BACHELOR OF BUSINESS INFORMATION SYSTEMS

A degree in Business Information Systems will help you become an entrepreneurial job creator, rather than a job seeker.

Lincoln Institute of Higher Education (LIHE)
Trading as Lincoln Education Australia (LEA)
website: www.lincolnau.nsw.edu.au
email: info@lincolnau.nsw.edu.au
ABN 53 638 284 081 | TEQSA Provider ID: PRV14352
CRICOS Provider Code: 04097J | CRICOS Course Code: 112283H

Studying business information systems at Lincoln Education Australia will help you gain the skills needed to thrive in today's modern digital world.

AQF Level:	*AQF 7*
Typical Duration:	*3 years full time*
Delivery Mode:	*On Campus: Face-to Face*
Units of Study CRICOS:	*24*
Course Code:	*112283H*

The Bachelor of Business Information Systems course will prepare you with broad and coherent knowledge, skills and practical application for planning and implementing information systems in a global economy. You will study technologies and techniques of architecture, information management systems and business applications with a focus on methods for using and monitoring appropriate technologies to facilitate strategic and operational activities and decision-making in organisations. You will have the opportunity to major in areas such as data analytics, cybersecurity and enterprise systems. As a graduate of this course, you will be a job-ready entrepreneur and capable communicator with ethically sustainable practices for a global society.

Lincoln Education Australia offers high quality teaching and learning with clear purpose, outcomes driven curriculum planning, high expectations and an enhanced opportunity for students to demonstrate performance.

Learning outcomes will be assessed using a range of authentic assessment methods which may include, but are not limited to: examinations, written assignments/ essays, projects, in-class quizzes/tests, tutorial and laboratory tasks, group work, individual and group presentations, reflective papers, participation, simulations and discussion forum contributions.

Core Employability Skills

As a graduate of this course, you will be prepared for work in a complex modern-day digital environment. The course helps you to develop core attributes such as creative and critical and thinking, effective communication and collaboration, entrepreneurship, social responsibility, cultural awareness, ethical competence and leadership skills that will allow you to engage across a variety of industries.

Career Opportunities

Graduates of this Bachelor of Business Information Systems degree will be highly sought after across a range of industries and sectors for their unique combination of IT skills and business acumen. You will be well prepared for a range of career pathways, such as:

- Information systems manager
- Data Analyst
- Cyber Security Analyst
- Database Administrator
- IT Consultant
- Systems Analyst
- E-Commerce Developer
- Enterprise Systems Manager
- Information Centre Manager
- Financial Analyst
- Project Development Manager
- Project Officer
- IT Manager

Industry-Based Real-World Projects

Lincoln Education Australia sources industry-based real-world projects as opportunities to help students understand modern-day practices and gain authentic experiences in the area of their studies. Guest lecturers and mentors from a variety of business sectors will provide students with the critical opportunity to make first-hand connections between classroom theory and workplace practice.

International Experiences

Our mission and vision are universal. We seek to provide a global educational experience, support character-building education and offer high-quality advanced learning. To this end, we have established a strong academic and corporate community in Australia supporting our institutes across the globe. We seek to provide world-class educational services that are affordable, oriented towards community service and meet local requirements.

Prerequisites for Bachelor's Degree

- Successful completion of Year 12 with an ATAR of 65 (or equivalent qualification), or alternative ATAR with interview; or
- Successful completion of a recognised foundation studies program; or
- One (1) year of university studies

English Language Requirements

English language requirements for admission into Bachelor of Business Information Systems is:

Domestic Students

- A Unit 3-4 sequence in English with a study score of at least 30 in Units 3 & 4 English as an Additional Language (EAL) or at least 25 in Units 3 & 4 English, Literature or English Language

International Students

The following English language requirements apply for international students or local applicants with international qualifications:

- IELTS: An overall IELTS band score of 6.0 with at least 5.5 in writing and speaking; or
- TOEFL (Internet-based): An overall score 65 with a minimum of 21 in writing and at least 18 in speaking; or
- CAE Advanced (CAE) or CAE Proficiency (CPE): An overall score of 169 with a minimum of 154 in writing and speaking; or
- PTE Academic: An overall writing communicative score of 50 with a minimum of 43 in writing and speaking.

