sqrt{}$ $\sqrt{}$ Managerial Economics 3 405142 _ Public Finance 3 $\sqrt{}$ 405149 _ 405216 Money and Banking 3 $\sqrt{}$ $\sqrt{}$ Investment Management 3 405221 _ **Behavioral Finance** 3 $\sqrt{}$ 405224 _ $\sqrt{}$ 405232 **Financial Mathematics** 3 _ 3 $\sqrt{}$ 405316 **Banking Operations Management** -405333 Feasibility Studies and Project Evaluation 3 $\sqrt{}$ _ International Finance 405405 3 $\sqrt{}$ _ 405408 Personal Finance 3 $\sqrt{}$ _ 3 405423 **Real Estate Financing** $\sqrt{}$ _ 405450 Computer Applications in Banking 3 $\sqrt{}$ Operations 3 $\sqrt{}$ 406433 **Banking Marketing** _

B. Supportive Requirements (9) Credit Hours

Fourth: Free Elective Requirements (03) Credit Hours

The students studies a free course offered by the university with (3) credit hours



جامعة عجلون الوطنية

ų.

Advisement Plan for obtaining a bachelor's degree in Financial Technology and Banking

First Year

First Semester					
Course Number	Course Name	Credit Hours	Prerequisite		
402101	Principles of Accounting (1)	3	-		
405101	Principles of Microeconomics	3	-		
405120	Markets and Financial Institutions	3	-		
405141	Fundamentals of Financial Technology	3	-		
-	Elective University Requirement	3	-		
	Total	15			

Second Semester				
Course Number	Course Name	Credit Hours	Prerequisite	
401100	Principles of management	3	-	
405102	Principles of Macroeconomics	3	405101	
405124	Electronic Financial and Banking Services	3	405124	
405215	Bank Management	3	-	
704118	Arabic Language Skills (1)	2	704099	
-	Electives Requirement – University	3	-	
401100	Requirement – University	1	-	
	Total	18		



جامعة عجلون الوطنية

Second Year

First Semester					
Course Number	Course Name	Credit Hours	Prerequisite		
403101	Principles of management information	3	-		
	systems				
405202	Principles of Financial Management	3	401100+402101		
405240	Data Management and their Applications	3	-		
405246	Applications of Data Science in Finance	3	-		
405247	Technology Transformation Management	3	-		
704119	National Education	3	-		
	Total	18			

Second Semester				
Course Number		Credit Hours	Prerequisite	
401109	Principles of Marketing	3	-	
403100	Introduction to Information Technology	3	-	
405303	Financial Analysis	3	405202	
405311	Statistics for Business Administration	3	-	
	Students			
-	Electives Requirement – Department	3	-	
-	Electives Requirement – University	3	-	
	Total	18		

Deans' Council Session (22/2023-2024), Decision No.: 05



جامعة عجلون الوطنية

Third Year

First Semester					
Course Number	Course Name	Credit Hours	Prerequisite		
108121	English language skills (1)	2	714099		
401111	Scientific research methods	3	405311		
404216	Islamic Banks	3	405101		
405344	Block chain and Financial Applications	3	405246		
405348	Business Models and Innovation in Financial Technology	3	404103		
-	Electives Requirement – University	3	-		
-	Requirement – University	1	-		
	Total	18			

Second Semester					
Course Number	Course Name	Credit Hours	Prerequisite		
108121	English language skills (1)	3	118099		
401111	Scientific research methods	3	405311		
404216	Islamic Banks	3	405101		
405344	Block chain and Financial Applications	3	405246		
405348	Business Models and Innovation in	3	404103		
	Financial Technology				
-	Electives Requirement – University	3	-		
	Total	18			

П



E

جامعة عجلون الوطنية

Fourth Year

First Semester				
Course Number	Course Name	Credit Hours	Prerequisite	
404129	Electronic Commerce	3	-	
404451	Graduation Project	3	-	
405422	Portfolio Management	3	-	
405455	405455 Security and Protection of Information Systems		-	
-	- Electives Requirement – University		-	
	Total	15		

