

CAREERS FOR CHANGE

# Design and Technology

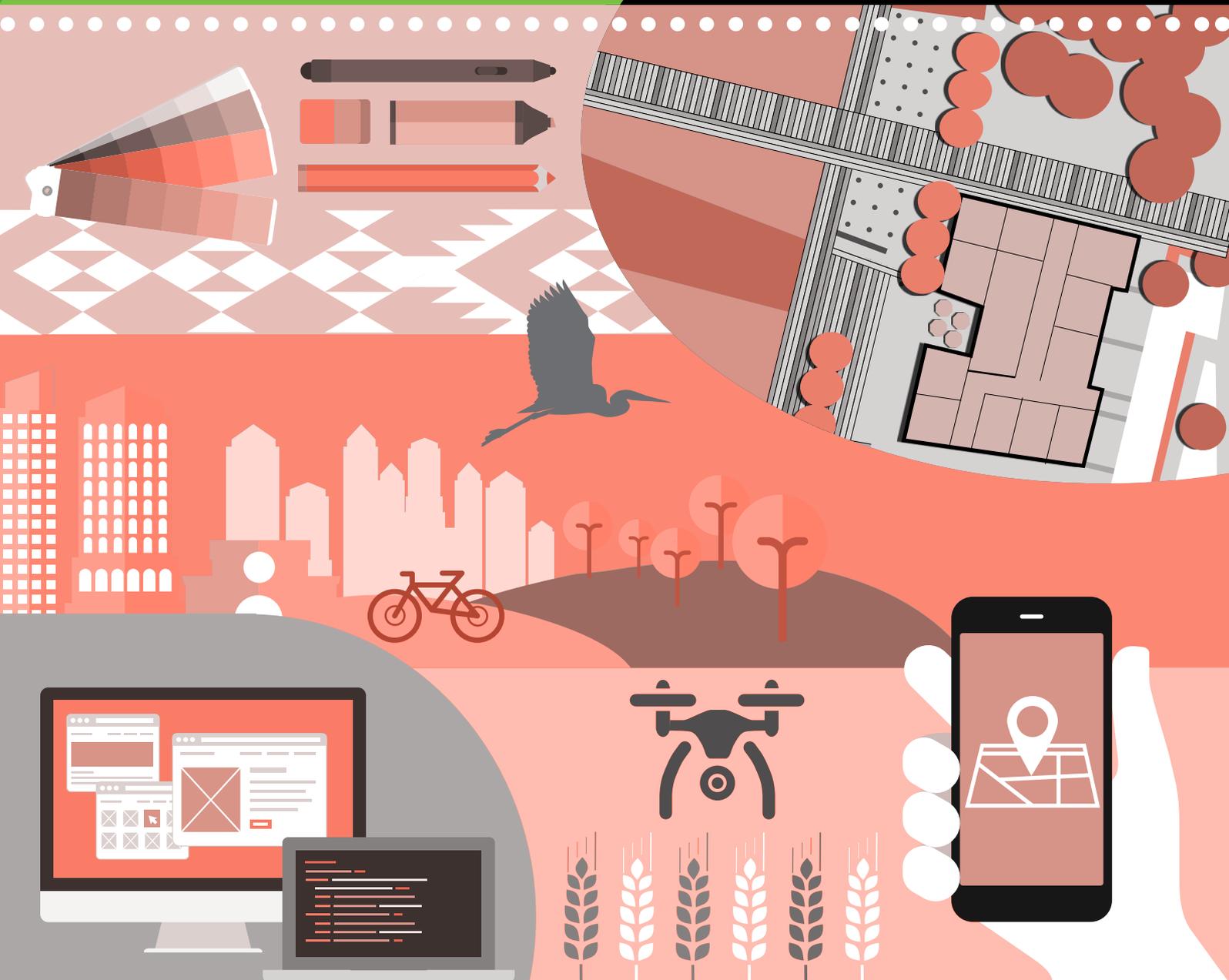


**Lincoln University**

*Te Whare Wānaka o Aoraki*

AOTEAROA • NEW ZEALAND

New Zealand's specialist  
land-based university



• **BE PART OF THE GENERATION THAT  
WILL MAKE A CHANGE**



• [WWW.LUGENERATION.CO.NZ](http://WWW.LUGENERATION.CO.NZ)

# OUR MISSION



**The University has a mission to help:  
feed the world, protect the future,  
and live well.**

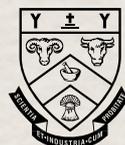
It is predicted that by 2050 the world's population will reach 9.2 billion people: this will create challenges that need solutions.

As the population grows, food supply and production will become key. So will sustaining the environment for future generations. As these two, potentially conflicting, concepts become increasingly pressing we will also want to be living well on our planet.

Lincoln University is a uniquely and deliberately specialised university finding solutions for these challenges.

To achieve our mission, Lincoln is positioned to work alongside industry, the community, and people from around the globe. The University's qualifications range from certificate level through to PhD - and our teaching and research covers all activity associated with the land-based sectors to meet the needs of not only New Zealand but also the world.

Lincoln students come from all over New Zealand and from more than 60 countries around the world. Once studies are completed, Lincoln graduates can be found around the globe making a difference.



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University**

*Te Whare Wānaka o Aoraki*

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New Zealand's specialist land-based university

# KIA ORA AND WELCOME



Whether you're looking at doing tertiary study for the first time, or adding to your educational achievements, you know the importance of selecting the right course of study and the right tertiary institution to carry out that study – the first step towards a future filled with opportunities.

Focusing on what you enjoy as well as your strengths is a good place to start to make the right decision for you. Think about what really interests you and why it interests you. What do you like about certain activities or environments? What skills do you already have or want to learn and use? What job would suit your personality? Are there a number of courses which match your preferences and skill set?

Once you've thought about what you might like to do, talking with friends and family who know you well is a good way to get perspective and narrow down the choices. Follow up by talking to a career advisor who can give you more information about various qualifications and how to achieve your career goals. Talking to people who have studied the subject you are interested in, or who are working in the field or job you are thinking about, can be really helpful and give you a realistic picture of what it will be like. It makes sense to decide what sort of job and lifestyle you want first, then work out what programme of study is best suited to make you employable in your chosen field.

Lincoln University offers a diverse range of programmes which prepare students for the demands of today's world. Course theory is underpinned by a practical focus which gives students valuable real world skills and experience. Our graduates move into the workplace with the knowledge and proficiency to be successful in a huge variety of careers all over New Zealand and the world.



# Lincoln campuses

Lincoln University has two South Island campuses: **Te Waihora** in Lincoln, Canterbury and **Telford** in Balclutha, Otago.

## » Te Waihora campus (Lincoln, Canterbury)

Situated on 58 hectares of green space, the University offers modern teaching on this beautiful, established campus. Facilities include a comprehensive library, IT labs, free car parking, large dining hall and function centre, café and bar, a printery, a travel agency, banking services and excellent sporting facilities.

With a student population of 3500, from over 60 different countries, Lincoln University is an easy place to make friends. On-campus accommodation is home to around 600 students during the University year, including catered halls of residence, self-catered residential halls and student housing. For those living off-campus, there are regular bus services to and from central Christchurch.

