

## **BSc in Digital Business**

### **Course Descriptions**

**ACCN101 Principles of Financial Accounting** - The aim of this course is to introduce students to the principles, concepts and uses of financial accounting information and to provide them with a good understanding of the role of accounting systems in a business. The course equips students with the technical ability to use the double entry system of record keeping, and to prepare basic financial statements.

**ACCN203 Financial Analysis & Business Valuation** - The aim of this course is to develop students' ability to understand, interpret, analyse, critically evaluate and use financial statements. The course explores in greater depth reporting issues from a user's point of view. Students are provided with an understanding of the regulatory environment for financial reporting, an exposure to sources of finance and merger and acquisition activity, and experience in the interpretation and analysis of financial statements through case studies.

**BUSN100 Introduction to Business** - The aim of the course is to provide a survey of the field of business management, by introducing students to topics such as business organization, the human factor in business, technology in business, ethical behavior, the environment, global and economic forces, organization, quality, products and services, functional management, and current issues and developments.

**BUSN103 Business Law** - This introductory course is designed to familiarize the student with the subject matter of the legal environment of business. Particular emphasis will be given to the sources of law; the role of society; the judicial function; and selected areas such as governmental regulation and agencies, crimes and torts, contracts, business organizations, personal property, agency, and employment law. Various approaches to understanding legal issues will be used, including case law analysis and the examination of current legal issues affecting business.

**BUSN104 Principles of Marketing** - The course will introduce students to the concepts, analyses, and activities that comprise marketing. It will also provide practice in assessing and solving marketing problems. The course is also a foundation for advanced electives in Marketing as well as other business/social disciplines. Topics include marketing strategy, customer behavior, segmentation, market research, product management, pricing, promotion, sales force management and competitive analysis.

**BUSN203 Business Finance** - The aim of this course is to provide the student with a comprehensive understanding of the tools employed by corporations in making financial decisions. The course starts with the fundamental trade-offs between risks and returns that corporate entities face, and discusses the theories that are used to model them. The course covers both cash instruments such as bonds and

equities as well as derivative markets. The emphasis throughout is on the understanding of the fundamental principles rather than the underlying mathematical tools.

**BUSN207 Marketing Management** - The main objectives of the course are to help students develop a deeper understanding of the business and financial dimensions of marketing Management operations. Students will understand the evolution of marketing and the emphasis on each stage and develop an appreciation of how marketing contributes to the financial objectives of an organization. In addition, students will develop skills that will help them contribute to the financial objectives of an organization – whether it is for profit, non-profit and government.

**BUSN209 Operation Management** - The planning, execution, and control of activities involved in converting resources into value-added and desired goods and services constitute the Operations Management (OM) function of an organization. This course examines the role of Operations Management in supporting effective strategy execution and how it may be leveraged as a sustainable source of competitive advantage. Topics covered include, among others, operations strategy formulation, inventory control, MRPII/ERP, scheduling, facility location and layout, quality management, and process and technology decisions. Manufacturing and service industry contexts are both considered, and OM versus Supply Chain Management (SCM) is also discussed.

**BUSN302 Consumer Behaviour** - This course gives an overview of psychological knowledge as it pertains to capturing consumer insight, and includes a consideration of how the brain works, what factors influence consumer choice, and a critical evaluation of psychological assessment tools (including such diverse methods as online surveys, brain imaging, computerized reaction time assessment, and eye-tracking). The course also reviews a range of “levers” that can influence purchase behavior in unexpected ways and at efficient cost.

**BUSN306 Corporate Risk Management** - Enterprise risk management (ERM) is the process of planning, organizing, leading, and controlling the activities of an organization in order to minimize the effects of risk on an organization's capital and earnings. Enterprise risk management expands the process to include not just risks associated with accidental losses, but also financial, strategic, operational, and other risks. This course will aim to explain the purpose and scope of risk analysis as well as apply the concepts and methods of risk analysis and measurement in a variety of applications.

**BUSN401 Business Strategy** - The main objective of the course is to provide a sound understanding of the principles of strategic management and their application within financial and other enterprises. Case studies on the strategies of particular companies will be used to illustrate key strategic issues.