Second Semester						
CourseCourse NameCreditPrerequisite						
Number		Hours				
405431	Risk Management and Financial	3	405202			
	Derivatives					
405453	Field Training	0	Completion of			
			90 Credit			
			Hours			
405460	Financial Modeling	3				
-	Electives Course	3	-			
-	Electives Requirement – University	3	-			
	Total	12				

П



جامعة عجلون الوطنية

Courses Description

Faculty Compulsory Requirements (21 Credit Hours)

Course Number	:	401100
Course Title	:	Principles of Management
Credit Hours	:	3
Prerequisites	:	-

Introduction to the Principles of Management, their definition, evolution, characteristics, functions, and a general overview of public and private projects, their legal forms, and their main functions, as well as the development of management intellectual schools. Basic management processes that can be classified into consecutive management processes such as planning, organizing, directing, and controlling, and ongoing management processes such as making administrative decisions and communication with practical applications through

cases and exercises.

Course Number	:	401109
Course Title	:	Principles of Marketing
Credit Hours	:	3
Prerequisites	:	-

This course includes an analytical study of the fundamental principles and concepts of marketing, including its definition and the evolution of its concept. It also covers the study of the marketing environment and explains its impact on the marketing process.

Course Number	:	401115
Course Title	:	Mathematics for Business Students
Credit Hours	:	3
Prerequisites	:	-

Understanding the mathematical methods necessary for solving business problems, basics of business mathematics such as algebra review, applications of equations and inequalities, graphical representation of functions, quadratic functions, exponential functions, logarithmic functions, financial mathematics, matrix algebra, geometric linear programming, and probability.



جامعة عجلون الوطنية

Course Number: 402101Course Title: Principles of Accounting 1Credit Hours: 3Prerequisites: -

Accounting Equation and its Applications, Recording Accounting Transactions, Inventory Adjustments for Revenues and Expenses, the Accounting Cycle, Accounting Treatment for Merchandise Operations, and Major Financial Statements.

Course Number	: 403107
Course Title	: Principles of Management Information Systems
Credit Hours	: 3
Prerequisites	: -

This course presents the concepts, principles, and foundations upon which Management Information Systems (MIS) are based and the nature of the benefit provided by these systems to various management functions and core activities within the organization. It discusses how data is collected, stored, and organized, emphasizing the concept and nature of MIS, as well as the types of MIS based on the management levels they serve. The course highlights the importance of MIS in making managerial decisions in business organizations. It also discusses the methodologies used in developing information systems.

Course Number	: 405101
Course Title	: Principles of Microeconomics
Credit Hours	: 3
Prerequisites	: -

The fundamental concepts of economics include the definition of economics, the economic problem, the relationship of economics with other sciences, different economic systems, supply and demand, equilibrium, elasticity, consumer behaviour, utility theory, and indifference curves, production and costs, different types of markets, and factor markets.



جامعة عجلون الوطنية

Course Number Course Title Credit Hours Prerequisites : 405202
: Principles of Financial Management
: 3
: 401100+ 402101

Correlations and Endings: Communication; Roll's Theorem; Mean Value Theorem and its generalization; Increasing and Decreasing Correlations; The Maximum Value of Correlations; Drawing Relative Correlations; Unlimited Integration; Limited Integration; Inverse Correlations, Logarithmic and Exponential Correlations (with their derivatives and integrals); Exponential Correlations; Inverse Trigonometric Correlations.





جامعة عجلون الوطنية

Compulsory Department Requirements (69 Credit Hours):

Course Number	: 405102
Course Title	: Money and Banks
Credit Hours	: 3
Prerequisites	: 405216

Money: Its origin and importance in the modern economy, types of money, demand for money, money supply, functions of money, and monetary systems and theories. The course also includes the origin and evolution of banks, their importance in the contemporary economic system, banking services, and credit, commercial banks and their functions, central banks and their importance and functions, specialized banks, and Islamic banks. The financial and banking system in Jordan.

