LINCOLN UNIVERSITY COUNCIL

AGENDA & PAPERS

At 10:15am on Tuesday, 27 May 2025 a meeting of Lincoln University will be held in Memorial Hall, Ivey West Building, Lincoln Campus

Click on this link to join the meeting: Click here to join the meeting

Lincoln University Strategy 2019-2028

Vision	Purpose	Strategy 2019-2028	Values
To be a globally-ranked, top-five land-based University, unlocking the power of the land to enhance lives and grow the future.	To facilitate excellent research and education to grow the knowledge of our students and help shape a world that benefits from a greater understanding of the relationships between land, food and ecosystems.	• A distinctive, Aotearoa New Zealand, end-to-end student experience • Improved assets and sustainable operating models • A culture which stimulates and inspires all staff and students • World-class research and teaching with impact • An organisation focused on meaningful partnerships • Facilitating student growth	Manaakitaka – Looking after people

STRATEGY GOALS

PRIORITY AREAS 2024-2028

GOAL 1	A distinctive, Aotearoa New Zealand, end-to-end student experience	• Provide an enriching and successful experience for all students within an environment that empowers them to thrive and achieve their goals. • Ensure quality streamlined student services that are responsive and focused on supporting wellbeing and success. • Enhance student experiences for postgraduate students. • Develop research-rich graduates. • Grow graduates ready for New Zealand's future workforce
GOAL 2	Improved assets and sustainable operating models	• Establish a clear pathway to carbon neutrality by 2030. • Make our organisation an exemplar of sustainable practices. • Establish a flexible, agile, and effective University operational framework • Digitally enable our University
GOAL 3	A culture which stimulates and inspires all staff and students	• Support and nurture a culturally inclusive campus. • Embed and celebrate our Takata Whenua. • Develop a values-driven culture that fosters a sense of identity, shared purpose and commitment. • Grow our staff through early career development, professional development, and workforce planning. • Manage workloads consistent with a research-intensive, specialist university focused on the land-based sectors.
GOAL 4	World-class research and teaching with impact	• Accelerate research impact and relevance to the land-based sectors through sustained research excellence and collaboration. • Provide innovative academic programmes that anticipate the workforce needs of land-based sectors
GOAL 5	An organisation focused on meaningful partnerships	• Grow our impact through partnerships. • Develop, nurture, and promote a culture of collaboration. • Build coherence between research and education in all partnerships
GOAL 6	Facilitating student growth	• Meet land-based sector workforce needs and challenges • Expand our reach to a wider group of potential students. • Increase participation and engagement of Māori and Pasifika students

Council Meeting - 27 May 2025

CONFIDENTIAL

LINCOLN UNIVERSITY
TE WHARE WĀNAKA O AORAKI

27 May 2025 10:15 AM - 01:00 PM

Agenda Topic   Page

9am on Tuesday 24 June 2025, in Memorial Hall, Lincoln Campus.

Karakia Timataka

Kimihia rapuhia

Whaia ki te Uru Tapu nui o Tane

Tane te waiora

Tane te wanaka

Tane te tokoraki

Puta ki te whaiao ki te ao marama

Tu te kana

Tu te maraka

Te tu hi te rarama

E noho te mataara nei

E roko whakairia ake ki ruka

Kia tina! tina! Haumi e! Hui e! Taiki e!

Opening Prayer

Let us pursue and follow Tāne into the highest realms.

The sacred repository of knowledge.

Tāne, the waters of life and wellbeing.

Tāne, the repository of all knowledge and wisdom.

Tāne who propped up the heavens.

Bringing forth the light, the broad daylight so that all life realises its potential.

It is Tū who preserves and protects the sacredness of all.

It is Tū who awakens the path of light within, imbuing his qualities of vigilance.

That our eyes may ever focus on the path ahead, in order that we may pass over the state of tapu to allow the renewal of peace to be suspended from on high. Make it firm, it is firm.

Join it, gather it. It is done!