Course Map

The course map below is not final and maybe subject to change dependant on circumstances.

Subject Code	Name of Subject	Scheduling	Core or Elective	Prerequisites (P) and Corequisites (C)
BIS5101	Entrepreneurship and Marketing	Year 1 – Semester 1	Core	Nil
BIS5102	Computer Principles and Programming	Year 1 – Semester 1	Core	Nil
BIS5103	Organisational Management	Year 1 – Semester 1	Core	Nil
BIS5105	Principles of Accounting	Year 1 – Semester 1	Core	Nil
BIS5104	Database Management Systems	Year 1 – Semester 2	Core	Nil
BIS5201	Design Thinking	Year 1 – Semester 2	Core	Nil
BIS5107	E-Commerce	Year 1 – Semester 2	Core	Nil
BIS5108	Data Communication and Networking	Year 1 – Semester 2	Core	Nil
BIS5106	Systems Analysis and Design	Year 2 – Semester 1	Core	BIS5102
BIS5202	Accounting Information Systems	Year 2	Elective	BIS5105 (P)
BIS5203	Website Design and Development	Year 2 – Semester 1	Core	Nil
BIS5204	Business Ethics and Professional Perspectives	Year 2 – Semester 1	Core	Nil
BIS5205	Object Oriented Programming	Year 2 – Semester 2	Core	BIS5102 (P)
Elective 1	Chose any one from the 2nd year Elective	Year 2 – Semester 2	Elective	
BIS5303	IS Project Management	Year 2 – Semester 2	Core	BIS5106(P)
BIS5208	Cloud Computing	Year 2 – Semester 2	Core	BIS5108 (P)

Subject Code	Name of Subject	Scheduling	Core or Elective	Prerequisites (P) and Corequisites (C)
BIS5301	Cyber Security Management	Year 3 – Semester 1	Core	BIS5108 (P)
BIS5302	Artificial Intelligence in Business	Year 3 – Semester 1	Core	Nil
Elective 2	Chose any one from the 2nd year Elective	Year 3 – Semester 1	Elective	
Elective 3	Chose any one from the 3rd year Elective	Year 3 – Semester 1	Elective	
Elective 4	Chose any one from the 3rd year Elective	Year 3 – Semester 2	Elective	
BIS5305	Analytics for Decision Making	Year 3 – Semester 2	Core	BIS5106 (P)
BIS5306	Enterprise System Development	Year 3 – Semester 2	Core	BIS5106 (P)
BIS5311	Capstone Project	Year 3 – Semester 2	Core	Successful completion of the 20 core subjects in first 5 semesters
Elective Subjects				
BIS5206	Human Resources Management	Year 2	Elective	
BIS5325	Cyber Law and Ethics	Year 2	Elective	BIS5108 (P)
BIS5304	Total Quality Management	Year 2	Elective	
BIS5321	Big Data Analytics	Year 3	Elective	Successful completion of 1 core subjects
BIS5322	Data Visualisation	Year 3	Elective	BIS5305 (P)
BIS5323	Network System Management	Year 3	Elective	BIS5108 (P)
BIS5324	Internet Routing	Year 3	Elective	BIS5108 (P)
BIS5326	Enterprise Data Management and Analysis	Year 3	Elective	BIS5106 (P), BIS5104 (P)
BIS5327	Systems Integration	Year 3	Elective	BIS5106 (P)

Subject Descriptions

BIS5101 Entrepreneurship and Marketing

This subject examines the underpinning theoretical and conceptual knowledge of entrepreneurship and explores the critical role of marketing through an entrepreneurial lens. Students will develop a broad knowledge of the total marketing function within an entrepreneurial organisation and apply technical skills to diagnose, analyse and create solutions to entrepreneurial marketing problems. The emphasis will be on applying theories and techniques for strategic and tactical decisions in the field of marketing. Students will be able to formulate and implement marketing management strategies within an entrepreneurial context. Students will engage with entrepreneurial enterprises during site-visits to local start-up hubs and learn first-hand from entrepreneurs as guest speakers in this subject.