Course Number	: 405120
Course Title	: Markets and Financial Institutions
Credit Hours	: 3
Prerequisites	: 311101

Financial markets in terms of their origin, evolution, instruments, and their role within the financial system in achieving balance with the real sector. International financial markets, their origin, evolution, and financial instruments, as well as Arab financial markets. Different financial institutions such as central, commercial, Islamic banks, specialized institutions, insurance companies, social security institutions, retirement, and occupational savings funds, postal and savings funds, in terms of their objectives, nature of work, capital, and sources of financing. Asset and liability management of these institutions, analysis of sources and uses of funds, working capital management, analysis of credit policies at these institutions, and their role in development.



جامعة عجلون الوطنية

Course Number: 405221Course Title: Investment ManagementCredit Hours: 3Prerequisites: 405202

The economic origin of the concept of investment and its types, the definition of investment, the concepts of return and risk, types and sources of risks, investment and speculation, different investment fields and tools, the essential components of investment decisions and their types, appropriate strategies in investment, and fundamental concepts in evaluating various investment projects. Designing investment portfolios and assessing their efficiency, as well as evaluating the competence of portfolio managers.

Course Number	:	405224
Course Title	:	Behavioural Finance
Credit Hours	:	3
Prerequisites	:	402102

Identifying Behavioral Finance, which involves applying psychological concepts to the behavior and financial decisions of investors. This includes elucidating various topics related to the application of behavioral finance approaches and biases in decision-making for individual or financial company investors. It analyzes psychological behavior and its impact on financial decision-making in all forms of markets, including market efficiency, common stock analysis, capital asset pricing model, the arbitrage pricing theory, stock behavior analysis, investor behavior, and finally, strategies of financial market behavior.

Course Number	: 405232
Course Title	: Financial Mathematics
Credit Hours	: 3
Prerequisites	: 402102

A practical study of the mathematical aspects in the business and commerce world, specifically the time value of money. It covers simple interest, true and commercial benefits, equal and unequal payments, calculation of financial sums and discounts, short-term loan consumption, present and future compound interest, perpetuities, bonds and their consumption, long-term loans, life insurance mathematics, and other practical applications for the aforementioned topics. It also explores mathematical tools used to solve problems of simple and compound interest, such as linear equations, laws of exponents, roots, arithmetic and geometric progressions, and logarithms.



جامعة عجلون الوطنية

Course Number	: 405246	
Course Title	: Applications of Data science in	i finance
Credit Hours	: 3	
Prerequisites	: 402102	

Scientific methods, processes, algorithms, and systems are employed to extract knowledge and insights from financial data using computer devices, programming tools, and algorithms. The goal is to solve problems and interpret actual phenomena. The study also includes an examination of how data is used in financial analysis through software applications such as Enterprise Resource Planning (ERP) and Meta Quotes Language 5 (MQL5). Additionally, it explores the use of data visualization and graphics in financial analysis to understand the reasons behind past events and apply them to improve present and future outcomes.

Course Number	: 405247
Course Title	: Digital Transformation Management
Credit Hours	: 3
Prerequisites	: 402102

Managing financial services through modern technological methods, such as lending and invoicing management, donation-based crowdfunding, reward-based crowdfunding, investment financing, and credit financing. This enables entrepreneurs to benefit from innovative ideas and technologies to finance and technologically manage their projects.

Course Number	: 405303
Course Title	: Financial Analysis
Credit Hours	: 3
Prerequisites	: 405202

analysis and its significance, financial statements, how to prepare the general budget, income statement, and statement of sources and uses of funds. Financial analysis using ratios, vertical and horizontal analysis, calculating the break-even point, financial leverage, and operating leverage. Principles of financial planning, preparing budget estimates, and cash budgets to determine the company's future capital needs and how to use them, with practical application using a computerludes an introduction to the theoretical framework for preparing financial statements, as well.



جامعة عجلون الوطنية

Course Number	: 405309
Course Title	: Financial information systems
Credit Hours	: 3
Prerequisites	: 314211

Financial information systems involve the concepts of the system, data, and information, and how they are connected to financial systems. In this context, topics such as foreign currency banking services, transfers, documentary credits, collection bills, guarantees, customer account management, dealing room, clearinghouse, trust funds, and other banking services not related to cash transactions are studied.

