

Program Details

Institution Name: Cambrooks College

Program Name: **Diploma in Business and Computer Information Technology**

Specific Job(s) for Graduates: Information Systems Analysts and Consultants, Database Administrators and Analysts, Computer Programmers, Computer Network Technicians, User Support Technicians, Information Systems Testing Technicians

(e.g. Administrative Assistant, Massage Therapist, Graphic Designer, Dog Groomer)

Program Outline: List Components

Note: The total number of weekly hours includes 2 hours tutorial and 2-hour instructor consultation.

Code	Course Name	Details	Number of Weeks
BUS 251	Business Communications	This course provides students with skills required for making effective communication and overcoming barriers in business communication. Topics include types of business communication, methods of business communication, communication process, communication flows, effective communication (seven C's), intercultural communication, conducting effective meetings, effective presentation skills, effective report writing, business negotiations, communication barriers, and overcoming communication barriers.	2 weeks (20 hours a week)
BCIT 101	Introduction to Business Computing	This course will enable students to learn how to use computers to analyze business data and collaborate on documents and projects. Students will gain hands on experience with advanced features of the Windows Operating System and the Microsoft Office suite of tools including file systems and directories, spreadsheets and databases.	2 weeks (20 hours a week)
APA 101	Accounting Fundamentals	History of accounting, branches of accounting, accounting basics, double entry, accounting cycle and process, bookkeeping, financial statements, financial reporting	3 weeks (20 hours per week)
BUS 200	Business Math & Statistics	The purpose of the course is to provide the student with a mathematical basis for personal and business financial decisions. The course stresses business applications using arithmetic, algebra, ratio and proportion, graphing and applications including payroll creation, cost-volume-profit analysis. The course also includes statistical representation of data, correlation, time series and exponential smoothing, and elementary probability distributions. Microsoft Excel is used as a software tool.	2 weeks (20 hours per week)
BCIT 102	Introduction to Marketing	The course will provide students with an understanding of the principles of Marketing. Focus is on the management of the marketing activities and how marketing relates to overall organisational functioning. It will include topics such as environmental analysis,	2 weeks (20 hours per week)

		industry and competitor analysis, objective setting, marketing strategies, and market mix components.	
BCIT 103	Introduction to Visual Programming	This course will enable students to study the Windows based application development environment. Students will be able to develop applications using graphical user interfaces and incorporate Object-Oriented Event-Driven (OOED) programming using Visual Basic.	3 weeks (20 hours a week)
BCIT 104	Internet Application Development 1	In this course students will learn the fundamentals of Web design and application development. They will learn to create Web content that communicates effectively and is easy to maintain. Course content will include learning HTML5, JavaScript, JQuery, AJAX and JavaScript sockets.	3 weeks (20 hours a week)
BCIT 200	Database Management Systems	The following topics are covered in this course: Introduction to Database Systems, Data Modeling and the Entity-Relationship Diagram, The Relational Model and Normalization, Physical Database Design, SQL, Introduction to Two-Tier and Three-Tier Architectures, Introduction to Data Warehousing, Data Quality and Database Administration. The theoretical material in this course is supplemented by labs, Assignment, and Project components.	3 weeks (20 hours per week)
BCIT 201	Systems Analysis and Design	The course deals with planning the development of information systems through business process design and documentation, to technology enablement, which includes understanding and specifying in detail what a system shall do and how the components of the system should be implemented and work together. This course focuses on the concepts, skills, methodologies, techniques, tools, and perspectives essential for systems analysts. The practical component is object-oriented and use-case driven, requiring the student to go through the steps of systems analysis and design to solve a real-life business problem.	3 weeks (20 hours per week)
BCIT 300	Object Oriented Software Development	In this course the student will study the fundamentals of object-oriented software design, UML and data structures. He will study the creation and selection of common collections and their related algorithms as well as apply these concepts in project development involving multi-user, networked application for data access.	3 weeks (20 hours per week)
BCIT 301	Information Security, Privacy and Ethics	Students will learn how to plan and manage security and privacy policies. The student will study the role of CIPS in providing ethical guidelines for professional conduct and also learn about the responsibilities of working with management information systems and their data. They will also discuss the ergonomics and health risks associated with computer based-work. The studies will include the components of an information system security model and the threat groups that compromise them. In addition, students will be exposed to examples of security technology and how to implement it as part of a security plan.	2 weeks (20 hours per week)

