Program Overview:

Full Curriculum

- Research Methodology in Finance: This course covers:
 - Rules for writing scientific research in finance.
 - Scientific methodologies for preparing and presenting scientific manuscripts articles, reports, theses, etc.
 - Methods and techniques for effectively managing and utilizing scientific references in the financial field to maximize their benefit.
 - Methods for using statistical and mathematical tools in presenting and analyzing financial texts.
 - Techniques for presenting and organizing ideas, summarizing content, citing references, structuring sections, ensuring balance, formatting texts, and presenting references effectively, among other key aspects.
- Information and Communication Technology: This course covers:
 - Learning about various software used in analyzing and processing data in economic research, and training students to use them for analysis, results preparation, and interpretation, such as: SPSS, Excel, Stata, MATLAB, Mathematica, Mathcad, WinQSB, and others.
 - Familiarizing with various digital technologies available for presenting and sharing scientific knowledge.
 - Training students to leverage the internet for scientific and pedagogical purposes, such as accessing and sharing scientific data.
- Applications of Artificial Intelligence: This course covers:
 - The importance of using AI in financial institutions.
 - Key AI techniques used in finance.
 - The impact of AI techniques on corporations' development.
 - The evolution of AI in financial management.

• Pedagogical Training: This course covers:

- Psychological preparation and social behavior patterns for faculty in university settings.
- Methods for managing discussions and debates among students.
- Means of Communication and idea presentation techniques.
- Methodology for preparing and delivering lessons using modern technological medias.
- Handling complex situations in university environments.
- Exam preparation methods and techniques for evaluating academic performance.

• Financial Modeling: This course covers:

- Uses of simple regression models.
- Uses of multiple regression models.
- Modeling financial data.

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• **Research Tools in Finance:** This workshop covers:

- Learning computer-based editing techniques (text editing, table preparation, graphical representations, statistical reasoning, etc.).
- Learning software for analyzing and processing financial research data (analysis, results preparation, and interpretation.)
- Study of investment risk analysis software.
- Study of econometric modelling softwares and forecasting techniques.

• Advanced Financial Management: This workshop covers:

- Theoretical foundations and recent developments in financial management.
- Financial planning for economic institutions (financial and operational budgets, profit planning, capital investment planning, etc.).
- Financing structure and criteria for selecting the optimal

financing mix.

- Modern financing products available in the Algerian financial market (limitations and usage potentials).
- Models used in evaluating corporations' financial position (e.g., Altman and McGough, Kida, Bouth, Campisi and Trotman, Argenti, Sherrord models).
- Modern financial performance evaluation tools (quantitative and financial methods).
- Financial competitiveness indicators for economic institutions.
- Analyzing the future financial position of economic institutions.

• International Finance: This workshop covers:

- The movement of international capital (sources, types, structure, objectives, and relative importance in the global economy).
- Foreign funding sources and their role in the economic and social development of developing countries (positive and negative effects).
- International capital markets (financial markets, money markets, foreign exchange markets), their characteristics, operations, and impact on international financial balance.
- Financial corruption and money laundering (sources, forms, and control methods).
- Financial crises (nature, causes, types, crisis indicators, and solutions).

• Financial Governance: This workshop covers:

- The concept of financial governance (its emergence, theories, objectives, and scope).
- Stakeholder relationships in financial institutions and governance risks.
- Financial management and governance in economic institutions.
- Governance and institutions (performance, competitiveness, social responsibility, etc.).
- Models and practical applications of financial

governance.

• Financial Engineering: This workshop covers:

- Definition and objectives of financial engineering.
- The role of financial engineering in achieving institutional goals.
- Fields, philosophy, and strategies of financial engineering.
- Financial engineering and financial institutions and markets.
- Tools and products in financial engineering.
- The concept and types of derivatives and their risk estimation and management.

• Financial Information Systems: This workshop covers:

- Components of a financial information system.
- Applications of financial information systems in planning, organizing, directing, and controlling.
- Computing financial systems and how to benefit from data processing using computers.
- How to design an integrated financial system on a computer (from purchasing orders to profit calculation).
- Benefits of developing internal and international information networks (saving time and effort, reducing costs, improving decision-making, etc.).
- Research tools in finance and their role in improving financial information systems within corporations.
- The role of financial information systems in enhancing competitive awareness in economic institutions.
- Modernizing financial information systems and their role in improving communication with external environments.