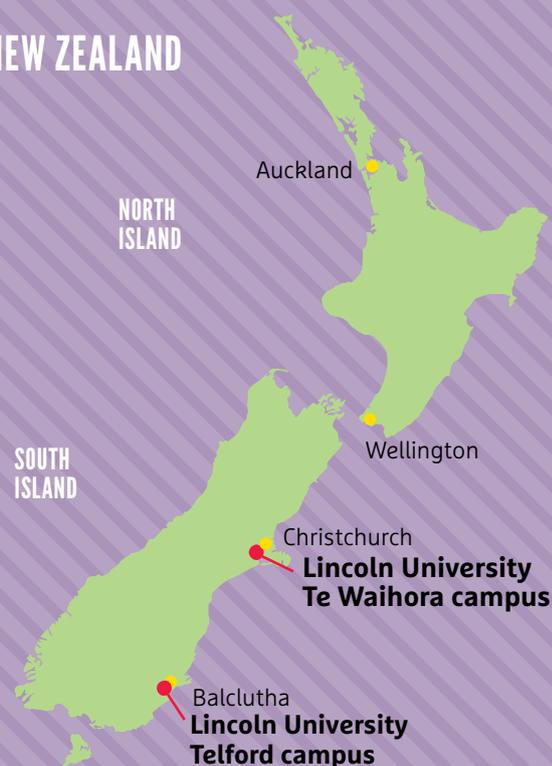
Find out more: [www.lincoln.ac.nz](http://www.lincoln.ac.nz)

## » Telford campus (Balclutha, Otago)

The Telford campus is our smaller campus and one of New Zealand's largest land-based vocational training providers. Located near Balclutha in South Otago, it is based on a 921-hectare commercial farm, offering real farming experience for live-in students. Telford offers practical training in agriculture, rural vet technician practices, dairying, stock and station, equine studies, forestry, horticulture, and apiculture (beekeeping).

Find out more: [www.telford.ac.nz](http://www.telford.ac.nz)

## NEW ZEALAND



# Why study design or technology?

**RANKED #13**  
**SMALL UNIVERSITY**  
**IN THE WORLD**  
**BY QS RANKINGS 2015**



Lincoln University's design and technology qualifications address the key issues of protecting the future and living well. Landscape architecture and information technology are both disciplines that help to maintain and enhance our lives while balancing the demands of economies, societies and the environment.

Landscape architecture uses a combination of science and art to create outdoor spaces that promote better ways of living. In 1969, Lincoln University founded New Zealand's first professional qualification in the field, making our Landscape Architecture programme the most established in the country.

Students of Lincoln's School of Landscape Architecture (SoLA) are exposed to a broad mix of design, ecology, planning, field tours and real-world projects. You'll work with landscape on a range of scales, and be taught how to sketch, map and communicate your ideas, as well as learn first-hand from leading designers.

Landscape Architecture graduates are sought-after all over the world because of their strength in design and planning, their ability to think critically and creatively, and due to the real-world experience they gain during their studies.

Information technology is an intrinsic part of our lives, and the ability to use it well differentiates businesses, industries and even countries. Our IT programmes focus on using computing technology to solve problems in the real world,

whether on-farm, in the office or out in the wild. We teach courses relating to programming, systems analysis, databases, end user computing, GIS, sensors, and robotic and autonomous technologies. The knowledge you learn from us will equip you for a broad range of career opportunities in the IT sector.

When you study design or technology subjects at Lincoln University, you will learn from some of the best researchers and lecturers in their respective fields and access the most up-to-date industry knowledge. We work closely with industry to ensure our qualifications in these areas provide our students with the skills required to make a lasting contribution to their chosen field. We don't train for the first job. We educate for a career.

This book explores undergraduate options in the fields of design or technology, and some of the pathways that our graduates have taken to get them where they are today. It is designed to show you pathways and opportunities you can take, and assist you in making the right choice for your future. To see the full range of qualifications on offer, visit: [www.lincoln.ac.nz](http://www.lincoln.ac.nz)

# What are your choices?

Depending on interests, time, and current qualifications, you can choose from one of the University's undergraduate degree programmes through to postgraduate level courses.



## Programmes on offer for design and technology studies:

Agritech			B				
Informatics			B		PG	M	PhD
GIS			B				
Information Technology			B		PG		
Landscape Architecture			B	H	PG	M	PhD

### C Certificates

These are excellent entry qualifications for people who would like comprehensive introductory information, don't have University Entrance, or who are coming back to University and would like to prepare for further study.

### D Diplomas

These are one-year programmes that focus on particular areas of interest.

### B Bachelors' degrees

In most cases, the bachelor's degree allows you to follow the path you want, mixing optional subjects with papers that are core requirements.

Undergraduate qualifications usually commence in semester one (February), but it is often possible to start in semester two (July) depending on the qualification selected.

*Note: Qualifications change from time to time, if you don't see the programme you are interested in please contact Student Liaison on 0800 10 60 10.*

Lincoln University also offers a wide range of single or multi-disciplinary further study or research opportunities for those looking for highly respected postgraduate qualifications. Please view the Postgraduate prospectus or visit:

[www.lincoln.ac.nz](http://www.lincoln.ac.nz)

### H Honours degrees

Offer the opportunity for those with high academic results to complete a fourth year of study on completion of their bachelor's degree.

### PG Postgraduate and graduate certificates and diplomas

These allow you to transfer from another area of study to gain skills in an area of interest, or build on the bachelor's degree or equivalent already gained.

### M Masters' degrees

These enable you to develop a thesis in a chosen area or undertake taught qualifications. They are the highest pre-doctorate qualification.

### PhD Doctor of Philosophy (PhD)

These are available in most of the disciplines in which the University offers postgraduate studies. This is a further three years' study and a thesis on top of a Master's or Honours degree.

# Best preparation for design and technology studies

If you are still at school, we highly recommend you take subjects that are relevant to your chosen course of study to make the most of your time at Lincoln University.

The table below shows you the subjects you should consider at school if you are thinking of pursuing the qualifications listed. It is also a good way of finding out what you might want to study if you are interested in particular school subjects.

	ACCOUNTING	AGRICULTURE/ HORTICULTURE	ART/HISTORY/ CLASSICS	BIOLOGY	CHEMISTRY	COMPUTING	ECONOMICS	ENGLISH	GEOGRAPHY/ SOCIAL STUDIES	GRAPHICS/ DESIGN	MĀORI/TE REO	MATHS/ STATISTICS	PE/OUTDOOR ED	PHYSICS	TOURISM
BACHELOR OF COMMERCE- INFORMATION TECHNOLOGY	Useful					Useful	Useful	Recommended				Useful			
BACHELOR OF ENVIRONMENT AND SOCIETY - GIS AND ENVIRONMENTAL INFORMATICS						Useful		Recommended	Useful			Useful			
BACHELOR OF LANDSCAPE ARCHITECTURE		Useful	Useful	Useful		Useful		Recommended	Useful						
BACHELOR OF SCIENCE - AGRITECH MAJOR		Useful		Useful	Useful	Useful		Recommended				Useful		Useful	

Recommended subjects.       Useful subjects.



