Jinan University of Lebanon

Faculty of Business Administration

Course Descriptions for the Postgraduate Master MBIT
(Business Information Technology)

Core Requirements

ADM508 Statistics and SPSS

This course is intended to provide students with an introduction to Statistics. The emphasis in this course will be upon understanding statistical concepts and applying and interpreting tests of statistical inference. Content will include but not be limited to: data and data files, data screening, scaling, recoding, visual representations of data, descriptive statistics, correlation and simple regression, sampling distributions, and the assumptions associated with and the application of selected inferential statistical procedures (parametric and non-parametric tests). Computer software (SPSS) will be employed to assist in the analysis of data for this course.

ADM509 Advanced Quantitative Methods

This course introduces post-graduate students to strategies and tools of how to develop statistical models that are tailored to answer their particular research questions. This course prepares students to conduct research using appropriate statistical models and to analyze modern social science data via advanced quantitative methods. It provides a foundation in the theory of maximum likelihood so students can investigate and implement a wide range of advanced quantitative models. Students will learn data analytic skills using statistical software package SPSS. This combination provides students with the skillset that is increasingly required by employers in today's highly competitive job market. Topics include Ordinary Least Square Regression, Regression with Dummy variables, Non-Linear Regression, Factor Analysis, Parametric and Non-Parametric Tests.

ADM518 Advanced Marketing Management

In this course students will acquire the knowledge and skills required to develop, implement, and control successful marketing strategies. This course will help students discover and understand the components of marketing management decision making process. Through this course, students will understand how the firm can benefit by creating and delivering value to its customers, and stakeholders using analytical concepts and tools of marketing related to segmentation, targeting, branding, pricing, distribution, and promotion.

To sum up, this course will help students developing abilities, formulating and implementing different marketing approaches for brands and businesses using advanced managerial competencies.

ADM522 Organization Theory

Organization Theory- is a course that targets potential executives and aspiring business leaders. It can be considered as a landmark guide to "macro" organization theory and design, fully grounded in current international practice, offering up-to-date coverage of the key developments driving new organization structure and practice besides case studies and examples from the international markets. The course provides a truly international overview for advanced students and business executives who want to be at the forefront of the evolution in Organization Theory. 21st Century organizations will be faced with entirely new challenges and opportunities than those faced by previous generations, and emerging business leaders must understand the new "macro" realities in order to succeed.

ADM526 Research Methodology
This course is designed to emphasize the foundational methods and techniques of research in business management context. Students will be exposed to the main components of the research process i.e., research problem, research question, research objectives, research hypotheses, data collection, ethical issues in research, report writing, and presentation. The main objective of this course is to enable students to understand the research process and conduct research project in an area of their choice.

ADM534 Advanced Financial Management
The course focuses on the financial concepts, skills, and technological applications that are most critical for MBA students in today's workplace. It also focuses on the analysis and study of the significant areas of financial planning and control, working capital and fixed asset management, and the identification and acquisition of funds in the money and capital markets; employment of financial techniques as aids in decision- making relative to balancing the liquidity-profitability objectives of a business firm. This course is an in-depth study of the financial management problems of business in general and corporations in particular, as they relate to working capital needs, flow of funds, optimum allocation & management of current operations. Problems of capital budgeting, debt management, acquisition or merger & other long-term financial problems in managing the capital structure are treated.

Major Required Courses

BIT505 Advanced Database Management System
This course provides students with an advanced overview of the vast topic of database systems. It covers the details of triggers, constraints, views, normalization, and transactions This course provides students with an advanced overview of the vast topic of database systems. It covers the details of triggers, constraints, views, normalization, and transactions

BIT512 Data Warehousing and Mining
This course gives an introduction to methods and theory for development of data warehouses and data analysis using data mining. Data quality and methods and techniques for preprocessing of data. Modeling and design of data warehouses. Algorithms for classification, clustering and association rule analysis. Practical use of software for data analysis.

BIT516 Software Engineering
This course introduces the students to software engineering. Special topics include software processes and agile methods, and essential software development activities from initial specification to system maintenance. Object oriented analysis and design using UML, design patterns, frameworks and APIs, client-server architecture concepts are also presented. In addition, this course will
focus on software testing, from unit testing to the testing of software releases.
Project management based on case studies, and professional software engineering practice will also be covered.

BIT522 Artificial Intelligence and Machine Learning

This course gives a basic introduction to Machine Learning (ML) and Artificial Intelligence (AI). The course begins by introducing and explaining the concepts of Data Science and AI & ML. Then, an introduction to algorithms with their usage is covered. The AI part will include: Deep Learning, Pre-processing data, Weka, and Natural Language Processing. The ML part will include: Concepts and Relation with AI, use of R in MI, Python and its position in ML, Building intelligence in Bot, and Robotic Process Automation.

BIT532 Advanced Web Programming

This course teaches students about website management principles, skills, techniques, strategies, hardware, and software necessary to operate and maintain a successful website or intranet. Web programming will be performed using the PHP programming language and MySQL database.

BIT533 Advanced Programming Lab

In this course, students will apply website management principles, skills, techniques, and strategies to build a complete website using the PHP programming language and MySQL database.

BIT535 System Administration and Security

This course teaches students the most essential/moderate system administration tasks in the Unix Operating System. Students will learn about crucial system management skills including managing local disk devices, managing UFS file systems, installing and removing Unix packages and patches, performing system boot procedures. The course also covers user and security administration, managing network printers and system processes, and performing system backups and restores.

BIT590 Thesis in Business Information Technology

A Master's Thesis is a research project resulting in a substantive paper that involves original collection or treatment of data and/or results. The final product of a Master's Thesis is a paper of publishable quality. The Master's Thesis, like the doctoral dissertation, involves original research and exemplifies an original contribution to scholarship. Elements of the thesis can:

- Include a pilot study upon which the dissertation will build
- Include a comprehensive review and analysis of relevant literature
- Include a research study design
- Include the collection and analysis of data, and discussion of results
- Represent a synthesis and application of the literature on a topic
- Apply the critical evaluation of empirical studies on the topic

The completed thesis should be formatted in accordance with the requirements of the Office of Graduate Studies.