

# Bachelor of Information Systems (BIS17) Curriculum map (2024)

Year 1								
Subject title	Information systems in organisations	Fundamentals of Programming	Network Fundamentals	Communications and Teamwork	Business Requirements Analysis	Operating Systems & Virtualisation	Elective	Elective
<b>Subject code</b>	BIS101	BIS102	BIS103	BIS104	BIS201	BIS202		
<b>Credit points</b>	6	6	6	6	6	6	6	6
<b>EFTSL</b>	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
<b>Core/Elective</b>	Core	Core	Core	Core	Core	Core	Elective	Elective
<b>Subject Objective</b>	To introduce basic concepts of Information systems and the different ways in which businesses use these systems. To understand the advantages of the impact of technology on business and decision making.	To introduce object oriented programming (OOP) and develop robust applications in OOP following coding standards and testing strategies.	To introduce the operation and structure of computer networks, their types and their role in data communications. To learn about the different networking models, the importance of security in networks and the protocols that operate at the different layers to achieve end to end data transfer.	To consolidate and strengthen students' communication, collaboration and teamwork skills in both industry and academic contexts. To develop in students the linguistic, academic and research skills essential for success in the Australian higher education sector.	To define tasks and techniques that, used with stakeholders, provide an understanding of the structure, policies and operations of a business and to recommend solutions that enable the business to achieve its goals.	To introduce modern computer Operating systems, their types and an overview of functionality of operating systems, and their relationship with computer operations. To learn about the importance of virtualisation with a detailed introduction to hypervisor technologies.	Chosen from Year 1 electives as listed below.	Chosen from Year 1 electives as listed below.
<b>Learning Outcomes</b>	<ol style="list-style-type: none"> <li>1. Explain the various components of Information systems and their impact on organisational processes.</li> <li>2. Analyse business models and the various modelling techniques.</li> <li>3. Examine organisational strategies and the competitive advantages of introducing information systems.</li> <li>4. Compare the different techniques that are used in depicting information systems and business processes.</li> <li>5. Understand the architecture and components of Business Intelligence Systems and various phases and categories of Information System Development.</li> <li>6. Evaluate Enterprise systems, Transaction processing systems and E- Commerce.</li> </ol>	<ol style="list-style-type: none"> <li>1. Analyse the basic concepts and advantages of using object oriented programming (OOP).</li> <li>2. Understand the data types and data structures used in the chosen language.</li> <li>3. Explain the programming constructs such as sequence, selection and repetition.</li> <li>4. Describe the main features of OOP such as inheritance, polymorphism and encapsulation.</li> <li>5. Learn to construct reusable and robust programs which are also user friendly.</li> <li>6. Examine and apply problem solving techniques using algorithms and learn how to test and validate code.</li> </ol>	<ol style="list-style-type: none"> <li>1. Understand Network fundamentals the different network types and the various devices that are used in these networks.</li> <li>2. Describe the basic operation of the protocols in the OSI and TCP/IP models and analyse network traffic.</li> <li>3. Establish an understanding of data flow, and the different protocols in the TCP/IP layers, by using Packet Analyzing/Capturing software.</li> <li>4. Describe key elements of the Internet, including but not limited to, Routers, IP addresses, Port Numbers &amp; DNS Servers.</li> <li>5. Describe the importance of security in computer networks.</li> <li>6. Apply the knowledge learnt to create a logical design for a small to medium network.</li> </ol>	<ol style="list-style-type: none"> <li>1. Plan and produce different styles of academic and technical written documents including long and short formats.</li> <li>2. Demonstrate understanding of academic conventions including referencing, acknowledging and document formatting.</li> <li>3. Develop listening, reading and research skills in academic and technical situations.