# Lincoln University and Climate Change



The University's commitment to sustainability and climate change issues is apparent in our teaching and research, from cutting edge research around climate change, asking questions about adaptation and evolution in changing environments and a changing climate, to mitigating the impact of agriculture on the planet.

So if the global challenges of how to feed the world, protect the future and live well mean something to you, or climate change is on your radar, then you have found the university for you.

## The details

Here is just a quick snapshot of our world-leading climate change research and educational initiatives, from detailed scientific studies on the mitigation of greenhouse gas emissions to alternative fuels and climate-resilient tourism.

1. Lincoln University is a partner in the NZ Agricultural Greenhouse Gas Research Centre (NZAGRC), a partnership between leading New Zealand research providers working in the agricultural greenhouse gas area. <http://www.nzagrc.org.nz/nitrous-oxide.html>
2. Lincoln University hosts the National Centre for Nitrous Oxide Measurement, part of the NZAGRC. The Centre can process more than 1000 nitrous oxide samples a day, making it one of the best specialist facilities of its type in the world.
3. Lincoln University contributes to the Global Research Alliance on Agricultural Greenhouse Gases which has 46 member countries. The Alliance focuses on research, development and extension of technologies and practices to grow more food (and more climate-resilient food systems) without growing greenhouse gas emissions. <http://globalresearchalliance.org/about/>
4. Lincoln University is involved in reducing greenhouse gas emissions on the farm by exploring the possibility of renewable fuel. The latest excitement is over Japanese grass *Miscanthus x giganteus*. <http://bioprotection.org.nz/news/can-farmers-help-address-climate-change>
5. Climate change has the potential to both increase New Zealand's attractiveness to tourists and undermine some of its core attractions. Lincoln University is involved in research projects around protecting and growing the tourism industry and developing adaptation strategies.
6. Lincoln University has established a nationwide Global Challenges Programme and Scholarships in response to challenges facing the planet today, including climate change, food production and security, depleting resources, urban sprawl, the loss of biodiversity, and pollution.
7. Lincoln University's academic staff are actively involved in teaching, researching and publication around climate change issues, as well as being involved on committees and boards dedicated to exploring climate change.
8. Lincoln University co-hosts the Waterways Centre (with the University of Canterbury) dedicated to improving New Zealand's waterways. Lincoln University undertakes extensive research on Banks Peninsula and elsewhere with respect to species conservation, and we host New Zealand's only Bio-Protection Research Centre.

To find out more, please talk to us.





# Our programmes

10 Bachelor of Commerce  
Information Technology

12 Bachelor of  
Environmental and  
Society

GIS and Environmental  
Informatics

14 Bachelor of Landscape  
Architecture

18 Bachelor of Landscape  
Architecture  
(Graduate Entry)

20 Bachelor of Science  
Agritech

Lincoln University's bachelor degrees include three LINC courses. These are common to all the degrees and give students a broad global understanding of issues impacting the future of the planet, as well as core learning skills necessary for University study.

## LINC 101

### **Land, People and Economies**

An introduction to the many perspectives involved in the use, management and stewardship of land, underpinned by the consideration of land as a resource, and the conflicts and tensions over land use and ownership. A range of topical issues are studied.

## LINC 102

### **Research and Analytical Skills**

An introduction to research, its role and function in the production and communication of knowledge. An introduction to critical thinking and the tools and techniques used in evidence-based decision-making and mathematics, statistics, and computing skills.

## LINC 201

### **Sustainable Futures**

An advanced discussion on sustainability issues in a global framework. This interdisciplinary course focuses on global sustainability with reference to social, environmental, cultural and economic aspects of sustainability.

# BACHELOR OF Commerce

[www.lincoln.ac.nz/BCom](http://www.lincoln.ac.nz/BCom)

## DURATION:

3

Years

## TAUGHT AT:



**Te Waihora campus**  
(Lincoln, Canterbury)

## INTAKE:

Semester Semester

1

2



Lincoln University's Bachelor of Commerce (BCom) degree has a specific focus on value chains. Value chains connect the world, and so do our graduates.

When businesses link their strategies and operations with what is happening in the global economy and with their commercial partners, they are well positioned to capture competitive advantages. As economies have become more interconnected and businesses have become more dependent on international markets for raw materials and end consumers, there is an increasing need for people who understand the global nature of value chains - and Lincoln University's BCom majors will give you the tools to be one of them.

The BCom has seven majors: Accounting and Finance, Food and Resource Economics, Individual, Information Technology, Māori and Indigenous Business Studies, Marketing and Supply Chain Management and Global Business.

## Entry requirements:

- University Entrance through NCEA, or an approved equivalent qualification.
- If English is not your first language other entry requirements will apply.

Refer to [www.lincoln.ac.nz](http://www.lincoln.ac.nz) for more information.

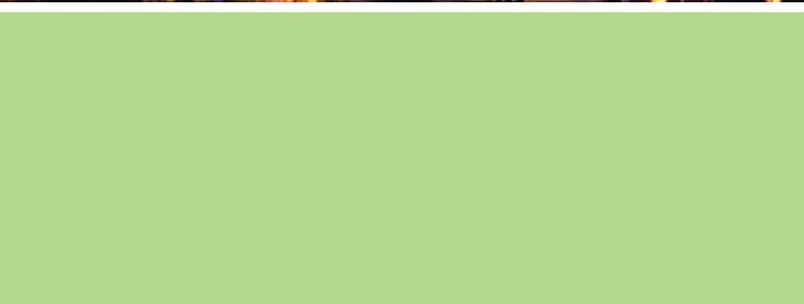
## Recommended preparation:

For all Bachelor of Commerce programmes a broad range of subjects at NCEA level is ideal.

For the IT major, a technology-based school subject is not essential.

## Programme structure:

- Pass at least 360 credits (24 courses)
- Pass all compulsory courses
- Include no more than 165 credits (11 courses) at 100 level
- Pass at least 75 credits (5 courses) at 300 level
- Meet the requirements of at least one of the named Bachelor of Commerce majors.



## Information Technology major

The Information Technology major will produce graduates who are highly skilled in understanding the importance of business computing to land-based industries and the role that these technologies play in creating value and sustaining performance. Graduates will be able to develop, apply and evaluate appropriate information technology solutions for important business challenges. A major in Information Technology will enhance and support the knowledge, skills and values that underpin the commercial sector - and open up a wide and varied career.

### Career outcomes

Graduates of this major will gain the skills to apply business technology in a business setting to help businesses to be more efficient and more productive. Graduates of this major have career opportunities in roles such as business analyst, interface designer, computer and information systems manager, systems analyst, technical communicator, website or application developer.



## >> PROGRAMME CONTACTS



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**STUDENT LIAISON TEAM**  
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# BACHELOR OF Environment and Society

[www.lincoln.ac.nz/BES](http://www.lincoln.ac.nz/BES)



## DURATION:

3

Years

## TAUGHT AT:



**Te Waihora campus**  
(Lincoln, Canterbury)

## INTAKE:

Semester Semester

1

2



Lincoln's Bachelor of Environment and Society (BES) prepares students to tackle the big issues around how we live on this planet. The world is changing. Resources are dwindling and the population is growing. This creates increasing pressure on food security, fresh water, ecosystems and indigenous culture. How do we increase productivity in the land-based industries while reducing negative impacts on the environment?