Course Number	: 405311	
Course Title	: Statistics for Business Administration Studen	ts
Credit Hours	: 3	
Prerequisites	: 311202	

Statistics, methods for all data and samples, methods for selecting them, measures of central tendency, measures of dispersion, correlation, regression, probability theory, probability distributions, random variables, index numbers, time series, estimation, and hypothesis testing. This is done by applying all the above to practical models in the world of business and investment.

Course Number	: 405316
Course Title	: Banking Operations Management
Credit Hours	: 3
Prerequisites	: 405215

Concepts and matters related to internal banking operations (internal banking operations) are a review of operational cases of internal bank activities, including deposit acceptance, development of other financing sources, traditional bank investments in securities, loans, and Islamic bank investments with Islamic financing instruments, along with an analysis of these operations. It also studies the profitability of commercial and Islamic banks and their sources. On the external level (external banking operations), it reviews operations at the external level, which are the operations of commercial and Islamic banks at the level of providing services to the public. It addresses limited banking operations, such as various types of transfers, guarantees or letters of social security, promissory notes, commercial paper cutting, and documentary credits.



جامعة عجلون الوطنية

Course Number	: 402333
Course Title	: Feasibility Studies and Project Evaluation
Credit Hours	: 3
Prerequisites	: 405202

The theoretical principles and foundations related to feasibility studies and their importance, their various elements and stages, the models used in evaluating projects such as discounted criteria and non-discounted criteria, market study, financing study, and technical study of various investment projects, which help in the process of creating good ideas, analyzing them, studying them, and showing them into reality, as they are based on analysis and evaluation. Economic projects from the point of view of businessmen (entrepreneurs) as well as the national economy (as social profitability), so that it becomes able to prove the feasibility of these projects.

Course Number	: 405342
Course Title	: Financial Technology Regulations
Credit Hours	: 3
Prerequisites	: -

Legislation and Regulations Regarding Financial Technology. Regulations at both the local and international levels. The impact of laws and regulations on the security of electronic transactions. Legal issues in financial technology, including an overview of laws governing the operations of central banks, commercial banks, Islamic banks, and financial companies in the Arab world in general and in Jordan in particular. This includes corporate laws, financial market laws, and social security laws. This course focuses on understanding, analyzing, and applying the key aspects of banking law, central bank law, commercial law, in addition to insurance and financial market-related law.

Course Number	:	405343
Course Title	:	Artificial Intelligence in Financial Sciences
Credit Hours	:	3
Prerequisites	:	405246

This course focuses on how to use artificial intelligence and machine learning techniques to enhance financial operations and decision-making in the financial environment. The topics covered in the course include studying methods of analyzing financial data using artificial intelligence techniques, applying predictive models to analyze market trends and investments, and utilizing financial robots in algorithmic trading. The course also addresses the ethical aspects and challenges that may arise with the adoption of intelligent technologies in the field of financial sciences.



جامعة عجلون الوطنية

Course Number	:	405344
Course Title	:	Blockchain and Financial Applications
Credit Hours	:	3
Prerequisites	:	405246

the block chain technology and its significance in various fields, especially industrial, commercial, and investment sectors, and its role in processing payments and financial transfers. it provides a high level of security, efficiency, and eliminates intermediaries, thereby reducing costs. The material also includes a study of digital currency trading markets, the characteristics of digital currencies, key elements, and parties involved in digital currencies, the risks associated with digital currency transactions, and the management of digital currency risks. Additionally, it covers the regulatory laws governing financial transactions

Course Number	: 405348
Course Title	: Business Models and Innovation in Financial Technology
Credit Hours	: 3
Prerequisites	: 403107

The concept of entrepreneurship, entrepreneurship in financial technology, and its impact on financial institutions, innovation in addressing and reducing financial challenges, the impact of entrepreneurship and innovation in financial technology on providing financial services to clients, and the ability of financial technology to address traditional challenges in financial markets.

Course Number	: 405216
Course Title	: International Finance
Credit Hours	: 3
Prerequisites	: 405405

Principles of International Finance, settlement of economic exchanges, balance of payments, foreign exchange rates, determination of exchange rates, and handling foreign currencies. International financial markets, global monetary systems, purchasing power parity theory, international trade, multinational institutions and companies, and the relationship between money and national income with the current account.



