What can I do with a degree in **Information Systems?**



Information Systems.





What is Information Systems?

We live in a digital age where access to data, information and technology is playing a major role in changing organisations and society, and how we deliver products and services. With data, technology and information Systems we are changing how we work, how we communicate, and how we do business.

Information Systems (IS) lies at the heart of this transformation. It's the IT discipline focused on using technology and data-driven decision-making to enable organisations to thrive in the digital landscape and be leaders in shaping the future of business and society. By harnessing information, IS empowers organisations to innovate and design solutions that enable them to become smarter, achieve their goals, and shape a better world.

The subject of Information Systems covers the practical problem of how to access information, and how to design, develop and deliver IT and data-driven solutions to organisational

problems, as well as the management of IS projects, personnel and resources. It takes more of a business perspective than Computer Science or Software Engineering.

Learn more

It is important to do some research when planning for your future career. Speak with, ask questions of, and follow relevant professional bodies, organisations, companies, thought leaders and industry professionals.

This will help you learn about career options, work environments, education and training requirements, and salary information.

Examples of professional bodies

- New Zealand Technology Industry Association
 www.nztech.org.nz
- IT Professionals New Zealand Te Pou Hangarau Ngaio 및 www.itp.nz
- International Institute of Business Analysis
 https://newzealand.iiba.org
- Project Management Institute
 www.pmi.org

Career and study information

Some study pathways and degrees have a recommended school background, and some careers may require further study beyond a first degree or additional experience.

Gather information from:

- Information Systems study details
 www.canterbury.ac.nz/study/academic-study/subjects/information-systems
- Job profiles on career websites, ie.
 www.careers.govt.nz
- · Job adverts/vacancy descriptions
- · Industry professional bodies.

This resource is part of a set of brochures focused on subject majors; many can also be studied as minors.



Te Rōpū Rapuara Careers





What skills can graduates gain?

Through studying a degree in Information Systems, graduates develop a valuable set of skills transferable to a range of careers. These skills can include:

- The application of computers and information systems knowledge to organisations and society
- · Commercial and business awareness
- · Data analysis and digital skills
- · Programming and design skills
- · Ethical knowledge
- Effective communication
- Collaboration, teamwork, and leadership
- Analytical and critical thinking, and interpretive skills
- · Logical and quantitative thinking
- · Research and problem-solving
- · Planning and coordination
- Creative thinking and innovation
- Cultural awareness.

Applied learning

Opportunities to apply your learning are available through practical course content related to real world business scenarios, and work-integrated learning such as internships with potential employers. These experiences deepen your skillset, working knowledge and employability.

What do employers look for?

Many employers look for generic skills such as communication, client/customer-focus, bicultural competence, cultural awareness, teamwork, and initiative.

With technology, globalisation, and other drivers changing society, skills such as resilience, problem solving, and adaptability is important.

Skills that are likely to grow in importance include analytical and creative thinking, systems thinking, and technological literacy.*

*World Economic Forum www.weforum.org/ agenda/2023/05/future-of-jobs-2023-skills

How can these skills be developed?

- Some skills are gained through studying
- Extra-curricular activities can help, such as getting involved in clubs, mentoring, cultural groups, part-time work or volunteering
- Be open to professional and personal development opportunities, whether it is undertaking work experience, overseas exchange, skills seminar, or joining an industry group.

Where have graduates been employed?

IS graduates are to be found in a wide range of sectors, be it commercial, public or not-for-profit. IS graduates have been employed in:

- Consulting and advisory services e.g. PWC, Assurity, Accenture, EY, Deloitte, KPMG, InterGen
- Financial and insurance services e.g. BNZ, ANZ, Westpac, Rabobank, AMI, IAG
- Agriculture and food services e.g. Fonterra, Farmlands, Foodstuffs, PrimaryITO
- Professional and administrative services e.g. MYOB, Cin7
- Information, media and technology services e.g. Google, hairyLemon, Spotify, One NZ, Slingshot
- Software companies e.g. Planit Testing, JADE Software, Soul Machines, CadPro, Seequent
- Healthcare e.g. Te Whatu Ora Waitaha Canterbury
- Government e.g. Christchurch City Council, CityCare, Oranga Tamariki
- Business enterprises/startups in various industries, e.g. tourism, manufacturing, transportation, retail, music.

What jobs and activities might graduates do?

Graduates with this degree are employed in a range of jobs — see some examples below.

Note: This list is not exhaustive, and some jobs may require further study, training or experience. It is recommended to start with the section 'How can I gain a sense of career direction?'

Business systems analyst, process analyst

- Designs, maintains and improves processes and systems
- Supports organisation to assess current and future needs, goals and requirements
- Provides solutions that align with organisational objectives

Business data analyst

- Advises on and contributes to business-data driven projects for organisational improvement
- Uses statistical models and analytic tools to analyse data and develop dashboards, infographics and reports for decision-making
- Transforms data findings into interpretable insights for organisations

Project manager

- Manages an information system project plan, budget and schedule
- · Supervises project progress and manages risks
- Liaises with project staff, contractors, clients

IS / IT consultant

- Works with clients and business leaders to reduce, manage, and mitigate risk
- Helps clients improve business processes and recommends programs and systems to use
- Designs implementation and disaster recovery plans and processes

User experience (UX) designer

- Researches website/app design and trends
- Works with clients to determine their needs and website/app requirements
- Designs how websites/apps should look and feel
- · Tests designs with users

Analyst programmer

- Assess business needs and designs software solutions accordingly
- · Builds prototypes of software programs
- Codes and designs system, ensuring technical implementation

- · Tests and maintains documentation
- Facilitates communication between technical and non-technical teams for successful software projects

Examples of other job titles and careers include:

- Analyst roles specialising in customer insights, applications, systems integration, or cyber security
- · Product owner
- · Programmer, software developer
- · Business development manager
- · Applications support specialist
- · Digital marketing specialist
- Technology risk advisor
- · Technical writer
- · Web content manager.

