Bachelor of Business (Business Analytics)

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Program Structure

To qualify for the Bachelor of Business (Business Analytics), a candidate shall accrue an aggregate of at least 144 credit points comprising of subjects from a common business subjects, specialised subjects required for major, general electives, general education subjects and a final year project.

Year 1

Accounting for Decision Making

This subject introduces students to the role and use of accounting information in a variety of organisations and society. Students evaluate both financial and non-financial reports and their impact on accountability, decision-making and corporate governance. The subject introduces students to various analytical techniques in order to make sound decisions in a variety of business and social settings.

Principles of Responsible Business

The subject provides students with a conceptual tool kit for understanding and practicing responsible and ethical commerce in managing environment, globalization, technology, anti-corruption, labour and human rights. Working with industry, students will examine these issues from a variety of theoretical and practical perspectives and apply them to contemporary commercial contexts.

Statistics for Business

The aim of the subject is to introduce students to quantitative techniques and their application to the business world with an emphasis on the decision-making process. Students will be trained in the use of computer based software and models to analyze quantitative information for business decision-making.

Economic Essentials for Business

This subject introduces students to essential macroeconomic and microeconomic ideas, models and reasoning, which helps them to understand various economic issues. The subject will demonstrate the importance of economics on business and society, and will stimulate greater awareness of economic approaches to the analysis of contemporary social issues.

Introductory Principles of Finance

This subject introduces fundamental concepts of corporate and personal finance, and the relationship with financial planning. Students are equipped with fundamental skills to understand the concept of time value of money, as applied to solving cash flow valuation problems within the context of corporate and personal finance. The subject also explores ethical issues in managing finance.



Marketing Principles

Organizations need to know how to position themselves against competition by identifying marketing opportunities and problems. The subject examines the fundamental concepts and theories relevant to the study and practice of marketing. The subject serves as a foundation for further studies in business by developing an overview of where marketing fits within organizations and what framework marketing provides for enhancing and enabling the conduct of a business.

Introduction to Management

Organizations rely on managers and the management function for the efficient and effective running of their operations. This subject will introduce students to the key management theories and concepts required for managing people, process, environment and organizational culture. Students will learn the implications of managerial decisions on the internal and external environments.

Choose 1 Elective from the following option.

Accounting Principles

The subject introduces basic accounting systems (double entries), concepts and techniques to identify, classify, process, record and present accounting and financial information. This subject train students on how to prepare account and financial statements.

Economics and Society

This subject introduces students to the economic analysis of contemporary social issues such as inequality, human resources, environment, growth and development, and international trade, and the institutions that play a significant role in shaping them. The emphasis will be on policy-relevant examples from both the domestic and international contexts.

Business Communications

This subject introduces the theory and practice of communication in business and in workplaces. It examines and discusses the cultural, organisational and personal contexts and processes of communication. The subject would develop skills of public speaking, making presentations, writing reports, understanding of non-verbal messages, listening and building relationships in business and workplaces.

Business Oriented Information Systems

This subject examines the roles of information systems in a modern organization. Topics would cover functions and purposes of various information systems and their components; system design and development process; information systems administration and management; social implications of information systems, and hands-on experience in the use of personal productivity software. The practical component



includes using the internet, word processing, spreadsheets, database systems and website design.

Year 2

Data Management and Security

The subject investigates three major areas of modern data management systems: data modelling, data processing, and data security. The goal of the subject is to learn the fundamental concepts in data management including conceptual modelling, the relational data model, processing of relational data with Structured Query Language (SQL), enforcing the concepts of data confidentiality, integrity, and availability data management systems. The subject develops the skills in the design, implementation, processing, and security of data management systems. The subject covers the following topics in data security: discretionary access control, user management, enforcing data security and integrity. The subject also explains the important ethical issues associated with responsible disclosure, responsibility, liability, security weaknesses, and privacy in data management systems.