**BUSN405 Project Management** - Project management is a key management tool which enables organizations to efficiently achieve their goals in a constantly changing business environment complicated by risks, uncertainties and competitor pressures. In this multi-disciplinary module students will be introduced to the role project management plays in the modern business world in addition to the more traditional planning and control aspects of project management.

**BUSN408 Business Decision-Making** - Decision-making is an essential component of modern management. Indeed, a manager has to take multiple and many decisions, which implies that decision-making is at the heart of the role of a manager. Decisions in fact determine and shape both organizational and managerial activities. A decision can be characterized as a course of action, chosen from a set of alternatives, in order to achieve organizational or managerial objectives and goals. Decision making process is never ending and key to managing any organization or business activities.

**BUSN411 Placement / Internship-** The overall objective of this course is to help students to acquire real work experience in a business related company. Specifically: Identify the major differences and similarities between financial and management accounting; Understand the role of management accountant in an organization, and the importance of upholding ethical standards; Expose students to concepts and techniques that managers and accountants use to produce information for decision making including an Activity-Based Costing (ABC), Standard Costing for planning, Variance Analysis, etc.; Expose students to methods and techniques needed by managers for performing functions such as costing, cost allocations, preparation of flexible budgets and variance analysis.

**BUSN412 Research Methods** - The objectives of the course are as follows: Design of research methodology; Writing research questions and assumptions; Writing and checking a questionnaire as well as collecting-recording and quantifying data; Implementation of basic quantitative data analysis techniques; Writing research with the correct structure and commentary on research findings.

**CS111 Introduction to Computer Science** - This introductory course serves as a guide to the new student to find his/her way through the multi facet and vast area of Computer Science and Networks. Its main objectives are: To get familiar with the various branches of Computer Science and Networks; (b) to get a feeling of the various courses that will be taught during his/her studies.

**CS112 Programming Principles I** – This is the course where the student comes in contact with programming. The main objectives of this course are described as follows: Introduce students to the syntax and semantics of a structured high-level programming language; Provide students with working knowledge of programming constructs such as expressions, selection statements, loops, functions and arrays; Provide practical experience in problem solving and coding; Guide the student in order to develop good programming practices.

**CS124 Management Information Systems** - The main objective of this course is the investigation of the role and impact of information systems in the business functions, through the examination of major models of strategy and management information systems used in today's business environment. Additionally, is a conceptual approach through the use of case studies, of a series of information systems applied in the "extended" or "digital enterprise", such as Enterprise Resource Planning Systems (ERP), Customer Relationship Management Systems (CRM), Supply Chain Management Systems (SCM), and Decision Support Systems.

**CS233 Linear Algebra** – The main objectives of the course are to: Provide students with the theory of linear systems of equations; Cover in detail the theory of Matrices, and develop the necessary skills in order for the students to be able to apply Matrices to Linear Systems; Introduce students to eigenvalues, eigenvectors, and diagonalization of square matrices; Cover the elementary concepts from the theory of linear transformations and utilize their main applications; Provide the necessary skills, in order the students be capable of comprehending abstract algebraic notions, related to vector space theory; Discuss the fundamental concepts and the elementary theory of finite dimensional vector spaces in detail.

**CS362 Principles of Cybersecurity** – The course aims to provide students with deep knowledge on various concepts of classical computer and network security paradigms. It will also assess contemporary security policies and security mechanisms within organizations and illustrate the balance of the managerial and technical aspects of network security.

**CS415 Data Analytics** – The purpose of this course is to introduce students to Data Analytics concepts and provide them with an understanding of data warehousing and data analytics methods and tools. The Course objectives are to: Gain an understanding of how managers use analytics to formulate and solve business problems and to support managerial decision making; Learn the principles of data analytics and its underlying methods and algorithms; Gaining factual knowledge regarding data acquisition, data cleansing, and various aspects of data analytics and visualization; Identify opportunities for creating value using business analytics; Estimate the value created using business analytics to address an opportunity; Learn how to use and apply analytics tools to solve business problems.