</li> <li>4. Construct and present a persuasive oral presentation using visual aids.</li> <li>5. Differentiate between different interview types including negotiation interviews.</li> <li>6. Demonstrate ability to interact and collaborate with group and team members to make decisions, solve problems, manage meetings and resolve conflicts.</li> <li>7. Compare and contrast different leadership styles and team roles and responsibilities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Interpret business needs and goals using user centred structured methods.</li> <li>2. Compile functional specifications to meet the requirements of a business information system.</li> <li>3. Compose a system model for user sign-off which is adaptive to moderate change in requirements.</li> <li>4. Propose techno ethical needs and requirements for a proposed information system</li> </ol>	<ol style="list-style-type: none"> <li>1. Understand the definition and role of operating systems and their types.</li> <li>2. Describe the integration of underlying hardware, operating systems, device drivers and application software.</li> <li>3. Compare the design and functionality of several modern operating systems.</li> <li>4. Establish an understanding of specific concepts such as multiprogramming, multitasking, processes, threads and virtualization.</li> <li>5. Apply knowledge of virtualisation technologies to understand its role in Cloud computing.</li> <li>6. Describe the use of Hypervisor software along with the installation and usage of different client and server operating systems using different hypervisor types.</li> </ol>		
<b>Weekly contact</b>	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours		
<b>Semester contact hours</b>	52 hours	52 hours	52 hours	52 hours	52 hours	52 hours		
<b>Independent learning</b>	104 hours	104 hours	104 hours	104 hours	104 hours	104 hours		
<b>TOTAL HOURS (semester)</b>	156 hours	156 hours	156 hours	156 hours	156 hours	156 hours		
<b>Assessment (%)</b>	Task 1: Weekly Tutorial - 10% Task 2: Assignment: Part A - 20% Task 3: Assignment: Part B - 10% Task 4: Assignment: Part C - 10% Task 5: Examination - 50% (Hurdle: Pass)	Task 1: Laboratory Work - 10% Task 2: Online quizzes (x2) – 10% Task 3: Assignment 1 - 20% Task 4: Assignment 2 - 20% Task 5: Examination - 40% (Hurdle: Pass)	Task 1: Laboratory Work - 25% Task 2: Assignment - 25% Task 3: Examination - 50% (Hurdle: Pass)	Task 1: Literature Review – 15% Task 2: Report – 40% Task 3: Discussion Forum Contributions – 10% Task 4: Group Presentation – 35% (Hurdle: Pass)	Task 1: User Needs Analysis – 15% Task 2: Software Requirements Specification. – 25% Task 3: Prototype – 20% Task 4: Examination– 40% (Hurdle: Pass)	Task 1: Laboratory Work - 15% Task 2: Tutorial submissions - 15% Task 3: Assignment (Group Report) – 20% Task 4: Examination – 50% (Hurdle: Pass)		
<b>Prerequisites/Co-requisites</b>	Nil	Nil	Nil	Nil	Nil	Nil		

Year 2								
Subject title	Business Decision Analysis	Database Design	Enterprise Systems	Web Design and Programming	Cyber security	Elective	Elective	Elective
Subject code	BIS301	BIS302	BIS401	BIS403	BIS404			
Credit points	6	6	6	6	6	6	6	6
EFTSL	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
Core/Elective	Core	Core	Core	Core	Core	Elective	Elective	Elective
Subject Objective	This subject introduces the conceptual framework and practical skills for Quantitative analysis techniques in a business context.	To review how databases are used in organisations from enterprise databases to local databases on mobile devices and review database architecture. To develop the knowledge and skills necessary for the effective design of a relational database that satisfies the data requirements of an enterprise.	To equip students with the concepts, knowledge and skills of business enterprises systems. The subject provides students with the opportunity to develop enterprise skills and to reflect and develop creative and critical thinking.	To introduce both responsive web design and programming using a standard web framework which facilitates a Model View Controller (MVC) design pattern.	To understand recent developments and future trends in cyber security and the various classes of cyberattacks that can occur, along with techniques to identify, detect, analyse and defend against these attacks.	Chosen from Year 2 electives as listed below.	Chosen from Year 2 electives as listed below.	Chosen from Year 2 electives as listed below.