جامعة عجلون الوطنية

Ajloun National University

Course Number	: 405408
Course Title	: Personal Finance
Credit Hours	: 3
Prerequisites	: -

The fundamental factors upon which the bank relies in granting personal financing, alongside studying the factors that contribute to the success or failure of personal financing and the optimal aspects in which personal financing is utilized.

Course Number	:	405422
Course Title	:	Portfolio Management
Credit Hours	:	3
Prerequisites	:	405221

The concept of investment and investment portfolios, their types, and investment policies. Methods for measuring and evaluating returns, with practical examples of portfolio management, risk mitigation affecting returns, and investment funds. The study includes how to structure and manage an investment portfolio in terms of diversification and risks, and the impact of diversification on risk reduction. Also, how to measure risks in investment portfolios, pricing capital assets (CAPM), models for evaluating investment portfolio performance, and the theory of risk pricing in investment portfolios and investment funds.

Course Number	:	405202
Course Title	:	Real Estate Financing
Credit Hours	:	3
Prerequisites	:	405423

The financing methods used in real estate, such as diminishing balance loans, leasing, and joint participation. This includes financial planning for such investments, its relationship with financing structure, cost of capital, and its overall impact on the economy. The review covers the concept of real wealth, making improvements to the property, evaluating it through market value, income flow, and risks. It also addresses the principles underlying financing for real estate projects, available financing sources and conditions, as well as methods for estimating or appraising real estate projects.



جامعة عجلون الوطنية

Course Number	405431	
Course Title	Risk Management and Financial D	erivatives
Credit Hours	3	
Prerequisites	405202	

Concept of Uncertainty Management, which includes an overview of the nature, objectives, and scope of risks. The module provides definitions for methods of measuring risk management in various economic units and identifies the financial responsibilities arising from it. It covers interest rate risk management, credit risks associated with banking and commercial credit, constructing an appropriate framework for credit risk management, credit default prediction models, credit rating points, and building stress testing for credit. It also addresses non-performing loans and how to mitigate them, Basel II agreement, exchange rate risks, foreign currency trading, risk management in traditional and Islamic banks, and the close connection of this module to the insurance industry. Furthermore, it explores financial engineering and financial derivatives, covering their concepts, types, investment mechanisms, and their role in risk management. Derivatives include options, their types, pricing, and measurement methods for pricing models. It discusses binary options models for one and two periods with mathematical applications and strategies for options, futures contracts, swaps, interest rate and currency swaps, stock prices, and commodity prices to avoid risks. The module also includes applications for techniques used in dealing with situations encountered in external derivative markets, as well as future applications for real options and common financial tools.

Course Number	: 405450
Course Title	: The Computer Use in
Credit Hours	: ³
Prerequisites	: 405215

The importance and nature of using computers in banking operations, identifying financial software and its applications in banking operations, executing financial analysis, and making financial decisions. traditional banking operations such as deposits and lending processes, analyzing returns and risks of individual investments, time value of money is performed using necessary computational formulas. financial and statistical functions are utilized in applications such as excel, access, easy soft, and other relevant specialized software in this field.



جامعة عجلون الوطنية

Course Number	:	405455
Course Title	•	Information Systems
		Security and Protection
Credit Hours	:	3
Prerequisites	:	-

This includes the study of the concept of financial management and the objectives of this discipline, the time value of money, return, and risk. It encompasses capital budgeting methods, cost of capital, capital structure, various types of financing instruments, methods of evaluating these instruments, and how to price capital assets. The course also covers cash flows for investment projects and their associated risks, the preparation of capital budgets, components of capital structure and their costs, as well as financial and operating leverage.

Course Number	:	405460
Course Title	:	Financial Modeling
Credit Hours	:	3
Prerequisites	:	-

The concept of financial modeling involves studying topics related to building the necessary financial modeling capabilities to apply financial rules and theories practically in investment studies and portfolio management. This includes evaluating and managing investment portfolios and the mechanisms for their assessment. The methodology followed in financial modeling includes the use of functions of data tables and applications (Excel, SPSS) to analyze financial and investment decisions. It also involves designing and developing financial models to solve financial problems and evaluate performance in investment projects.