Further study options

IS is a dynamic discipline requiring knowledge and skills to be regularly updated. IS graduates can progress through to PhD level in the subject, including doing a Master of Commerce.

A Postgraduate Diploma in Information Systems and Technology is also an ideal advanced qualification for graduate IT/IS specialists. IS graduates with some work experience can also undertake an MBA.

Non-IS graduates can gain IS knowledge and skills through the Master (or Postgraduate Diploma) in Business Information Systems.

Postgraduate study may facilitate career benefits such as specialist skills, entry into a specific occupation, higher starting salary, faster progression rate, and advanced research capability.

It is important to determine which, if any, further study will help you in your future career.

For further UC study options visit:

www.canterbury.ac.nz/study/academic-study

How can I gain a sense of career direction?

Understanding yourself and others is important to gain a sense of direction. This grows with experience; therefore, trying new things and reflecting on an ongoing basis is important.

Career planning checklist

☐ Discover and reflect on:

- Your values, interests, strengths, abilities, and aspirations
- Your connection to whānau, people, and places
- · Lifestyle preferences and location
- The skills you want to gain, use, or enhance

☐ Engage in a variety of experiences to learn about:

- How you want to contribute to society, the environment, and global challenges
- The tasks, responsibilities and work environments you prefer
- Your work values, priorities and interests

Learn more and gather career and study information

(refer to page one of this resource)

- Speak with people working in careers that interest you; check the realities of a job/career
- Gather information from various sources

☐ Identify your next steps

 Talking to a career consultant can help you to identify your next steps. Visit:
 www.canterbury.ac.nz/life/jobs-and-careers



What have other students and graduates done?

Explore career stories of students' university experiences and UC alumni who make a difference globally in varied ways.

why-uc/our-students/student-stories



Henry

Managing Director, Corvecto, Christchurch Executive Director, EPIC Innovation

Bachelor of Commerce with an endorsement in Information Systems

What motivated you to study Information Systems?

I was motivated by a mixture of my interest in high-level computing and business. Information Systems is an exciting and continually growing industry with multiple directions for potential career paths, especially right now here in Christchurch.

What are you doing currently?

As the Executive Director of EPIC Innovation. I work with my three business partners to manage and grow the 4000sqm EPIC technology campus on Manchester Street in the centre of town where we house 20 innovation-focused companies with around 300 full time employees between them, whilst we foster a global network of industry leaders, entrepreneurs, SMEs, financiers and governments who are excited to connect with New Zealand.

Did you have any exciting job opportunities before EPIC Innovation?

At CerebralFix Ltd which is one of New Zealand's largest video game development studios, I was fortunate to work on a day-to-day basis with some of the world's most influential and experienced executives, engaging with multimillion to multi-billion dollar brands.

My role at CerebralFix as President of Business Development included seeking out new business whilst maintaining contact and building relationships with our existing business partners such as Disney, DreamWorks and Sony Pictures to name a few.

How has your study prepared you for what you are doing now?

My degree has helped to nurture and solidify my ability to commit to completing and executing the goals I set for myself, no matter how ridiculous they may look from afar.

What do you aim to achieve with your career?

I seek to reinforce the international perception that New Zealand companies are capable of not only meeting but exceeding expectations when performing on the global stage. I believe it's realistic that we can grow New Zealand into the Silicon Valley of the Southern Hemisphere.

The value of experiences

Learn what experiences graduates attribute to helping them transition into work:

■ www.canterbury.ac.nz/life/jobs-and-careers/ graduate-destinations

Effective job search strategies

- Speaking with employers is key to finding opportunities; not all jobs are advertised.
- Developing an online presence is useful as employers can approach you online.
- Learning about recruitment patterns and where to find opportunities is important.

What else should I know? Where can I seek help?

Need careers advice?

Career guidance services are available for intending and current students, and recent graduates. Contact:

Te Rōpū Rapuara | Careers

T: +64 3 369 0303

E: careers@)canterbury.ac.nz

■ www.canterbury.ac.nz/life/jobs-and-careers

Need study advice?

Student Advisors help you with any questions you have about starting, planning and changing your studies. Visit:

■ www.canterbury.ac.nz/study/study-supportinfo/study-support

• If you are considering UC contact:

The Future Students team T: 0800 VARSITY (0800 827 748) E: futurestudents@canterbury.ac.nz If you are a current UC student contact:

Kaitoko | First Year Student Advisors T: +64 3 369 0409

E: firstyearadvice@canterbury.ac.nz

Te Kura Umanga | UC Business School

T: +64 3 369 3888

E: studybusiness@canterbury.ac.nz

■ www.canterbury.ac.nz/study/academicstudy/business