Mathematics for Business

This subject provides an introduction to mathematical techniques useful in business and economics. The main topics include marginal values, average values, elasticities, constrained and unconstrained optimization, matrix algebra and the mathematics of finance. The mathematical techniques will be systematically presented and clearly illustrated in representative business and economic models.

Introduction to Business Analytics

With growing quantities of data available, specific knowledge and skills are required in analyzing this data to make evidence-based decisions to enable organizations to achieve their strategic goals. This subject introduces students to the study of business analytics and provides the necessary foundations and skills (e.g., data descriptive statistics, visualization, estimation, sampling, modeling, and inference) to successfully complete the Business Analytics major. This subject introduces theoretical models and quantitative techniques and approaches (e.g., descriptive, predictive and prescriptive modeling) to enable the analysis of large volumes of data for the purposes of decision making. The subject also introduces students to a variety of software tools (e.g., SAS, STATA,) relevant to the analysis and presentation of quantitative data.

Big Data and Visual Analytics for Business

This subject investigates different categories of big data in business and the use of visual analytics techniques to study and analyse big data related to business activities of business organisations. The goal is to derive and translate hidden information in the big data into useful business information that can help to improve various aspects of a business. Students develop their knowledge on big data and the technologies (like Hadoop and NoSQL) involved as well as skills of data visualization for descriptive and



diagnostic analyses using static and interactive visualization techniques and dashboards. This is aided through the use of appropriate tools and software like SAS Viya and Python. In addition, text mining and Natural Language Processing (NLP) is also introduced as a tool to analyse unstructured big data. Students will be introduced to different business problems throughout the course to be able to illustrate and interpret different aspects of big data visual analytics.

Choose 1 UAE Studies Subject

Urban Sociology

The societies and places in which we live are very complex, and the interactions of individuals, as well as social institutions, have a direct impact on the life path we take. This course provides an engaging and accessible introduction to urban sociology and the study of cities, with particular focus on the experience of the UAE and Dubai. We'll examine a number of substantive urban topics, including but not limited to the growth of cities and urban spaces in the UAE, sustainable development and practices, and the 'built' environment.

Public Health

This course will introduce Public Health as an interdisciplinary science concerned with topics central to the population of U.A.E and on a wider scale of GCC region with regard to their physical, mental, and social well- being. The course focuses on current pertinent public health problems, assessing causation and examining intervention and management strategies at personal, social, and organizational levels.

UAE and International Relations

This course offers an overview of the UAE's rapidly emerging significance and its increased roles in global networks of international relations and diplomacy. Within that overview, the course examines the internal dynamics of the UAE, in particular, the priorities that emerge from a specific workforce dependency, a construction and tourism industry that looks 'East' as much as it does 'West'. Thus the new 'Look East' policy complements the country's historical partnership with the Western states. With the expansion of its global ties and relations, the UAE also becomes more sensitive to transnational issues, such as immigration, fluctuations in international markets or terrorism.

Society and Environment – Resources, Challenges, Futures

This subject aims to provide an understanding of relations and interactions between society and environment, including impact of societies on the Earth and its processes. Topics covered include the agricultural, industrial and urban revolutions; governance of environments; Indigenous land management; climate change; sustainability; and environmental impacts in the context of the Anthropocene.



Compulsory Arabic Language Subject or Challenge Test

Arabic Language

Language is key to everything we do. From verbal communication and the way we talk, to non-verbal communication and the emojis we use in our text messages, to the visuals we use to construct compelling visual stories, language is how we communicate. Living, studying and working the UAE, having a basic understanding of Arabic language can give you a huge competitive advantage. This introductory subject provides some of the basics of Arabic language, and you'll leave this subject able to communicate on a basic, conversational level.