BIS5102 Computer Principles and Programming

This subject introduces key aspects of computer hardware, architecture and operating systems. It then introduces programming with a focus on the foundational principles of object-oriented programming, problem solving and algorithmic development that underpin computer software systems. Students will gain a broad knowledge and understanding of and develop the skills, techniques and approaches necessary for solving programming problems. They will study topics such as primitive data types, arithmetical and logical operators, selection and repetition structures and interactive user input. They will explore and apply sound techniques for designing, developing, and documenting well-structured programs using software-engineering principles.

BIS5103 Organisational Management

This subject provides broad theoretical and practical knowledge of the management functions and practices of contemporary business by examining the roles and responsibilities of a manager. Key models and frameworks of management are considered to develop student understanding of the influence of culture, diversity, and ethics upon decision-making in business and management policy and practice. Particular emphasis is placed on management skills in the key elements of planning, organising, directing, coordinating and controlling. These skills are then applied to management decision-making tasks and the work performed by teams in an authentic business context.

BIS5104 Database Management System

This subject provides an in-depth exploration of the underpinning theory, application and management of relational database management systems (RDBMS) and the past, present and future of database systems and database research. It also gives an overview of the technologies used in implementing database management systems. Large data resources are critical to the functioning of just about every significant modern computer application and knowledge of how to manage them is crucial to the IS/IT industry. Students will be provided with an overview of the relational data model, gaining understanding through topics such as understanding entities and relationships, designing logical data models and database design using the process of normalisation. By the conclusion of this subject, students will be capable of building high-quality (correct, efficient, and usable) applications based on relational databases and have a sound understanding of issues in managing relational database management systems. They will apply this knowledge to design databases to limit redundancy and enforce data integrity, including security and privacy.

BIS5105 Principles of Accounting

This subject explores the underpinning principles and concepts of the accounting profession, covering basic accounting knowledge and applied skills necessary to run a business. The subject will focus on the ethical use of accounting information for analysis, reporting, planning, and controlling business activities. The subject introduces the design of accounting systems based on double-entry bookkeeping and other internal

controls. Students will gain knowledge and skills for recording financial information in a standard format and understand how this enables managers, investors, lenders, stakeholders, and regulators to make appropriate decisions using Income Statements, Balance Sheets, Statements of Cash Flow and Statements of Shareholders' Equity. Students will explore contemporary accounting challenges and devise ethical and responsible solutions within authentic business contexts.

BIS5106 Systems Analysis and Design

This subject focuses in-depth on the system development lifecycle and investigates contemporary business practices used by business analysts. Students will gain broad knowledge of methods, tools and techniques for eliciting system requirements and skills for analysis, design, implementation and control of information systems. Students will investigate topics such as methods of information storage and retrieval, forms design and control, systems testing and security, and the software systems development process. In addition, they will cover software design and development, cost/benefit analysis and data security. Students will gain specialised knowledge enabling them to determine client's systems requirements. They will acquire skills to model data, design functional processes to communicate and implement system designs effectively.

BIS5107 E-Commerce

This subject examines the technological concepts and issues surrounding the emergence and future directions of electronic business practices, related tools and key practical skills. With a strong focus on electronic commerce initiatives, students will develop key understandings of current business models, strategies and opportunities in electronic publishing, effective communication, distribution, collaboration, and online payment options. The focus is on innovative and strategic thinking with respect to the application of these techniques in successful new business ventures.

BIS5108 Data Communication and Networking

This course provides overview and application of the concepts and practices of data communications and networking within a business environment. Topics of this course include data communications models, protocols, standards, and services; networking technologies and communication media; network topology, design, and architecture; network management; wireless technologies; network security; and cryptography. Students will practice their knowledge and skills through hands-on labs and assignments, which is based on real-world business case scenarios.