**DBA201 Digital Business** – The course offers an up-to-date account of key topics, discusses open questions, and provides guidance for future research in digital business. It offers a blend of theoretical and empirical approaches that are central to understanding the digital business. In this context, it aims to develop knowledge in various digital business models and forms. It also takes account of the digital business environment including digital channels, digital value chains and digital marketplace. Moreover, it explains the digital business strategies applied in real-life and provides knowledge on the transition to digital business.

**DBA205 Trading Technologies** – The objectives of the course are: to provide students with an understanding of the fundamentals of trading technology; to introduce Mutual Funds and Hedge Funds; to introduce the concept of financial leverage and its importance; to introduce the various forms of orders and their placement strategies; to discuss how and why different order types generate impact on liquidity; to provide a first analysis of basic trading instruments such as commodity futures and options; to provide a first analysis of more complex financial instruments such as options; to provide a first approach in understanding derivative hedging.

**DBA301 Disruptive Technologies** – The objectives of the course are: to identify potentially disruptive technologies; to carefully consider their disruptive powers in the economy and society; to assess the potential reach and scope, as well as the potential economic impact and disruption, of major rapidly

advancing technology areas; to identify 12 technology areas with the potential for massive impact on how people live and work, and on industries and economies; to quantify the potential economic impact of each technology across a set of promising applications.

**DBA302 Financial Engineering** - The objectives of the course are: to provide students with an understanding of the fundamentals of financial engineering; to provide a first analysis of basic financial instruments such as commodity futures; to provide a first analysis of more complex financial instruments such as options; to provide a first approach in derivative valuation; to present a basic analysis of risk management.

**DBA303 Digital Marketing** - The main objectives of the course are to: Understand how and why to use digital marketing for multiple goals within a larger marketing and/or media strategy; Understand the major digital marketing channels - online advertising: Digital display, video, mobile, search engine, and social media; Learn to develop, evaluate, and execute a comprehensive digital marketing strategy and plan; Learn how to measure digital marketing efforts and calculate ROI; Explore the latest digital ad technologies.

**DBA304 Digital Leadership** – The objectives of the course are: to apply practically the new skills and competencies required for leadership in disruptive environments; expanding and structuring the digital understanding of business leaders to value the new opportunities offered by technology; to provide students with an understanding of how teams collaborate and are built using new technologies.

**DBA305 Entrepreneurship Digitalization** – The objectives of the course are: to provide the students with analytical tools which are necessary for managing in an environment where rapid technological change is a factor; to learn about the challenges associated with technological innovation; to understand the impact of these challenges on a variety of business sectors.

**DBA306 Social Media Management** – The course intends to offer an introduction to a wide range of business-related social media topics. Basic concepts and practices on social media management are explained in order to introduce students to the business essentials of social media. Students are offered critical reflections on a recent and hyped phenomenon, based on a combination of academic insights and practical tips and tricks. By taking a multidisciplinary approach, students get to know a wide range of organization-relevant topics in order to put social media into an appropriate business perspective. It is shown that social media are not a solution to all business problems, and their use should be well considered to avoid failures or too high expectations.

**DBA401 Entrepreneurship Finance** – The objectives of the course are: to provide students with an understanding of the fundamentals of financial statement analysis; to present financial tools that can be used to manage the cash flow of the business efficiently; To present basic techniques that find the value of the company; To differentiate among various methods to finance the business.

**DBA402 Financial Technology** – The objectives of the course are: to provide students with an understanding of the fundamentals of financial technology landscape; to provide students with an

understanding of the tectonic changes that are occurring within the financial technology landscape; To understand how the fintech industry is introducing innovation into financial services through the use of modern technologies; To understand how fintech firms either compete directly with banks, or have partnered with them and are improving the financial services world through introducing innovative ideas, allowing for speedy delivery and increasing competition.