Learning Outcomes	<ol style="list-style-type: none"> <li>Examine the mathematical tools needed to assist in business decision making.</li> <li>Identify business problems and devise potential alternative solutions using mathematical models.</li> <li>Address decision trade-offs, quantitatively analyse decision alternatives using spreadsheets and other analytical tools.</li> <li>Analyse, interpret and communicate results of mathematical decision models.</li> <li>Apply problem solving methodologies using spreadsheet features and other tools.</li> </ol>	<ol style="list-style-type: none"> <li>Demonstrate understanding of database system and relational data model concepts and theories.</li> <li>Explain the steps in a database application development life cycle.</li> <li>Apply data modelling principles to produce ER diagrams</li> <li>Design and develop a relational database schema based on a conceptual schema design</li> <li>Construct a well-designed relation schema using normalisation theory</li> <li>Create and interrogate a database using SQL statements in a database server environment</li> </ol>	<ol style="list-style-type: none"> <li>Demonstrate understanding of enterprise systems, their components and their effectiveness to support business operations and management in a large organizational context.</li> <li>Appraise an ERP system's role, its architecture and components, its implementation, strengths and weaknesses.</li> <li>Explain the challenges and issues associated with the implementation of ERP (Enterprise Resource Planning) system in large organizations.</li> <li>Examine different Enterprise Systems that support business operations and management.</li> <li>Critically analyse and demonstrate the application of the systems thinking approach to problem solving and decision making in regard to the management of enterprise systems.</li> <li>Demonstrate an ability to work independently and in a group, Communicate recommendations for ERP system implementation with a professional approach.</li> </ol>	<ol style="list-style-type: none"> <li>Explain the main concepts of a responsive web design.</li> <li>Compare and contrast the main web design patterns.</li> <li>Construct a responsive web application.</li> <li>Use a web framework to create an MVC based web application.</li> <li>Assess the advantages and disadvantages of using an MVC web design pattern.</li> <li>Evaluate what impact Cloud computing will have on the future of web software development.</li> </ol>	<ol style="list-style-type: none"> <li>Explain the concepts of confidentiality, availability and integrity in Information Assurance.</li> <li>Analyse the TCP/IP protocol suite as it relates to the different classes of attacks in Cyber Security</li> <li>Examine the types of incidents including their categories, the responses and timelines for response.</li> <li>Examine how risk management principles can be used to assess threats, vulnerabilities, and provide countermeasures and the impact risk management has on the mitigation of risk to information systems</li> <li>Appraise the role of information security, network security and web security as an integral part of an organization's secure business model.</li> </ol>			
Weekly contact	4 hours	4 hours	4 hours	4 hours	4 hours			
Semester contact hours	52 hours	52 hours	52 hours	52 hours	52 hours			
Independent learning	104 hours	104 hours	104 hours	104 hours	104 hours			
TOTAL HOURS (semester)	156 hours	156 hours	156 hours	156 hours	156 hours			
Assessment (%)	Task 1: Weekly Tutorials and Labs - 30% Task 2: Class Test 1 - 10% Task 3: Class Test 2 - 10% Task 4: Examination - 50% (Hurdle: Pass)	Task 1: Homework Exercises x 3 - 20% Task 2: Online Tests x 3 - 15% Task 3: Group Project & Presentation - 35% Task 4: Examination – 30% (Hurdle: Pass)	Task 1: Tutorials/labs - 20% Task 2: In-class test 1 - 5% Task 3: In-class test 2 - 5% Task 4: Group Project - 20% Task 5: Examination - 50% (Hurdle: Pass)	Task 1: 4 Tutorials - 10% Task 2: 4 Online tests - 20% Task 3: Assignment 1 - 10% Task 4: Assignment 2 - 10% Task 5: Examination - 50% (Hurdle: Pass)	Task 1: Tutorials - 10% Task 2: Assignment 1 (Group) - 25% Task 3: Assignment 2 (Individual) - 15% Task 4: Examination - 50% (Hurdle: Pass)			
Prerequisites/Co-requisites	Nil	Nil	Nil	Prerequisite: BIS102	Prerequisite: BIS103			

Year 3							
Subject title	Big Data and Business Intelligence	Enterprise Cloud Computing	Project Management	Database Systems	Information Systems Support and Testing	Information Systems Project	Ethics and IT Governance
Subject code	BIS501	BIS502	BIS503	BIS402	BIS601	BIS602	BIS603
Credit points	6	6	6	6	6	12	6
EFTSL	0.125	0.125	0.125	0.125	0.125	0.125	0.125
Core/Elective	Core	Core	Core	Core	Core	Core	Core