Our graduates will gain a broad skill-set to tackle today's sustainability and land-use issues. Through your specialist major, you will be able to critically analyse and work towards solving global issues – the issues that really matter as our world changes.

The BES has four majors: GIS and Environmental Informatics, Land and Society, Māori and Indigenous Environmental Management, and Water Management.

## Entry requirements:

- University Entrance through NCEA, or an approved equivalent qualification.
- If English is not your first language other entry requirements will apply.

Refer to [www.lincoln.ac.nz](http://www.lincoln.ac.nz) for more information.

## Recommended preparation:

**GIS and Environmental Informatics:** Geography would be useful. Mathematics/Statistics and computing are not essential but may be beneficial.

## Programme structure:

- Pass at least 360 credits (24 courses)
- Pass all compulsory courses
- Complete no more than 165 credits (11 courses) at 100 level
- Complete at least 75 credits (5 courses) at 300 level
- Meet the requirements of at least one of the named Bachelor of Environment and Society majors.



As our world changes, we need highly skilled individuals who can tackle the big issues.



## GIS and Environmental Informatics major

The GIS and Environmental Informatics major gives students the opportunity to use Graphical Information Systems and other software tools to explore the nature of spatial data, learn how to analyse and manage data, and to use data to design solutions for environmental issues. You will include courses on environmental analysis, applications of GIS, data management, and computer application development. You will gain the theory and skills for applying a range of technologies to 'real world' problems.

### Career outcomes

Examples of roles this programme will prepare graduates for are: GIS analyst, GIS consultant, GIS developer, geospatial specialist, GIS database administrator.

## >> PROGRAMME CONTACTS



### GIS AND ENVIRONMENTAL INFORMATICS

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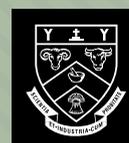
### LAND AND SOCIETY

**Lloyd Carpenter**

Senior Lecturer

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# BACHELOR OF Landscape Architecture

[www.lincoln.ac.nz/BLA](http://www.lincoln.ac.nz/BLA)



## DURATION:

4

Years

## TAUGHT AT:



**Te Waihora campus**  
(Lincoln, Canterbury)

## INTAKE:

Semester 1 Semester 2

1

2



Lincoln University's Bachelor of Landscape Architecture (BLA) is taught by the School of Landscape Architecture (SoLA) - the longest established school of its type in New Zealand and staffed by internationally-acclaimed academics.

The Lincoln University BLA is accredited by the New Zealand Institute of Landscape Architects (NZILA) meaning graduates are eligible to become registered professionals who are highly sought after within both public and private sectors throughout New Zealand, Australia and internationally. In addition to providing an in-depth foundation in all aspects of landscape architecture, Lincoln's BLA programme specialises in: landscape and urban ecology, resilient landscape design, sustainable communities, structure planning, urban landscapes and indigenous Māori landscape design.

The BLA can be awarded with honours to those students who achieve a sufficiently high standard in their fourth year courses.

To find out more about Lincoln University's School of Landscape Architecture, we recommend you request a copy of the SoLA Year Book 2015.





At SoLA, we work together to understand and imagine the potential of landscape. It's a vibrant mix of design, ecology, planning, field tours and real-world projects.

## Entry requirements:

- University Entrance through NCEA, or an approved equivalent qualification.
- If English is not your first language other entry requirements will apply.

Refer to [www.lincoln.ac.nz](http://www.lincoln.ac.nz) for more information.

## Recommended preparation:

Courses in Fine Arts, Geography, or Ecology would be useful but not essential.

## Programme structure:

- Pass at least 480 credits (courses and studios)
- Pass all compulsory courses
- Completion of practical work component
- Attendance at compulsory field tour.

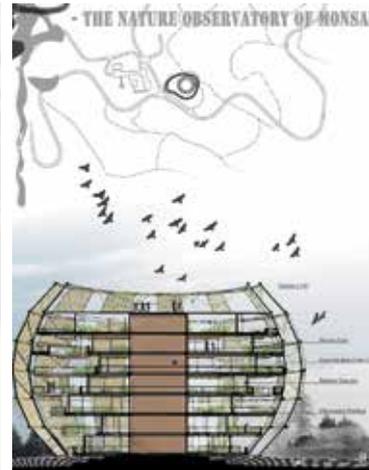
## Practical work:

- Not less than 6 weeks in an approved office-based professional practice
- Not less than 3 weeks in an approved aspect of landscape implementation
- Three weeks applied practice in LASC 393 - Practicum: Applied Landscape Practice.



# BACHELOR OF LANDSCAPE ARCHITECTURE

(continued)



## Career outcomes:

Lincoln University has an international reputation for excellence in landscape architecture. Our graduates are employed all over the world because of their strength in design and planning, their ability to think, and the real world experience they gain during their study.

Please request a copy of our yearbook for information about our alumni (former students) and where they are now or visit: [www.lincoln.ac.nz/yearbook](http://www.lincoln.ac.nz/yearbook)





## Programme content

Content can include topics such as:

- Digital Tools for Design
- Introduction to 3D Design
- Visual Communication
- History of Design and Culture
- Land Surfaces, Water and Structures
- Land, People and Economies
- Research and Analytical Skills
- Introduction to Earth and Ecological Sciences
- Landscape Planting Practice
- Planting Design and Management
- Landscape Analysis, Planning and Design
- Site Design
- Design Details
- Landscape and Culture
- Sustainable Futures
- Design Theory
- Landscape Ecology
- Innovative Design
- Sustainable Design and Planning
- Landscape Assessment and Planning
- Professional Practice
- Complex Design
- Major Design.

## FACTS

**FIRST  
AND OLDEST**  
LANDSCAPE ARCHITECTURE  
PROGRAMME IN NEW ZEALAND

RECOGNISED AS ONE OF THE  
**BEST**  
LANDSCAPE ARCHITECTURE  
PROGRAMMES IN THE  
WORLD

OUR GRADUATES ARE  
**SOUGHT AFTER**  
AROUND THE  
GLOBE

## >> PROGRAMME CONTACTS



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Course Advisor

Lecturer

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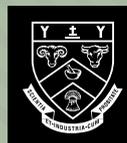


**Barbara Nicholson**

Practical Work Coordinator

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# BACHELOR OF Landscape Architecture (Graduate Entry)

[www.lincoln.ac.nz/BLAGrad](http://www.lincoln.ac.nz/BLAGrad)

## DURATION:

2

Years

## TAUGHT AT:



**Te Waihora campus**  
(Lincoln, Canterbury)

## INTAKE:

Semester Semester

1

2



Lincoln University's Bachelor of Landscape Architecture (Graduate Entry) is an option for people who want to study Landscape Architecture and already have a bachelor's degree. Students taking the BLA (Graduate Entry) option can complete their programme in two years.

The degree is taught by the School of Landscape Architecture - the longest established school of its type in New Zealand and staffed by internationally-acclaimed academics. The BLA is accredited by the New Zealand Institute of Landscape Architects meaning graduates are eligible to become registered professionals who are highly sought after within both public and private sectors throughout New Zealand, Australia and internationally. Lincoln University has an international reputation for excellence in Landscape Architecture. Our graduates are employed all over the world because of their strength in design and planning, their ability to think, and the real world experience they gain during their study. In addition to providing an in-depth foundation in all aspects of landscape

architecture, Lincoln's BLA programme specialises in: landscape and urban ecology, resilient landscape design, sustainable communities, structure planning, urban landscapes and indigenous Māori landscape design.