**DBA403 Social Media Marketing** – The course is designed to help students understand how marketing has changed due to the rise of social media and changes in various underlying contextual factors, such as dramatically increased speed of information dissemination across consumers and brands. The overarching goal is to obtain a clear perspective on what's really going on in digital/social/mobile marketing so that they can begin to appreciate its true value to consumers, to managers, and to other corporate stakeholders. It will equip students with the relevant knowledge, perspectives, and practical skills required to develop marketing strategies that leverage the opportunities inherent in social media and consumer-to-consumer social interactions for achieving business and marketing goals. The emphasis of this course is on understanding consumers' social interactions, examining the various social media channels available to marketers, learning how to build social marketing strategies, and practicing how to track their effectiveness. Also, since social media is heavily technology-driven, the course covers some relevant related aspects in digital marketing more broadly, including emerging topics in electronic commerce and mobile marketing.

**DBA404 E-Commerce** – The primary objective of this course is to introduce the student to the various e-commerce tools for marketing, media and social media platforms, communications, market analysis, and customer feedback techniques.

**DBA406 Digital Innovation Management** – The objectives of the course are: to provide an introduction to digital innovation and enterprise; to help students to understand of how to develop an online blog, group website and report.

**ECON101 Principles of Microeconomics** - Microeconomics is concerned with the behaviour of individual decision-makers in the economy - households, business firms, and governments - and how they interact. The course provides a foundation of Microeconomics. It examines how households form their demand for goods and services and how business firms set their supply of goods and services. Because modern societies rely heavily on markets to coordinate the interactions between demand and supply, the course focuses on how markets are structured and what kinds of results markets' structures produce. Finally, the course considers how governments can modify the workings of markets and describes the effects of government's policies.

**ECON102 Principles of Macroeconomics** - Macroeconomics is concerned with the performance, structure and behavior of the entire national economy. The course provides an introduction to the macroeconomic issues of unemployment, inflation, and economic growth and the tools of Macroeconomics in tackling these issues. The course begins by defining key aggregate economic

variables and the basic macroeconomic accounting framework. It studies short-run economic fluctuations, the business cycle, by developing first the building blocks, and then a comprehensive theory of aggregate output. The course analyzes the effect of government policies, fiscal and monetary, on the economy in both the short run and the long run.

**ECON202 Managerial Economics** - Managerial Economics is concerned with the application of microeconomic principles to key management decisions. It provides guidance to increase value creation within organizations, and allows a better understanding of the external business environment in which organizations operate. The course is concerned with resource allocation, strategic and tactical decisions and techniques used by analysts, managers and consultants in the private, public and non-profit sectors of the economy. It equips students with the analytical tools and managerial insights essential to the analysis and solution of those problems that have significant economic consequences, both for the firm and society at large.

**FINA301 Corporate Finance** - **The main goal of this course is to** provide the conceptual background for corporate financial analysis from the point of corporate value creation. The course develops the theoretical framework that will enable students to understand and analyze major financial problems facing a firm. The course covers basic models of corporate capital valuation, including pricing models for primary financial assets, real assets and investment projects. Students will be able to make decisions on the optimal capital structure. Students will also develop the needed skills deciding in the rights type of financing, allocating capital, and the distribution of earnings. It provides necessary knowledge in evaluating different management decisions and their influence on corporate performance and value.

**MATH103 Introduction to Mathematics** - This course is an introduction to the mathematical concepts of calculus. It will enable students to follow more advanced topics in other courses. The course fulfils the general educational requirements for quantitative reasoning in calculus problems.

**STAT103 Statistics I** - The course aims to enable students to apply statistical techniques in related business, finance and real estate problems. It will assist students to develop skills in representing data visually and in engaging in the examination of probability distributions and their applications. Students will learn different statistical techniques and how to identify the appropriate technique for a given set of data and research question.

**STAT203 Statistics II** - The aim of the course is to familiarise students with basic statistical techniques and their application to problems for business. The aim of this course is to enable students to perform good multivariate statistical analyses. To achieve this, a great deal of statistical theory is covered in the course and statistical software will be used to perform the various statistical tests and to produce parameter estimates. The emphasis throughout the course is on understanding the logic of statistical methodologies and the interpretation/meaning of the findings, rather than on the mathematical underpinnings of each method.

**PEPS401 Dissertation** – The aim of this course is to provide students with the opportunity to do an in-depth analysis and investigation of an independent, researchable topic. They will have the chance to utilize all their prior knowledge by participating in a major real life project.