Subject Objective	To understand the use of Big data in business analytics, and Business Intelligence Software, Processes and management, including the use of strategic, tactical and operational Business Intelligence.	To provide an in-depth understanding of the key technologies that define Enterprise Cloud Computing, from a technical perspective, including the 3 models of delivery, namely: infrastructure as a service (IaaS); platform as a service(PaaS); and software as a service(SaaS).	To explore the principles, tools and techniques of Project Management (PM) and Quality Assurance (QA), and provide insight on how these methodologies help in managing organizational problems in business, Information and Communication Technology (ICT).	To explore critical issues and advanced techniques in data management and security in an enterprise database management system environment; and design strategies for managing the data and ensuring its security. Implement the designs using an Enterprise Database Management System, and then test and review the designs to ensure they meet the client's	To establish the criteria to determine whether an information system is fit for purpose and to identify and implement the components required to support and to extend or adapt that information system over its expected lifetime in various business environments.	The subject is a capstone for the course as a whole, and brings together the knowledge and skills learned in subjects throughout the course. Students to work effectively in autonomous teams, demonstrate their ability to bring together and synthesize the knowledge	To understand ethics and IT governance and corporate strategies, acknowledging constraints defined by culture, enterprise goals and legislation.
Learning Outcomes	<ol style="list-style-type: none"> <li>Examine different Big Data Analytics techniques, tools, applications and implementation Methodologies;</li> <li>Evaluate the contribution of the various processes in extraction, transformation and loading (ETL) of a data warehouse to the quality of the analysis provided by Business Intelligence software.</li> <li>Utilise Data Warehousing and Business In business decision making and competitive advantage.</li> <li>Analyse and Evaluate Big Data Analytics using both structured and unstructured data processing techniques.</li> <li>Utilise and Examine tools and techniques for data visualisation.</li> <li>Research emerging Big Data trends and issues, investigate and critically analyse various Big Data Analytics methods, techniques and governance.</li> </ol>	<ol style="list-style-type: none"> <li>Understand the relationship between Cloud computing and the technologies that underpin it.</li> <li>Compare the advantages and disadvantages, for an organization, in migrating to the Cloud.</li> <li>Discuss the relationship between each of the stake holders in an Enterprise Cloud system.</li> <li>Analyse the key characteristics of an Enterprise cloud system as defined in "The NIST Definition of Cloud Computing" and compare this with the services offered by at least one large Cloud provider.</li> <li>Understand the relationship between each of the Cloud delivery models offered by a cloud provider to the kinds of access, functionality and security implications this has on a cloud consumer.</li> <li>Construct an environment based on each of the 3 delivery models, namely: IaaS; PaaS; and SaaS.</li> </ol>	<ol style="list-style-type: none"> <li>Compare various studies that show the effect of applying PM principles to real life business projects.</li> <li>Establish the importance of planning the outputs and outcomes of a project and analysing these before starting the execution.</li> <li>Evaluate the various techniques used in estimating the time taken for completion of a project.</li> <li>Assess the different categories in the process of cost management depending on the size and type of project.</li> <li>Measure the impact of risks and importance of incorporating risk and quality management during the development of a business project.</li> <li>Construct, from a case study, a detailed project proposal and justify the PM principles that are applied.</li> </ol>	<ol style="list-style-type: none"> <li>Evaluate the contribution of the various functions of an enterprise database management system to managing data and its security.</li> <li>Analyse a client's data management and security requirements, assess the data management and security issues and design security protocols that allow access to the data as required by the client while keeping the data secure.</li> <li>Implement and test a sophisticated database design and its data management features, along with its associated security protocols and objects ensuring it meets the client's data management and security requirements.