## Entry requirements:

- Completion of an undergraduate degree.
- Demonstration of design ability.

Refer to [www.lincoln.ac.nz](http://www.lincoln.ac.nz) for more information.

## Recommended preparation:

Courses in Fine Arts, Geography, or Ecology would be useful but not essential.

“

My favourite part of the programme so far is the range of tutors we have available to offer us individual help.

”

*Jane Ge*  
BLA (Grad) student



Accredited by:



NEW ZEALAND INSTITUTE  
OF LANDSCAPE ARCHITECTS



## Programme structure:

- Pass at least 300 credits (courses and studios)
- Pass all compulsory courses
- Complete the practical work requirement
- Attend the multi-day field tour.

## Practical work:

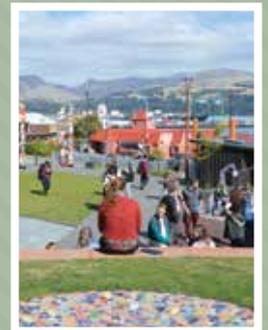
No less than three weeks of landscape implementation.

## Programme content

Content can include topics such as:

- History of Design and Culture
- Introduction to Earth and Ecological Sciences
- Planting Design and Management
- Landscape Analysis, Planning and Design
- Design Details
- Landscape Ecology
- Sustainable Design and Planning
- Landscape Planting Practice
- Design Theory
- Landscape Assessment and Planning
- Professional Practice
- Complex Design
- Major Design.

On field trips you'll go where the action is: we often align field trips onto significant conferences or environmental issues, or we explore key issues in sites that matter.



“

I've really enjoyed the courses on design theory and history, they have been incredibly thought provoking.

”

*Rachel Walton  
BLA (Grad) student*

## >> PROGRAMME CONTACTS

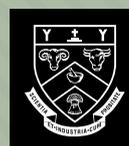


### Jacky Bowring

Professor of Landscape

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# BACHELOR OF Science

[www.lincoln.ac.nz/BSc](http://www.lincoln.ac.nz/BSc)



## DURATION:

3

Years

## TAUGHT AT:



**Te Waihora campus**  
(Lincoln, Canterbury)

## INTAKE:

Semester Semester

1

2



As our world changes, we need highly skilled individuals who can tackle the big issues. How do we feed the world while minimising environmental impact? How do we protect our environment from biological threats? How do we maintain good environmental quality? These are the pressing questions facing scientists of the future. As a Lincoln University Bachelor of Science (BSc) graduate, you can help answer them.

Lincoln University's Bachelor of Science programme is applied and context-based designed to produce graduates who have a firm grounding in the basic sciences. These can be applied to processes in the environment, in ecosystems, or at the molecular level. This will contribute to sustainable management and conservation of land, water and air and the country's natural resources.

This degree has seven majors to choose from: Agritech, Bioprotection and Biosecurity, Conservation and Ecology, Food Science, Individual, Land, Water, Environment and Māori and Indigenous Knowledge of the Environment.

## Entry requirements:

- University Entrance through NCEA, or an approved equivalent qualification.
- If English is not your first language other entry requirements will apply.

Refer to [www.lincoln.ac.nz](http://www.lincoln.ac.nz) for more information.

## Recommended preparation:

A good grounding in the science subjects from school: Biology and Mathematics/Statistics, Chemistry, Physics and Computing are useful options too.

## Programme structure:

- Pass at least 360 credits (24 courses)
- Pass all compulsory courses
- Complete no more than 165 credits (11 courses) at 100-level
- Complete at least 75 credits (5 courses) at 300-level
- Meet the requirements of at least one of the named Bachelor of Science majors.



“

Lincoln is right at the cutting edge in this new era of research. Studying at Lincoln meant I could be part of that exciting research initiative.

”

### Agritech major

The Agritech major will produce graduates who are highly skilled in using information technologies to create value and sustain performance in land-based industries. Graduates will be able to develop, apply and evaluate appropriate information technology solutions to important challenges for optimising land-based performance. A major in Agritech will enhance and support the sciences that underpin primary industries. This qualification will produce graduates who have the unique combination of the knowledge and skills to utilise digital technologies, and the knowledge of the science behind primary industries – resulting in the ability to find IT-led solutions to production, environmental and land-use problems.

#### Career outcomes

The application of advanced information technologies in the land-based sectors is increasing and there are diverse employment opportunities for graduates from this programme. BSc-Agritech graduates have unique skills that are highly-valued by a range of employers across the public and private sectors. Possible employers might include: precision agriculture and environmental management consulting firms, agricultural, horticultural, or forestry companies, the wine industry, and local and central government. Potential job titles might include precision agriculture consultant, natural resource analyst, precision technology software/hardware developer, precision technology specialist.



