



Diploma in System Design (401) – Business Computer Systems




Prerequisites: Basic knowledge of computing terminology.	Corequisites: A pass or better in Certificate in Computer Fundamentals or equivalence.
Aim: This course involves both theory and practical sessions. Practical sessions involve learning DreamWeaver (see DreamWeaver in Diploma in Web Design for course outline). Business Computer Systems centres on the effective use of information technology, computers and telecommunication networks to support management decision making and corporate strategy, hence providing all necessary operational levels support for the organisation. A general study of computer types, capabilities, uses, and limitations from a business-oriented perspective. Use of operating systems and application software on a microcomputer. Use of network environments to access online resources. The course illustrates the importance of internet and how organisations can make use of Internet/Web.	
Required Materials: Recommended learning resources.	Supplementary Materials: Lecture notes and tutor extra reading recommendations.
Special Requirements: Build web pages using DreamWeaver	
<p>Intended Learning Outcomes:</p> <p>1. Define Information Systems(IS) and Information Technology(IT). Identify how Information Technology can help to improve the efficiency and effectiveness of the business processes, managerial decision making, and workgroup collaboration, thus strengthening the competitive positions in a rapidly changing marketplace.</p> <p>2. Illustrate how to view information systems strategically, that is, as vital competitive networks, as a means of organisational renewal, and as a necessary investment in technologies that help a company adopt strategies and business processes that enable it to re-engineer or re-invent itself in order to survive and succeed in today's dynamic business environment.</p>	<p>Assessment Criteria:</p> <p>1.1 Explain why knowledge of information systems is important for business professionals and identify areas of information systems knowledge they need.</p> <p>1.2 Give examples to illustrate how the business applications of information systems can support a firm's business processes, managerial decision making, and strategies for competitive advantage</p> <p>1.3 Provide examples of several major types of information systems from your experiences with business organisations in the real world</p> <p>1.4 Identify several challenges that a business manager might face in managing the successful and ethical development and use of information technology in a business</p> <p>1.5 Illustrate how in an information system, people use hardware, software, data, and networks as resources to perform input, processing, output, storage, and control activities that transform data resources into information products.</p> <p>2.1 Identify basic competitive strategies and explain how they can use information technologies to confront the competitive forces faced by a business</p> <p>2.2 Identify several strategic uses of Internet technologies and give examples of how they give competitive advantages to a business</p> <p>2.3 Give examples of how business process re-engineering frequently involves the strategic use of Internet technologies</p>

<p>3 Identify the major types of software businesses depend on. Discuss the characteristics and purposes and give examples of their use.</p>	<p>2.4 Identify the business value of using Internet technologies to become an agile competitor or to form a virtual company Explain how knowledge management systems can help a business gain strategic advantages.</p> <p>3.1 Describe several important trends occurring in computer software</p> <p>3.2 Give examples of several major types of application and system software</p> <p>3.3 Explain the purpose of several popular software packages for end user productivity and collaborative computing</p> <p>3.4 Outline the functions of an operating system</p> <p>3.5 Describe the main uses of computer programming software, tools, and languages.</p>
<p>4 Examine how data is a vital organisational resource that needs to be managed like other important business assets. Describe how today's business enterprises cannot survive or succeed without quality data about their internal operations and external environment.</p>	<p>4.1 Explain the business value of implementing data resource management processes and technologies in an organisation</p> <p>4.2 Outline the advantages of a database management approach to managing the data resources of a business, compared to a file processing approach</p> <p>4.3 Explain how database management software helps business professionals and supports the operations and management of a business.</p>
<p>5 Discuss telecommunications and networks. Examine the impact of computing and communications on our society.</p>	<p>5.1 Identify several major developments and trends in the industries, technologies, and business applications of telecommunications and Internet technologies;</p> <p>5.2 Provide examples of the business value of internet, intranet, and extranet applications;</p> <p>5.3 Identify the basic components, functions, and types of telecommunications networks used in business;</p> <p>5.4 Explain the functions of major types of telecommunications network hardware, software, media, and services.</p>
<p>6 Define how e-business is used on the Internet.</p>	<p>6.1 Identify cross-functional enterprise systems, and give examples of how they can provide significant business value to a company</p> <p>6.2 Give examples of how Internet and other information technologies support business processes within the business functions of accounting, finance, human resource management, marketing, and production and operations management.</p>
<p>7 Define the implementation of customer relationship management (CRM) business</p>	<p>7.1 Identify and give examples to illustrate the following aspects of customer relationship management, enterprise resource management, and supply chain management systems: Business</p>