</li> <li>Critique the different approaches that are available to prevent or minimize data loss in an enterprise database management system and propose effective solutions based on different scenarios.</li> <li>Design, implement, and test a database backup and recovery strategy for a given scenario.</li> <li>Evaluate emerging trends and judge their value in relation to data management and security.</li> </ol>	<ol style="list-style-type: none"> <li>Explore IT service management as it relates to aligning IT services to the needs of an organisation, utilizing the Information Technology Infrastructure Library (ITIL) framework to understand how it can be used to develop best practices in supporting IT infrastructure within an organisation.</li> <li>Develop suitable testing frameworks for information systems prior to their implementation and over the course of their life cycle.</li> <li>Evaluate the different levels of support required for each of the groups of users of an information system and to advocate for sufficient resourcing to achieve this end.</li> <li>Create appropriate training packages and/or support documentation for each group of users of an information system and to review these items when required to incorporate any enhancements or modifications to be made to that information system over its lifetime.</li> <li>Communicate effectively with end users to establish the circumstances in which problems with the information system occur, to rectify these problems in a timely and effective manner and to devise suitable feedback mechanisms to ensure that all relevant stakeholders are provided with an acceptable service.</li> <li>Incorporate enhancements into existing information systems in response to changes in the business environment or the addition of new system requirements where appropriate and to implement system updates as and when they are required whilst minimizing the impact on users.</li> </ol>	<ol style="list-style-type: none"> <li>Identify and assign the required roles within a team, formulate a project plan and track progress through to implementation and handover.</li> <li>Liaise with stakeholders, consulting with them throughout the complete project lifecycle, to gather, analyze, refine and develop a set of requirements that meet their needs. Understand the ethical issues and professional responsibilities involved during this project.</li> <li>Investigate and choose, from several possible approaches, the most appropriate methodology available for the problem in hand.</li> <li>Working in a team environment, identify any skill gaps and take the appropriate steps to address this. Resolve any technical or personnel issues that may arise during the lifetime of the project.</li> <li>Synthesize existing knowledge to produce a solution to a unique set of requirements.</li> <li>Evaluate the completed process and reflect on what was learnt, and what could have been improved both at a project level and a personal level.</li> </ol>	<ol style="list-style-type: none"> <li>Develop an understanding of the importance of IT governance.</li> <li>Reflect on the implications of critical contemporary issues for IT/IS governance including strategy planning and controls, and ethics.</li> <li>Critically analyse the role of CIO within organisations.</li> <li>Contextualize the IS/IT role and function from a corporate perspective.</li> </ol>
Weekly contact	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours	3 hours
Semester contact hours	52 hours	52 hours	52 hours	52 hours	52 hours	52 hours	39 hours
Independent learning	104 hours	104 hours	104 hours	104 hours	104 hours	208 hours	117 hours
TOTAL HOURS (semester)	156 hours	156 hours	156 hours	156 hours	156 hours	260 hours	156 hours
Assessment (%)	Task 1: Weekly Tutorials/Labs – 20% Task 2: Group Project/Assignment – 40% Task 3: Examination – 40% (Hurdle: Pass.)	Task 1: Individual Report – 10% Task 2: 5 Labs – 20% Task 3: Group Project – 40% Task 4: Examination – 30% (Hurdle: Pass.)	Task 1: Major Assignment – 40% Task 2: Mid Semester Presentation – 10% Task 3: Final Presentation – 10% Task 4: Examination – 40% (Hurdle: Pass.)	Task 1: Research report (Individual) – 30% Task 2: Group project – 45% Task 3: In class scenario-based assignment – 25%	Task 1: Assignment 1 (Individual) – 30% Task 2: Assignment 2 (Group) – 40% Task 3: Assignment 3 (Individual) -30% (Hurdle: Pass.)	Group effort (Target size group of 3, for all 4 assessments). Task 1: Planning and project management report - 20% Task 2: Progress report with recommendations and demonstration of prototype to sponsor. – 20% Task 3: Evaluation report and demonstration of final deliverables to sponsor – 20% Task 4: Project Presentation to Panel, and handover of system deliverables. – 40%	Task 1: Tutorials – 10% Task 2: Assignment 1 (Group presentation) – 30% Task 3: Assignment 2 (Case study) – 20% Task 4: Examination – 40%