## >> PROGRAMME CONTACTS

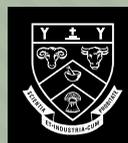


**AGRITECH**  
**Brad Case**

Lecturer

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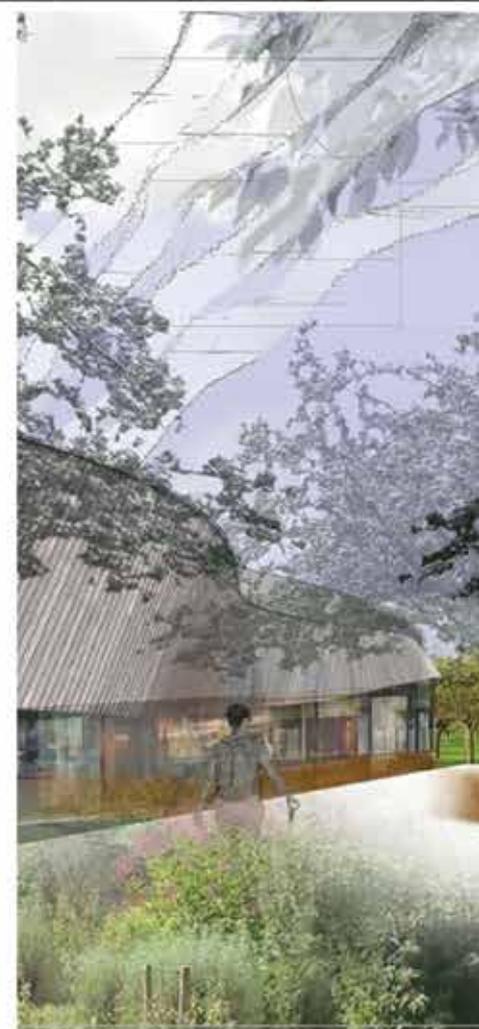
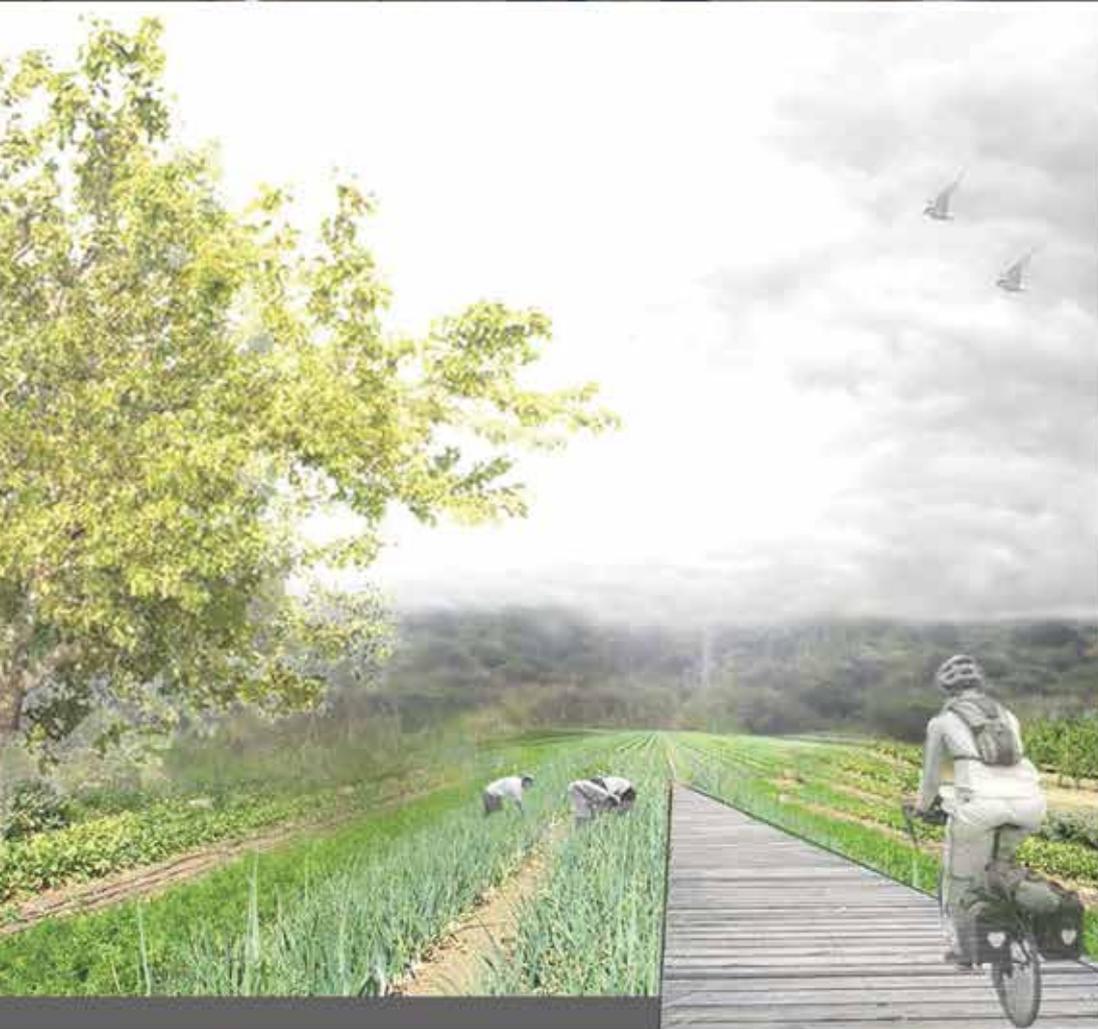
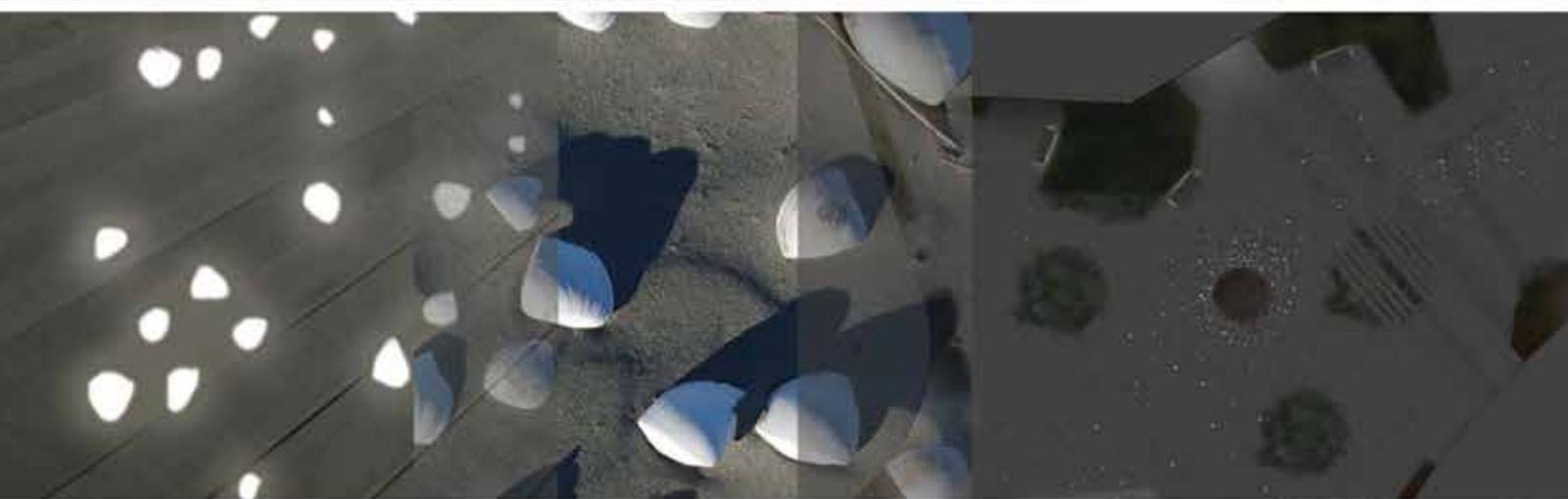


**STUDENT LIAISON TEAM**

E: [land@lincoln.ac.nz](mailto:land@lincoln.ac.nz)

P: 0800 10 60 10

03 423 0000





# Where are Lincoln University graduates?





**ABBY SHEPHERD**

**Bachelor of Commerce**

*Web Optimisation Team Leader, Ark Advance*

Abby Shepherd decided to attend Lincoln University because of its small classes and ability to offer one-on-one assistance to students. She graduated with a Bachelor of Commerce in 2012.

Her studies focused on business management and IT and she says she enjoyed the latter the most, due to the hands-on tutorial work. “The lecturers and staff were fantastic as they actually want to help you to succeed. They also tried to make things fun and applicable to the real world.”

After graduating, she spent time overseas then moved to Auckland, where she secured a graduate role as an Online Marketing Campaign Manager. Three years on, she is now the Website Optimisation Team Leader for a group of Online Marketing Campaign Managers.

She says her business management studies were instrumental in setting her apart from others and have allowed her to take on extra responsibilities at work.

“The business management study I did at Lincoln is what helped me to prove myself as being different from other marketing graduates in the company I work for,” she says.

“I look beyond my very client-focused role and help the business owner with all aspects of managing the company, from hiring to training and helping to make decisions about the direction of the business.”