BIS5201 Design Thinking

This subject further consolidates students' theoretical and conceptual knowledge and refines their technical expertise in Information Systems and Technology using design thinking concepts, tools, models and application. Under academic project supervision, students will independently undertake a current and relevant Information Systems project that involves the development of an applied project, based on a select business issue. In this subject, students will use design thinking and agile methodologies to empathise, define, ideate, prototype, test and further develop their proposed solution. An industry expert in design thinking will provide a workshop on application of design thinking concepts, tools and models.

BIS5202 Accounting Information Systems

This subject provides students with the fundamental theoretical and conceptual knowledge of Accounting Information Systems (AIS) and their function in supporting strategic and operational decision-making and problem solving in organisations. Using a cycles approach, the subject introduces internal control procedures, covers the basic elements of the revenue and expense cycles and provides opportunities for students to develop proficiency with documentation techniques, such as flowcharting. The subject focuses on the needs and responsibilities of accountants as users and developers of information technology, and

as auditors. Students will become capable users of accounting software to undertake a real-world case study.

BIS5203 Web Design and Development

This subject provides students with broad understanding of the methods, tools and techniques for developing simple to moderately complex web sites. Using the current standard web page mark-up languages and cascading stylesheets (HTML5 and CSS3), students will have the opportunity to apply their knowledge and develop skills for creating and maintaining static web sites. User interfaces and accessibility standards will be introduced. Students will also be introduced to a range of more advanced concepts and technologies including the basics of JavaScript and jQuery.

BIS5204 Business Ethics and Professional Perspectives

In contemporary business, business ethics and professional perspectives are of increased importance, particularly within the context of information systems. This subject focuses on developing a critical awareness among prospective business professionals and students as to the nature, function and importance of ethical processes and practices across a broad range of contemporary business issues. The subject examines the theoretical bases of ethics within the context of contemporary business and explores real-world ethical and moral dilemmas using a case-study approach.

BIS5205 Object Oriented Programming

This subject focuses on the core foundational concepts and principles of Object-Oriented Programming (OOP) as a model that organises pieces of software as objects using Python - a high-level language. Students will explore Object-Oriented Programming as an integration of software components into large-scale software architecture. In this way, software development represents the next logical step after learning coding fundamentals, allowing the creation of Object-Oriented programming. The subject covers broad knowledge and practical mastery of object-oriented concepts such as classes, objects, data abstraction, methods, method overloading, inheritance and polymorphism.

BIS5206 Human Resources Management

This subject explores key concepts, theoretical perspectives, policies and legislative frameworks in the area of Human Resource Management (HRM) and how these contribute to organisational effectiveness. Students will examine a range of core areas for planning and managing an organisational workforce including attracting, selecting, training and performance management of staff; job design; oversight of organisational leadership and culture; occupational health and safety; and, compliance with employment and labour market legislation. Students will investigate a range of policies, processes, strategies, techniques and practices in use by companies and/or managers for effective and efficient utilisation and management of human resources.

BIS5207 IT Industry Management

IT Industry Management is essential at all levels in the Information Technology industry and requires a specific set of competencies. In this subject, students will examine key management theories and competencies along with legislative and regulatory frameworks. They will develop broad skills required for general services management and governance also focus on the competencies associated with, and specific to, Information Systems and Technology. This subject is designed to develop student understanding and competency in the range of skills, methods, tools and techniques to manage effectively and successfully in a contemporary Information Systems environment.

BIS5208 Cloud Computing

Businesses worldwide now use cloud computing but it is not without its challenges. Students will study the principles, strengths and weaknesses of cloud computing and enabling technologies such as virtualisation.

Students will investigate cloud platforms, services and applications. Cloud privacy, security, ethical and legal issues will be discussed. Students will analyse and design a cloud-based solution for a given organization. They will examine the use of cloud in newer technologies such as the Internet of Things (IoT) and Edge Computing.

BIS5301 Cyber Security Management

This Cyber Security Management subject provides students with specialised knowledge and understanding of how to engage all functional levels within an enterprise to deliver information system security. The subject addresses a range of topics including plans and policies, enterprise roles, security metrics, cyber security and cloud computing risks and challenges, risk management, standards and regulations, physical security, and business continuity for ethical and socially responsible business practices.