Prerequisites/Co-Requisites	Prerequisite: BIS301	Prerequisite: BIS202	Nil	Prerequisite: BIS302	Nil	Prerequisite: BIS104, BIS503	Nil

Year 1 electives					
Subject title	Information Security Management	Change Management	Business Management **	Business Economics **	Accounting Principles **
Subject code	BISE03	BISE04	BAC208	BAC108	BAC101
Credit points	6	6	6	6	6
EFTSL	0.125	0.125	0.125	0.125	0.125
Core/Elective	Elective	Elective	Elective	Elective	Elective
Subject Objective	To provide the fundamental knowledge of Information security (IS) and its management in an organisation from the perspective of management, including the technological, legal, ethical and professional aspects of managing digital information	To understand organisations, their quickly changing environments, and the management of change, with a special focus on the role of the ICT professional and information systems in organisation change.	To analyse and respond to various commerce-related contingencies that are relevant in the contemporary organisation and to develop a range of skills associated with being an effective leader and manager.	To introduce the principles, concepts, data and analytical frameworks used in economics and to become familiar with the language of economics.	To introduce the conceptual foundations that impact on the recording of transactions, including development of the double entry accounting system and generally accepted accounting standards, and the history of Australian Accounting Standards.
Learning Outcomes	<ol style="list-style-type: none"> <li>Understand organisational information security practices and the need for managing the security of digital information and information systems</li> <li>Identify and describe the various threats to the security of digital information and information systems.</li> <li>Undertake a risk assessment regarding the security of digital information and information systems and develop strategies for mitigating risk.</li> <li>Analyze various models and practices for managing security of digital information and information systems</li> <li>Establish an understanding of the current legal and ethical positions that relate to information technology security management issues</li> </ol>	<ol style="list-style-type: none"> <li>Assess different dimensions of organisational change.</li> <li>Differentiate between disruptive and sustaining technologies.</li> <li>Propose various approaches to managing resistance to change.</li> <li>Compare and contrast managers' approaches to implementing changes.</li> <li>Explain common issues in change management.</li> <li>Critically analyse academic literature and/or case studies on change management.</li> <li>Develop an implementation strategy for an IT change project</li> </ol>	<ol style="list-style-type: none"> <li>Describe the organisational environment within which managerial work is undertaken and examine the functional and role perspectives of managerial work</li> <li>Debate a perspective of management thinking through an examination of historical and contemporary theories</li> <li>Explain structured decision-making and planning processes that support organisational goals</li> <li>Evaluate the approaches to organising and controlling work activities that ensure effective and efficient utilisation of organisational resources</li> <li>Investigate and assess the issues critical to leading and motivating individuals, teams and organisations</li> <li>Discuss issues that have a high impact on managerial activity in the contemporary work environment including corporate social responsibility, ethics and the management of change</li> </ol>	<ol style="list-style-type: none"> <li>Demonstrate an understanding of the core concepts and tools of economics.</li> <li>Relate basic economic theory and principles to current economic issues and evaluate related public economic policies.</li> <li>Apply economic principles and reasoning to solving business problems.</li> <li>Interpret charts, graphs, and tables and use the information to make informed judgments.</li> <li>Communicate knowledge and understanding of economic issues using written, verbal and visual expression.</li> <li>Critically reflect on the broader social consequences of economic decision making.</li> </ol>	<ol style="list-style-type: none"> <li>Understand the uses and limitations of key conventions, practices, business entities and classifications in an accounting environment</li> <li>Apply double entry accounting principles to the recording of transactions</li> <li>Analyse transactions to identify their nature and form</li> <li>Evaluate and utilise inventory recording and valuation methods</li> <li>Apply the principles of accrual accounting</li> <li>Produce a set of appropriately classified financial reports for a sole trader</li> <li>Understand the importance of ethics, including the requirements of professional ethics codes, and how to recognise and address ethical dilemmas as part of the decision-making process.</li> </ol>