**KESS ALEKSANDROVA**

**Bachelor of Landscape Architecture (Honours)**

*Landscape Architect, Rough and Milne Landscape Architects*

In her final year of study, Kess Aleksandrova was offered a full-time position as a landscape architect and also won a number of national and international landscape architecture/urban design awards.

“I’ve had a lifelong passion for nature and ecosystems, art and social sciences, so landscape architecture was a perfect match and Lincoln is globally recognised in producing excellent graduates in this field. Having some very passionate, incredibly gifted and globally renowned lecturers and tutors has definitely made my studies more enjoyable, as well as adding to the overall ‘home-like’ atmosphere of the university.

“The strong focus on constructive critique along with the balance of theory and practice has been very valuable in developing my design and theoretical thinking, as well as the ability to successfully apply these ideas in a way that genuinely benefits people.”



## **DENNIS KARANJA**

*PhD in Landscape Planning*

Choosing Lincoln was easy for Dennis after he was offered the PhD scholarship in Landscape Planning and the opportunity to work on real life policy issues. A native of Nairobi, in Kenya, Dennis is writing his thesis on “Pathways to Robust Futures: Distilling Principles to Guide Landscape Policy Decisions”.

“I am researching the reasons behind decisions on landscape change and change management. Getting to talk to decision-makers and those who influence policy, such as local communities, landscape architects, and resource planners is great.”

Dennis is enjoying being surrounded by the South Island’s beautiful and unique landscape and the inspiration created by the Central Otago communities he experiences throughout his frequent field trips.

“The research facilities with superb technical support, library support, and office space provided for postgraduate students are all excellent.”



## **CHRIS CHEN**

*Bachelor of Landscape Architecture*

*Senior Landscape Architect, Pocok Design Environment*

Originally from China, Jianxi says his time at Lincoln University was the most challenging and one of the most rewarding times of his life.

“I had the most challenging five years of my life at Lincoln University, which probably also turned out to be the most important five years, as the new environment enabled me to change my way of living, thinking and studying completely. I had lots of fun, while also putting in a lot of hard work.”

Jianxi says his degree helped him to approach landscape design from a new perspective.

“One of the most valuable aspects of my study was the need and ability to think ‘large scale’ in landscape architecture. This has helped me immensely in my current role, as I am practising larger scale landscape design now.

“I also really enjoyed the freedom of managing my own time beside compulsory classes and studios.

“My time at Lincoln University changed me completely. – I was given back the confidence as a student that was lost during my middle and high school study back in China.”



**HALEY FARMER**

*Bachelor of Landscape Architecture  
Landscape Architect, Darby Partners*

Having completed a Bachelor of Landscape Architecture in 2015, Haley Farmer now works at Darby Partners in Queenstown, where she applies her hard-earned skills and knowledge to high-end, large-scale master planning projects.

She says that Lincoln University's landscape architecture degree sets students up well for their future careers, allowing them to hit the ground running when they graduate.

"Studying at Lincoln was a great experience. The degree covers a wide range of topics, including development planning, design and project management. A lot of time was spent in the studio and on field trips, learning the application of design.

"We also took papers on ecology, planning, Māori culture, earth science and sustainability, so it was a really well-rounded programme.

The large scope of the landscape architecture vocation means professionals need to draw on a wide range of skills in order to succeed in the industry."

She says the field is continuing to evolve and that she witnessed changes taking place in the industry even throughout her four years of study.

"I found there was more and more focus on the sustainability of cities, global interest in the environment and the quality of urban life in big cities increasing."



**SENAIT SENAY**

*PhD Ecological Informatics  
Research Associate, University of Minnesota*

Senait Senay, originally from Ethiopia, says that Lincoln University offered "the whole package" when she was in the process of choosing a university to attend.

"New Zealand is the go-to-nation for biosecurity, and this was central to the project I wanted to work on."

She received her PhD in Ecological Informatics in 2015 and now works as a research associate at the University of Minnesota in the US.

Senait says she was hugely impressed by the academic expertise available to her throughout her studies, and relished the opportunities she received to interact with academics from overseas.

"While at Lincoln University, I also had the chance to travel to Australia, Brazil and the US to present my work. This gave me invaluable international experience and confidence."

After graduating, Senait spent six months working for the Department of Conservation (DoC), helping with their efforts to eradicate the invasive great white butterfly, the dispersal of which was the focus of one of her thesis chapters.

"My current job as a Research Associate at the University of Minnesota includes developing and enhancing spatial models that can be used to predict the distribution of agricultural pests and diseases."



### **MUHAMMAD NDA YAKUBU**

***Bachelor of Software and Information Technology***  
*Software Engineer, Orion Health*

Muhammad Nda Yakubu says it was the hands-on experience he gained through his Bachelor of Software and Information Technology at Lincoln University that helped him to get ahead in his chosen field. Muhammad recently landed a new role, with plans to further advance his career.

“I chose to study a Bachelor of Software and Information Technology because I am interested in using computers to make people’s lives easier and better, and also because I love programming,” says Muhammad.

“Lincoln University also offers a ‘real world experience’ approach to learning, and has a very good student-to-lecturer ratio, giving better access to the teaching faculty. Most importantly, it is an applied university. One of the most valuable aspects of my studies was a software engineering paper, because it introduced me to many of the things I am using and experiencing at work currently. I also really enjoyed competing in the Microsoft Imagine Cup New Zealand final, which offered a real world application.”

With his practical experience, Muhammad was able to secure a job as soon as he graduated, starting work with software development company, Contec Group International, as a Technical Support Technician and Programmer. A few months later, he has landed at Orion Health as a Software Engineer.



### **GRAHAM SMART**

***Bachelor of Software and Information Technology***  
*Software Developer/Unit Test Monitor/Build Monitor, Northern Arch*

Membership in the Lincoln University team representing New Zealand in the world final of the 2009 Microsoft Imagine Cup in Egypt was an unforgettable highlight of Graham Smart’s time as a student.

“We received excellent support from the University preparing for the competition. It clearly shows that Lincoln University staff members are willing to go the extra mile to help their students.”

Graham graduated with a Bachelor of Software and Information Technology in 2010 and now works for Northern Arch as a software developer/unit test monitor/build monitor.

“The company utilises tools that Lincoln University used to teach us, so I found it easy to get going from my first day. Lincoln University prepared me well.”

# Employment opportunities

[www.lincoln.ac.nz](http://www.lincoln.ac.nz)



## CAREERS IN DESIGN



Landscape architects work to create and improve the landscape around us. They plan, design and manage open spaces in both natural and built environments. They work to provide innovative and aesthetically pleasing environments for people to enjoy, whilst ensuring that changes to the natural environment are appropriate, sensitive and sustainable.

The work covers diverse projects – both urban and rural – that range from designing the layout of parks, gardens and housing, to city-centre design, sporting sites and improving land affected by mining or motorway construction.

Landscape architecture equips you with many skills, including design appreciation, planning and project management. You will need to work to briefs developing time management and budgeting skills. Communication and teamwork are paramount when working with clients, architects and professional members of design teams. IT skills - to show your ideas and designs in 3D - and report writing are vital, along with the ability to research. A good knowledge and awareness of environmental impact surveys and current legislation, and how it might affect clients, is crucial.