BIS5302 Artificial Intelligence in Business

This subject provides comprehensive and specialised knowledge of Artificial Intelligence (AI) to create value for business transformation. Students will appraise AI theory and concepts and apply tools and methods for digital transformation, focusing on how AI technology benefits business by increasing efficiency, reducing operational costs, increasing revenue and improving customer experience and satisfaction. Students will develop integrated knowledge of Big Data, data warehousing, data mining, machine learning and applications of AI in industry.

BIS5303 IS Project Management

This subject develops students' understanding and skills for technology project management from a management perspective. Students will execute a project plan, managing major cornerstone tasks, and; employing critical project management tools and methods. The subject will integrate specialised knowledge and application of technology management techniques and behavioural management skills to systematically manage projects in business and information systems. Current issues and trends including agile project management approach in IS/IT project management are discussed, and project management software skills are developed throughout the subject.

BIS5304 Total Quality Management

This Total Quality Management (TQM) subject provides students with broad theoretical and conceptual knowledge and applied skills that are fundamental to TQM for the design, implementation and management of quality systems within an organisation. The focus is primarily on appraising TQM quality frameworks and methodologies, quality standards and the tools and techniques for quality improvement and quality assurance. A central aim of the TQM subject is the development of technical knowledge and application of key practical skills in a real-world environment.

BIS5305 Analytics for Decision Making

This subject will develop students' specialised analytical capabilities, equipping them with in-depth knowledge of basic data analysis for deriving essential information from numerical, textual and visual datasets. Students will learn about data management and security practices, as well as legal and ethical issues related to the collection and use of data. This subject develops students' abilities and expertise in using mathematical and software tools for the analysis of data for improved decision-making. Students will also develop skills effective communication skills for conveying the results of their analysis and recommending considered business actions to diverse audiences.

BIS5306 Enterprise System Development

This subject provides students with deep knowledge of the underlying principles, concepts, tools and techniques of software product development and lays the foundation for solving tasks in large-scale software

projects development and information processing. Students will be familiarised with state-of-the-art models, methodologies and technologies used for large-scale software system development and their implementation in software products. They will integrate in-depth knowledge and targeted programming skills to develop programs and systems that deliver the functionality and quality required to generate solutions to complex business problems. Students will benefit from a guest lecture from the industry.

BIS5311 Capstone Project

This subject advances students' theoretical and conceptual knowledge and further develops their technical skills and expertise in Information Systems and Technology. Under academic supervision, students will collaborate in small groups to initiate and develop an applied Business Information Systems project based on a current and relevant business issue. Students will undertake a critical review of relevant literature, determine the appropriate research methods for designing and planning an IS based project and create a comprehensive project proposal. Students will be encouraged and supported in analysing, designing, prototyping, synthesising, troubleshooting, and testing systems to address an identified problem.

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Elective Group

BIS5321 Big Data Analytics

Big Data Analytics examines the key principles, theories and practices of big data computing. The subject will cover the challenges that arise when the size of data to be analysed outgrows the limits of traditional data analytics systems, the new challenges big data computing introduces and the evolution of the big-data ecosystem. This subject further develops and integrates students' data science knowledge and skills on appropriate frameworks for data management. Students will critically evaluate, select and apply relevant data science theories, principles and techniques to generate and transmit solutions to data science problems.

BIS5322 Data Visualisation

This subject provides students with specialised understanding and skills in the key principles and processes for displaying data or information in graphical charts, figures and bars and the ability to determine the appropriate means of data visualisation for the specific interpretation or decision-making purpose. Students will learn to better understand, critically analyse and manipulate data. Further, they will develop skills and techniques to present clear evidence of findings and convey engaging data stories depicting relevant points and specialist advice to target audiences. Students will gain expertise and applied skills that offer significant value for creatives, educators, entrepreneurs and business leaders across a variety of industries.

BIS5323 Network System Management

The Network System Management subject provides students with specialised knowledge and skills required to technically manage elements of a network, including the network management system, network management architectures and protocols, disaster recovery planning and the role of the network manager. Students will examine a variety of computer network security issues and learn to identify network-related problems. They will gain expertise in applying a range of network management tools and techniques and use well developed judgement to creatively solve and determine the resources required to resolve client problems in an organisational setting.