Weekly contact	4 hours	4 hours	4 hours	4 hours	4 hours
Semester contact hours	52 hours	52 hours	52 hours	52 hours	52 hours
Independent learning	104 hours	104 hours	104 hours	104 hours	104 hours
TOTAL HOURS (semester)	156 hours	156 hours	156 hours	156 hours	156 hours
Assessment (%)	Task 1: Tutorials – 10% Task 2: Major Group Assignment – 25% Task 3: Assignment (Individual) – 15% Task 4: Examination– 50% (Hurdle: Pass.)	Task 1: Literature Review x 2 – 20% Task 2: Discussion Forum Contributions – 10% Task 3: Group Project - Report and Presentation – 40% Task 4: Examination – 30% (Hurdle: Pass.)	Task 1: Quizzes (x 3) (open book) -15% Task 2: Argumentative Essay, 1500 words - 35% Task 3: Examination, 2 hours (closed book) - 50%	AT 1: Quizzes, 20 minutes (x 5) - 10% AT 2: Class Test, 2 hours - 25% AT 3: Independent structured research project, 1500 words - 25% AT 4: Examination, 2 hours (closed book) - 40%	Task 1: Individual assignment 10% Task 2: Class test, 2 hours 20% Task 3: Case study 20% Task 4: Examination, 3 hours (closed book) 50% Hurdle: Students must achieve a minimum of 45% of marks available in the final examination before being considered for a pass grade or above.
Prerequisites/Co-requisites	Nil	Nil	Nil	Nil	Nil

\*\* Units taken from an already accredited business degree i.e. Bachelor of Business Accounting

Year 2 electives						
Subject title	Human Computer Interaction	Programming Web Services	Business Transformation and Innovation	Computerised Accounting Applications **	Business Relationship Management. **	Organisational Behaviour and Design. **
Subject code	BISE01	BISE02	BISE05	BAC102	BAC210	BAC205
Credit points	6	6	6	6	6	6
EFTSL	0.125	0.125	0.125	0.125	0.125	0.125
Core/Elective	Elective	Elective	Elective	Elective	Elective	Elective
Subject Objective	To introduce the principles and methodologies of human computer interaction in building effective interfaces for users and to understand how an interactive interface plays a vital role in the way humans communicate with computers.	To provide the skills and knowledge needed to plan, design and validate a web service, then create a secure application to use this Web Service.	To define and evaluate technology innovation in the context of providing value to business; to compare methods of decision making with respect to Information Systems and to appraise problem solving techniques	To develop proficiency in the use and selection of computerised accounting packages for SMEs, and spreadsheet software for problem-solving and decision-making	To develop the personal and interpersonal skills necessary to participate meaningfully within the organisation and to build and develop relationships with peers, managers and external stakeholders.	To develop an understanding of how work gets done in the contemporary business environment through the interaction of individuals, teams and systems and to apply that knowledge to achieve organisational effectiveness.
Learning Outcomes	<ol style="list-style-type: none"> <li>Analyse the basic concepts of Human Computer Interaction and describe social and emotional interaction.</li> <li>Compare different cognitive frameworks and conceptualize interaction.</li> <li>Evaluate the various data gathering techniques and learn how data is analysed, interpreted and presented.</li> <li>Evaluate the process of interaction design and learn to establish the basic requirements of the user.</li> <li>Propose a prototype for a business requirement and develop an interactive design to fulfil the user requirements.</li> <li>Describe all the evaluation techniques and learn evaluating designs in both controlled and uncontrolled environment.</li> </ol>	<ol style="list-style-type: none"> <li>Explain the main components of a web service and how web services are being used in cloud computing.</li> <li>Compare and contrast SOAP web services to RESTful web services.</li> <li>Plan, design and validate a RESTful Web service API, which satisfies a set of given requirements.</li> <li>Build a RESTful Web Service API from a given design, and host it in the Cloud.</li> <li>Create a front end application that makes use of a RESTful web service API.</li> <li>Establish how web services are used in Cloud computing.