Landscape architecture is considered vocational, with the majority of graduates entering landscape design or related professions and remaining in their chosen profession. Most graduates work in design practices, private or public, or for other environmental, consultancy or development-related organisations.

Landscape architects may choose to specialise in design or landscape management, landscape planning or landscape science, depending on their skills, experience and interests. Typical roles include landscape architect/designer, landscape gardener, landscape planner, environmental consultant and landscape manager.



## CAREERS IN TECHNOLOGY



Computing doesn't exist in isolation. It is an integral and exciting part of our everyday lives and a significant source of a huge range of employment opportunities worldwide. The outlook for graduates in this sector is excellent, with demand currently exceeding the supply of new talent.

There are so many ways you could use your degree in technology, but the real advantage of a Lincoln University IT degree is the combination of technical skills with skills and knowledge from other disciplines, such as commerce, science and agriculture. Having those extra skills and knowledge will be your point of difference.

Employers will be interested in both the technical skills you have learned, such as programming languages, and in the transferable skills you have developed, such as innovation and adaptability to cope with rapid change in technology.

Your study will teach you a disciplined approach to analysing problems, how to design creative solutions, and the ability to critically evaluate the results. You will also develop management skills such as communication, team work, time management and reporting. You will learn how to apply these skills and develop tools for different sectors, based on your major.

Typical outcomes for graduates in this field include becoming a test analyst, computer support technician, precision agriculture technologist or a geospatial analyst/developer. Graduates may work in database administration, information system management, applications and web development, IT consulting, geo-spatial analysis, systems and business systems analysis and design.

Lincoln University has a Careers and Employment office which can provide you with support and guidance as you navigate your way through your career choices.

To find out more about more about opportunities in design or technology careers contact:

**[michelle.ash@lincoln.ac.nz](mailto:michelle.ash@lincoln.ac.nz)**



# Planning your study and applying

[www.lincoln.ac.nz](http://www.lincoln.ac.nz)

You can apply online using our MyLinc system through the University website but before you do make sure you have done a bit of homework.



Take some time to decide what level of study best suits you and your abilities and aspirations, as well as to better understand how study is structured at Lincoln University.

There are a lot of options and study levels progress from level 4 to level 10. Most of our undergraduate bachelor's degree students start directly into the first year of their degree - but if you feel you need to upgrade your academic skills, your English language skills, or want a one-year course to lead straight into a particular career, Lincoln University has those bases covered too.

There are many pathways to a bachelor's degree. After successfully completing three years and gaining the undergraduate degree you could go on to postgraduate study if you want to gain more knowledge and become more specialised.

To find out more visit [www.lincoln.ac.nz](http://www.lincoln.ac.nz) or see our Certificates and Diplomas or Undergraduate prospectuses.

## How to apply

1

Decide on your programme

2

Apply – click on the Apply Now button on our website or complete your application in **mylinc.nz**

We will assess your application and contact you with an offer if you are successful.

3

Accept your offer through our online system, mylinc

4

Enrol in the individual courses that will make up your qualification programme. Enrolment opens 1 October each year. Enrolment can only take place once an offer of placement has been made and accepted.

# Student Liaison team

Our Student Liaison team will be the first point of contact for you as a future student. They can provide you with any information you need, and answer any questions you may have about course planning, applying or life at Lincoln University. The Student Liaison team also visits secondary schools and attends career expos in all regions.



**Jaime Thomson**  
**Student Liaison Manager**

Jaime leads the Liaison team and is the key contact for schools in Southland, South Canterbury (including Oamaru), and Christchurch.



**Suzanne Jamieson**  
**Student Liaison Officer**

Suzanne is the key contact for Auckland, Waikato and Northland.



**Ekara Lewis**  
**Māori Outreach Coordinator**

Ekara is the key contact for schools in Gisborne and is available to provide support and advice for all future and current Māori students.



**Anna Soboleva**  
**Recruitment Officer, International**

Anna is the key contact for international students already studying in New Zealand who would like to study at Lincoln University.



**Sophie Prangnell**  
**Senior Student Liaison Officer**

Sophie is the key contact for schools in Hawke's Bay, Wellington, Wairarapa, Christchurch and Australia.



**Suzanne Carruth**  
**Student Liaison Officer**

Suzanne is located at our Telford campus, and covers the North Island and the lower South Island.



**Kimberley Forbes**  
**Student Liaison Officer**

Kimberley is the key contact for Otago, Nelson/Marlborough, Wanganui, Manawatu and Christchurch.



**James Agnew**  
**Student Liaison Officer**

James is the key contact for Bay of Plenty/Coromandel, the Central Plateau (North Island), Taranaki, Westland and Christchurch.



## Te Waihora (Lincoln) campus contacts

Freephone: 0800 10 60 10  
(within New Zealand)  
Phone: +64 3 423 0000  
(international)  
Email: land@lincoln.ac.nz



## Telford (Balcultha) campus contacts

Freephone: 0800 83 53 67  
(within New Zealand)  
Phone: +64 3 419 0300  
(international)  
Email: enquiry@telford.ac.nz

# WHO CARES ABOUT THE Environment

» We do!

Key to all that Lincoln University does is an **awareness of the environment** - from our course content, to our native plantings, to the paper this publication is printed on.

As New Zealand's specialist land-based university, our mission is to transform land, people and economies, and we aspire to do this without negatively impacting our environment.

Land is something we value. It is, literally, our world.

In 1993 the University adopted an **Environmental Charter and an Environmental Policy** (the first among New Zealand tertiary establishments) to support the work of the already established staff-student group called Lincoln Environmental Organisation (LEO). This led to the formation of a formal Environmental Task Force and the revision of the Policy in 2003 and 2010 – giving the University what it now has: the **Sustainability Advisory Group for the Environment** (SAGE). SAGE works alongside LEO to ensure the University 'treads lightly on the Earth', ensuring we live up to our values in the areas of sustainable practices, stewardship of our own environment, and protection of the wider environment.

The University's School of Landscape Architecture building was built with **locally sourced materials** with a life span of over 100 years and which require minimal maintenance. In this building and across campus, the University continues to make a difference with significant efforts in **energy conservation, water management, resource recovery and waste management**.

Lincoln University is a major supporter of the **Lincoln Envirotown Trust** and provides office space and resources for the Chair of the Trust.

All our publications are printed on **environmentally responsible paper**, produced using Elemental Chlorine Free (ECF), Third Party Certified pulp sourced from well managed and legally harvested forests, and manufactured under the strict ISO14001 Environmental Management System.

New Zealand's native biodiversity makes this country unique and Lincoln University is very proud of our **park-like campus, gardens and the native plantings** we have both on campus and extensively at the Lincoln University Dairy Farm.

The Māori outreach programme and the work of staff across the University aims to facilitate an understanding of, and acknowledges **Māori communities, iwi, hapu, whanau and their affinity with their whenua and their environments**. Formal partnerships and informal collaboration will ensure a continuing mutual understanding and respect for the land, consistent with the concept of kaitiakitanga (stewardship).



## Disclaimer

Every effort is made to ensure that information in this publication is correct at the time of printing, but the content may be subject to change. Lincoln University reserves the right to make changes, amendments or deletions - including the withdrawal of courses - should circumstances change.

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University**  
*Te Whare Wānaka o Aoraki*

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