BCIT 302	Data Communications and Networks	This course provides an in-depth discussion of computer networks. It includes a detailed discussion of the different Network Models. Concepts that have a direct effect on the efficiency of a network (e.g. collision and broadcast domains, topology) are also discussed. Concepts on different network technologies, distributed computation, networking, and communication software, and security issues are also discussed.	3 weeks (20 hours per week)
BCIT 304	Introduction to Project Management	This course will develop essential project management skills that will place a student in a position to make an immediate and valuable contribution to the success of real world projects. The student will study industry standards and methodologies to develop an appreciation of the resources available to project managers. The student will learn tools and techniques which are useful to the project process groups and knowledge areas. They will study the theory that supports project management and how to apply it to real-world examples.	2 weeks (20 hours per week)
BCIT 305	Entrepreneurship and Innovation in Technology	This non-technical course on start-ups, entrepreneurship, and innovation. Topics include: the impact of technological innovation; a critical overview of selected emerging technologies; effective strategies for marketing new technologies; choosing an entrepreneurial career; and starting a new venture, including market research, business planning, team building, and financing. Students may be required to complete and present a detailed business plan.	2 weeks (20 hours per week)
BCIT 400	Internet Application Development 2	In this course, students will become familiar with Java EE components such as servlets, JSP and Tag Libraries. Fundamentals of server-side programming and Model View Controller Architecture (MVC) will be discussed using Web servers and application servers. They will also be introduced to Java EE JSF and Ajax technologies. Students will develop, test, debug and deploy end-to-end Web applications using Eclipse and RAD as application development tools, Tomcat/and WebSphere as application servers, and MySQL as databases.	3 weeks (20 hours per week)
BCIT 401	Mobile Application Development	There are more mobile devices on the planet than people. Mobile app development helps to unleash the full power of mobile devices, and push their usage into every corner of modern society. This course introduces students to important concepts and aspects in mobile application development on Java based Android phones, including UI design, data persistence, multimedia support, sensor management, multithreading, debug and test, and application publishing. Although the course is centred on Android, general principles of mobile app development discussed here can also be applied to other contexts.	3 weeks (20 hours per week)
BCIT 402	Technical Support	In this course, students will study how to trouble and diagnose common computer related problems and how to look for solutions to such problems. They will have a	3 weeks (20 hours per week)

		hands-on experience on how to configure environments such as Linux, Microsoft Windows, networking, hardware and the internet. Students will learn how to install various software and hardware systems.	
BCIT 403	Application Development Project	In this course, students will be presented with various topics describing real-life projects. They will be grouped in teams of two to three people per team. In their various project groups, they will collect requirements, design a solution for their chosen project, implement the solution and test it to demonstrate that it works.	5 weeks (20 hours per week)
OR			
BCIT 404	Enterprise Resource Planning	The course provides knowledge and skills in design and configuring of business processes using Enterprise Resource Planning (ERP) tools. The course will introduce and apply techniques used in popular ERP software (e.g. SAP ERP) for system configuration and integration. An example application (such as Accounting) will be considered.	
HRM 001	Employment Success Strategies	Resume writing, cover letter writing, job search strategies, Preparing for interviews, Employment references, Job acceptance, First week at work and interpersonal relations skills	1 week (20 hours per week)
BCIT405	Practicum	The Practicum will provide an opportunity for the student to integrate the formal knowledge and skills learned in the classroom with hands-on learning from the workplace. The student will have the opportunity to apply theoretical concepts to real work situations, work collaboratively in team work situations, experience the complexity of the roles and responsibilities within an organization, and apply personal employment skills.	8 Weeks