

Unit Description

SIBT
<p>IEPC101 Professional Communication</p> <p>This unit provides the opportunity for you to explore the academic and professional skills required in educational institutions and workplaces, including critical thinking, project and time management, ethics and safety, use of formal language, presenting and supporting arguments, interpreting visual data, and writing reports. You will learn about academic culture and processes, as well as the required conventions as they apply to your own academic research and writing.</p>
<p>IBIS101 Principles of Business Information Systems</p> <p>In this unit, you will develop your understanding of business information systems required by organisations in a range of different settings. You will learn about the range of the tools, techniques, and frameworks used to build information systems; the information technologies used to support information systems; artificial intelligence; security, and the ethical responsibilities of both the information system professional and the private user of information.</p>
<p>IPRG101 Introduction to Programming</p> <p>This unit is designed to help you understand the important role programming languages have in developing computer software. You will develop basic computer programming skills that you will be able to use to solve real problems and gain practical experience in procedural computer programming. By the end of this unit, you will be able to write programs that are well-documented, tested, and easy to read and modify.</p>
<p>ISOF102 Introduction to Software Design</p> <p>This unit introduces you to formal software design methods through an object-oriented programming language. You will learn how to develop your problem-solving skills related to algorithm design, software documentation, software testing, and complexity analysis. Your programming skills will also be extended to abstract data types and object-oriented programming principles. Additionally, you will learn about the influence that artificial intelligence and quantum computing have on the design of software. You will also develop your ability to construct programs with appropriate documentation and testing, ensuring that your code is reliable and meets the required specifications.</p>
<p>ICYB102 Introduction to Cyber Security</p> <p>Cyber security is one of the biggest concerns for organisations in the digital age. In this unit, you will start to explore the world of cyber security and what it means for an IT professional. You will learn about the importance of security and privacy policies within an organisation, and the current computer security standards and legal frameworks that guide these. You will be introduced to the different types of security threats, risks associated with web technologies, and the respective security measures applicable to the Australian standards, and examine security issues within various hardware</p>

systems, operating systems, and application software. You will also analyse database security issues to protect sensitive information and statistical systems within an organisation.

***INET103 Computer Networking**

In this unit, you will learn about the fundamental concepts and technologies for modern networks, including cloud computing. You will explore the different types of networks, such as local area networks (LANs) and wide area networks (WANs) and gain an understanding of the various components that make up a network. You will analyse the significance of the OSI and TCP/IP models, protocol stacks, and their operation in computer networks. Through practical exercises, you will gain hands-on experience in configuring networking devices and applying the initial configurations necessary for network operation. By the end of this unit, you will have a solid understanding of network fundamentals and management practices, as well as the practical skills to implement, configure, and troubleshoot small business LAN networks. Upon successful completion of this unit, students will achieve industry certification: CISCO Certified Network Associate (CCNA).

***ISDM103 System Design and Data Management**

This project-based unit gives you the opportunity to be involved in a real-world IT case study. You will learn about the fundamental concepts of business information systems and how to document business requirements. You will gain an understanding of the different types of business information systems, such as transaction processing systems, decision support systems, and executive information systems. You will also gain an understanding of the core concepts of database administration and learn how to design and implement a database management system. Through your collaborative contribution to the teamwork project, you will develop your fundamental knowledge, teamwork skills, and expertise to be successfully able to align business and information systems in real-world situations.

*Prerequisite unit: ITEC101 Principles of Business Information Systems

Proposed Elective Units

ISTA202 Introduction to Statistics

This unit introduces you to statistical practice and data analysis techniques. You will apply appropriate techniques to analyse data and interpret the results, including adapting statistical programs to manipulate and assess data. You will learn how to draw conclusions from the results of data analysis and effectively communicate these findings. Throughout the course, you will have opportunities to apply statistical techniques to real-world problems arising from diverse fields of research, providing you with practical skills that can be used in your future studies or career. Students who are articulating to Bachelor of Information Systems- BIS at WSU will be advised to study this unit.

IMATH212 Mathematics for Computing

In this unit, you will learn the foundation of mathematical concepts that computing graduates require for their careers. You will learn about algebraic expressions and calculus, and how they can be applied to real-world situations. You will use critical thinking

and cognitive skills to identify, analyse, compare, and assess mathematical concepts to apply them to technical problems. Additionally, you will discuss various mathematics definitions and number systems that are relevant to computing. Students who are articulating to Bachelor of Information Communication Technology- BICT at WSU will be advised to study this unit.