<p>initiatives and information systems as part of a customer-focused or customer centric strategy to improve the chances for success in today's competitive business environment.</p>	<p>processes supported; customer and business value provided; potential challenges and trends</p>
<p>8 Define Electronic Commerce Systems. Understand how E-commerce is changing the shape of competition, the speed of action, and the streamlining of interactions, products, and payments from customers to companies and from companies to suppliers.</p>	<p>8.1 Identify the major categories and trends of e-commerce applications</p> <p>8.2 Identify the essential processes of an e-commerce system, and give examples of how they are implemented in e-commerce applications</p> <p>8.3 Identify and give examples of several key factors and Web store requirements needed to succeed in e-commerce</p> <p>8.4 Identify and explain the business value of several types of e-commerce marketplaces;</p> <p>8.5 Discuss the benefits and trade-offs of several e-commerce clicks and bricks alternatives.</p>
<p>9 Define Decision Support Systems. To succeed in business today, companies need information systems that can support the diverse information and decision-making needs of their managers and business professionals. Explore in more detail how this is accomplished by several types of management information, decision support, and other information systems. Define how the Internet, intranets, and other Web-enabled information technologies have significantly strengthened the role that information systems play in supporting the decision making activities of every manager and knowledge worker in business.</p>	<p>9.1 Identify the changes taking place in the form and use of decision support in business</p> <p>9.2 Identify the role and reporting alternatives of management information systems</p> <p>9.3 Describe how online analytical processing can meet key information needs of managers</p> <p>9.4 Explain the decision support system concept and how it differs from traditional management information systems</p> <p>9.5 Explain how the following information systems can support the information needs of executives, managers, and business professionals: Executive information systems; Enterprise information portals; Knowledge management systems</p>
<p>10 Define how to create and implement an action plan that allows you to make the transition from an old business design to a new e-business design.</p>	<p>10.1 Discuss the role of planning in the business use of information technology, using the scenario approach and planning for competitive advantage as examples</p> <p>10.2 Discuss the role of planning and business models in the development of business/IT strategies, architectures, and applications</p> <p>10.3 Identify several change management solutions for end user resistance to the implementation of new IT-based business strategies and applications.</p> <p>10.4 Discuss strategic planning concepts about developing IT-based business strategies and other planning issues.</p> <p>10.5 Discuss the process of implementing IT-based business plans and the challenges that arise when introducing new IT strategies and applications into a company.</p>
<p>11 Explore the threats to businesses and individuals posed by many types of computer crime and unethical behaviour. Examine methods that companies use to manage the security and integrity of their business systems.</p>	<p>11.1 Identify several ethical issues in how the use of information technologies in business affects employment, individuality, working conditions, privacy, crime, health, and solutions to societal problems</p> <p>11.2 Identify several types of security</p>

<p>12 Explore how the Information System (IS) function can be organised and managed, and stress the importance of a customer and business value focus for the management of information technologies.</p>	<p>management strategies and defences, and explain how they can be used to ensure the security of business applications of information technology</p> <p>11.3 Propose several ways that business managers and professionals can help to lessen the harmful effects and increase the beneficial effects of the use of information technology.</p> <p>12.1 Identify the components of information technology management and use examples to illustrate how they might be implemented in a business</p> <p>12.2 Explain how failures in IT management can be reduced by the involvement of business managers in IT planning and management</p> <p>12.3 Identify cultural, political, and geo-economic challenges that confront managers in the management of global information technologies</p> <p>12.4 Explain the effect on global business/IT strategy of the trend toward a transnational business strategy by international business organisations</p> <p>12.5 Identify considerations that affect the choice of IT applications, IT platforms, data access policies, and systems development methods by a global business enterprise.</p>
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Recommended Learning Resources: Business Computer Systems

<p>Text Books</p>	<ul style="list-style-type: none"> • Business computer systems: Using application software by David Kroenke. ISBN-10: 0938188364 • Business Computer Systems: A Guide for Students and Small Business by R. Hudson and R. Batten. ISBN-10: 0070849765 • Computer Information Systems for Business by V. Thomas Dock and James C. Wetherbe. ISBN-10: 0314931732
<p>Study Manuals</p> 	<p>BCE produced study packs</p>
<p>CD ROM</p> 	<p>Power-point slides</p>
<p>Software</p> 	<p>None</p>