General Elective Requirement

Muslim Societies Across the Ages: Tradition, Secularism & Modernity

This course aims to provide students with critical thinking perspectives about the relationship between history, religion and culture, in this case, the formation of Islamic culture(s). A sociological introduction to the study of Islamic culture will introduce students to the emergence of Islam in its 7th century historical context, its relationship to the other monotheistic traditions of the region, its growth into the dominant cultural paradigm of the Near East by the 9th century, alongside its impact and contribution to key fields of medieval science and knowledge. A historical approach will help students acquire familiarity with key Islamic texts, institutions, concepts of authority, traditions of jurisprudence and spirituality, artistic expressions, as well as milestones in Islamic history. The course wraps up with a discussion of issues central to contemporary debates relating to Islamic culture, such as identity, gender, multiculturalism, pluralism, secularism and religiosity.

Fundamentals of Innovation and Entrepreneurship

This course is focused on learning innovation and entrepreneurship that can be applied to any high-growth enterprise or other organization. The course is composed of three modules:

Module 1: Design Thinking

Module 2: Entrepreneurship

Module 3: Growth and Leadership



Year 3

Applied Financial Modelling

This subject enables students to apply econometric modelling techniques to analyse contemporary finance and economics issues. Students will learn the fundamentals of econometric modelling and numerous modelling techniques and methods, utilise specialised econometric software to apply to real world finance and economic data, and apply various hypothesis tests of models' usefulness and adequacy. The subject covers simple and multiple linear regressions, hypothesis testing, and assumptions underpinning the classical linear regression model. It then provides an in-depth analysis of model diagnostics, time-series modelling and forecasting, dealing with stationary and non-stationary data, and modelling financial market volatility.

Emerging Techniques and Tools in Business Analytics

This subject explores emerging techniques and tools in business analytics. Concepts of predictive analytics and prescriptive analytics are introduced to students. Data collection methods, Database technology, data mining and data techniques used in machine learning are also introduced and used to explore a range of business analytics scenarios for different business problems. Students explore and assess these emerging techniques and tools in business analytics to learn their effectiveness and applicability in various business problems related to current business environments.

Business Analytics Industry Project

This subject is the capstone subject within the Business Analytics major. The subject provides an opportunity for students to integrate knowledge and skills gained in previous subjects in the major through an industry-based group project. Working in groups, students will apply their knowledge and skills of business analytics to solve a 'real life' industry problem. Students will not only have to demonstrate the technical skills to solve the industry problem and justify their recommendations but also consider the ethics, and social responsibility aspects of their recommendations. The subject involves lectures, workshops and discussions where students are initially briefed on a 'clients' specific information- based problem and are then required to develop an analytical solution involving making recommendations to the client. The emphasis in the solution is around the analytical process including identifying information needs, acquiring the necessary information, interpreting it and using it as the basis for a set of strategic recommendations.

Choose I subject from the following options.

Marketing Effectiveness

Companies are spending an increasingly significant amount of their budget on marketing initiatives. Marketing managers are responsible to explain and demonstrate the value of such expenditure. This subject aims to provide marketers and marketing managers an understanding of tools and approaches that can be used to measure the effectiveness of marketing functions, as well as the knowledge of assessing the communicating marketing effectiveness to the executives and other functions within the company.



Database Systems

The subject presents more advanced topics in the modern relational database technology and it introduces the new non-relational (NoSQL) database technologies. The relational database technology component of the subject includes database design with meta modelling and spatio-temporal modelling, database normalization, advanced programming in SQL and programming of database server with stored PL/SQL procedures, functions, and triggers, concurrency control and database recovery techniques, design and programming of distributed database systems. The non-relational (NoSQL) database technology component of the subject includes the key value data model, document-oriented model, column-family stores, graph data model, and new approaches to data distribution, consistency preserving, and transaction processing.

Capstone Subject

Integrative Business Capstone

Integrative Business Capstone enables students to apply the principles of ethical, socially responsible, and sustainable commerce in a simulated business environment. The subject is based on a series of lectures and an action based learning project. Students will be required to make multidisciplinary interactive decisions based on sound ethical, socially responsible and sustainable practice.

Choose Any 3 Business Subjects as Elective