</li> </ol>	<ol style="list-style-type: none"> <li>Evaluate the use of Information Systems to drive innovation and the role of cloud computing in fostering entrepreneurship, value adding and idea incubation.</li> <li>Construct a computer based application that aids business decision making using a structured method.</li> <li>Analyse problems common to Information Systems and construct innovative proposals that resolve these issues.</li> <li>Plan transformation of an existing business process or develop a new business process with tangible return on investment.</li> <li>Examine examples of disruptive innovation, documenting its technology needs and issues</li> </ol>	<ol style="list-style-type: none"> <li>Interpret, analyse, solve and apply accounting information in a desktop accounting environment.</li> <li>Evaluate and record business transactions using a cloud-based accounting package.</li> <li>Compare and contrast the advantages and disadvantages of different accounting software packages and critically review the risks associated with the acquisition of accounting software.</li> <li>Develop and maintain various business models and perform data analyses to solve problems and support decision-making using spreadsheet software.</li> </ol>	<ol style="list-style-type: none"> <li>Identify internal and external factors which impact on business relationships.</li> <li>Build self-awareness, and increased awareness of others, as a foundation to relationships and how we relate to others.</li> <li>Examine the interpersonal skills required to successfully manage business relationships in the modern organisation by applying the principles of supportive communication.</li> <li>Understand the role of teams in different work environments and the stages of team development and identify strategies for managing teams.</li> <li>Critically examine strategies to manage the performance of others by giving effective feedback, using motivation techniques and gaining power and influence in business relationships.</li> <li>Analyse the nature of conflict and its resolution and demonstrate attitudes which enable the individual to cope in conflict situations.</li> <li>Assess the training, education and development options available in modern organisations.</li> </ol>	<ol style="list-style-type: none"> <li>Evaluate and apply the concepts of organisational behaviour and organisational culture and analyse the work of selected organisational behaviour theorists.</li> <li>Explore patterns of individual behaviour and motivational factors in the work environment.</li> <li>Explain the basis of organisational design, assess formal and informal organisational structures and identify the position of the manager in these areas.</li> <li>Assess the use of power, politics and influence in organisations in both the public and private sectors.</li> <li>Explore the development of leadership theories and their application in the contemporary business environment.</li> </ol>
Weekly contact	4 hours	4 hours	4 hours	5 hours	3 hours	4 hours
Semester contact hours	52 hours	52 hours	52 hours	65 hours	39 hours	52 hours
Independent learning	104 hours	104 hours	104 hours	91 hours	117 hours	104 hours
TOTAL HOURS (semester)	156 hours	156 hours	156 hours	156 hours	156 hours	156 hours
Assessment (%)	Task 1: Major Assignment (Develop a prototype of interactive design.) – 25% Task 2: Mid Semester Presentation – 10% Task 3: Final Presentation (Present how the prototype was developed and evaluated.) – 15% Task 4: Examination – 50% (Hurdle: Pass)	Task 1: 3 Tutorials – 15% Task 2: 2 Online Tests – 10% Task 3: Build and deploy to the cloud a web service API. – 15% Task 4: Take an existing web service API, and use the services in a front end application. – 10% Task 5: Examination – 50% (Hurdle: Pass.)	Task 1: Project Plan and Test Plan – 30% Task 2: Computer Model – 30% Task 3: Case Study – 40%	Task 1: Desktop accounting package case study 1, 20% Task 2: Cloud-based accounting package case study 2, 20% Task 3: Accounting software selection report and presentation, 1,000 words, 25% Task 4: Problem solving: spreadsheet software project, 35%	AT 1: Research Report, presentation, 2,000 words and 15min, 40% AT 2: Case Study and presentation (group), 20% AT 3: Examination, 2 hours (closed book), 40%	Task 1: Argumentative Essay, 1800 words, 30% Task 2: Discussion Posts (x 4), 1200 words (total), 30% Task 3: Examination, 2 hours, (closed book), 40%
Prerequisites/Co-requisites	Nil	Prerequisite: BIS102 Fundamentals of Programming.	Prerequisite: BIS101 Information Systems in Organisations	Prerequisite: BAC101 Accounting Principles	Nil	Nil

 \*\* Units taken from an already accredited business degree i.e. **Bachelor of Business Accounting**