BIS5324 Inter Routing

This subject provides students with key concepts and understanding of the essential components that drive internetworking. It also elaborates the impact of different networking protocols, standards, and technologies on network-based applications. Students will develop comprehensive understanding of routing and its protocols. They will apply this knowledge to design, construct, and implement small to medium-sized intranets and perform basic management and security tasks. The subject covers the TCP/IP protocol suite, TCP/IP

layered architecture, class-full and classless addressing, IPv6, ARP, RARP, UDP, TCP, SCTP, unicast and multicast routing protocols, TELNET, FTP, TFTP, HTTP, SMTP, POP, IMAP, WAN technologies, mobile IP, multimedia over IP, compression, congestion control, flow control and security issues.

BIS5325 Cyber Law and Ethics

This subject examines domestic and international policy, legal standards and regulatory structures that govern malicious and defensive actions in cyberspace, including laws related to cybercrime, cyber-espionage, and cyber-war. This subject provides a framework for making ethical decisions about cyber issues that computer professionals are likely to encounter. Students will undertake a critical exploration and analysis of contemporary theories and debate on legal and regulatory standards and the ethical and legal implications of advances in technology.

BIS5326 Enterprise Data Management and Analysis

This subject examines enterprise data management (EDM) frameworks and the key concepts, rules and regulations for unifying and standardising data use for analysis and generation of insights for business. Data and data types are of increasingly larger scale, complicating data processing and the generation of data sights. Students will examine the strategies, phases and components of EDM and develop a plan for a business information system based on new or revised business processes. Students will integrate in-depth knowledge and skills to determine the capabilities of current technologies. They will develop and appraise a systems proposal specific to the needs of an organisation.

BIS5327 Systems Integration

This subject provides students with in-depth understanding of the underlying principles, concepts and process of integrating different systems and software applications. Students will examine and appraise current and emerging trends, strategies, tools and techniques for solving real world systems integration issues in business**.** Students will consolidate their understanding, develop and apply skills for documenting integration requirements using business process models. They will design creative integration solutions reusing patterns and implementing integration solutions using service-oriented architecture.

Learning resources: All the software requirements for the BBIS course will be provided.

Further Information

Lincoln Education Australia
Home | Lincoln Education Australia (lincolnau.nsw.edu.au)

Fees and Charges
Fees and Charges | Lincoln Education Australia (lincolnau.nsw.edu.au)

Handbook information
Student Handbook.pdf (lincolnau.nsw.edu.au)

Future Student Enquiries

Australian citizens, permanent residents, New Zealand citizens and international students
International | Lincoln Education Australia (lincolnau.nsw.edu.au)

Australia provides rigorous protection for international students through the Education Services for Overseas Students Act 2000 (ESOS Act) and related legislation, (including the National Code of Practice 2018) which protects and enhances Australia's reputation for quality education, provides tuition protection and supports the integrity of the student visa program.

The Australian Government is committed to high quality educational experiences for international students and has produced a fact sheet containing important information about their rights and responsibilities while studying in Australia. This fact sheet provides information about:

- Choosing and enrolling in a course of study
- Support services available in Australia
- Rights and responsibilities of students on a student visa
- Working in Australia
- Making complaints and seeking help.

The links for the following four websites have been provided:

Education Services for Overseas Students Act 2000 -
https://www.legislation.gov.au/Details/C2022C00066

Education Services for Overseas Students Regulations 2001 -
https://www.legislation.gov.au/Details/F2016C00681

National Code of Practice for Providers of Education and Training to Overseas Students 2018 -
https://www.legislation.gov.au/Details/F2017L01182/Html/Text#_Toc487026957

Australian Government Fact Sheet: "International Education - Ensuring Quality and Protecting Students -
https://internationaleducation.gov.au/Regulatory-Information/Documents/esosstudentfactsheetv4%20-%20Final%20clean%20copy.pdf

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CRICOS Provider Code: 04097J | CRICOS Course Code: 112283H