STRICTLY CONFIDENTIAL

Council Members' Interests Register

Councillor	Name of Company / Institution	Dates Applicable	Position	Comments	Updated
Janice Fredric	Mainpower Ltd	Current	Director		1 February 2022
Janice Fredric	Aurora Energy Limited	Current	Director		1 July 2022
Janice Fredric	~~Aviation Security Services~~	~~Current~~	~~Chairman~~		24 July 2024
Janice Fredric	~~Civil Aviation Authority~~	~~Current~~	~~Chairman~~		24 July 2024
Janice Fredric	~~Unity Credit Union~~	~~Current~~	~~Chair of Audit and Risk Committee~~	~~Formerly Credit Union Baywide and Credit Union South~~ Chair role ends on 28 October 2022	1 October 2022
Janice Fredric	Green Power New Zealand Ltd	Current	Director	Reappointed with effect 21 August 2024	26 August 2024
Janice Fredric	Mt Cass Wind Farm Ltd	Current	Director	Reappointed with effect 21 August 2024	26 August 2024
Janice Fredric	Timaru District Council	Current	Independent member of Audit and Risk Committee		
Janice Fredric	NZ Shipwreck Welfare Trust	Current	Trustee		
Janice Fredric	Tregynon chartiable Trust	Current	Trustee		
Janice Fredric	NIWA	Current	Director		
Janice Fredric	NIWA Vessel Management Limited	Current	Director		
Janice Fredric	~~NZ Growth Capital Partners Limited~~	~~Current~~	~~Director~~	Ceased directorship 10 September 2024	26 August 2024
Janice Fredric	~~Aspire NZ Seed Fund Limited~~	~~Current~~	~~Director~~	Ceased directorship 10 September 2024	26 August 2024
Janice Fredric	~~Elevate NZ Venture Fund GP Ltd~~	~~Current~~	~~Director~~	Ceased directorship 10 September 2024	26 August 2024
Bruce Gemmell	The Gemmell Group Limited	Current	Director, Shareholder		1 February 2022
Bruce Gemmell	The Highlanders GP Limited	Current	Director		
Bruce Gemmell	~~Miramar Consolidated Limited~~	~~Current~~	~~Director~~	Removed 21 May 2024	21 May 2024
Bruce Gemmell	The Second Little Pig Was Right Limited	Current	Director, Shareholder		
Bruce Gemmell	ATT Trustee Limited & associated subsidiaries	Current	Director	Non-trading	
Bruce Gemmell	Lincoln Agritech Limited	Current	Chair		
Bruce Gemmell	Lincoln University Centennial Trust	Current	Ex-officio Trustee		
Bruce Gemmell	Lincoln University Foundation Trust	Current	Ex-officio Trustee	Formally constituted 12 November 2019	
Bruce Gemmell	Gemmell Finance Limited	Current	Director, Shareholder		
Bruce Gemmell	Nitrolabs Limited & Associated companies	Current	Director		
Bruce Gemmell	Central Plains Water Limited	Current	Director		
Bruce Gemmell	Buller Electricity Limited & associated subsidiaries	Current	Director	Director from 1 September 2021	
Bruce Gemmell	Planz Consultants Ltd	Current	Director		
Bruce Gemmell	Nexia Limited	Current	Director		
Bruce Gemmell	Selwyn District Council	March 2024 - current	Independent member of Audit and Risk Committee	Appointed in March 2024	1 March 2024
Bruce Gemmell	Waldmel Holdings Limited	July 2024 -Current	Director		
Bruce Gemmell	Pioneer Energy Renewables GP Limited	Current	Director	Commenced term 5 December 2024	13 December 2024
Bruce Gemmell	Pioneer Energy Renewables GP Limited	Current	Director	Appointed until March 2025	18 February 2025
Bruce Gemmell	Universities New Zealand, (Chancellors Committee)	Current	Chair	Appointed for 2025	
James Parsons	Ashgrove Genetics Limtied	Current	Director		
James Parsons	Agfirst Northland Limited	Current	Director		
James Parsons	Trevear Limited	Current	Director, Shareholder		
James Parsons	Wools of New Zealand Holdings Limited	Current	Director		
~~James Parsons~~	~~Wools of New Zealand General Partner Limited~~	~~Current~~	~~Director~~	Ceased Directorship 14 May 2024	25 July 2024
James Parsons	Ashgrove Limited	Current	Director		
~~James Parsons~~	~~Ospri New Zealand Limited~~	~~Current~~	~~Director~~	~~Ceased Directorship 22 November 2024~~	
~~James Parsons~~	~~National Animal Identification and Tracing (NAIT) Limited~~	~~Current~~	~~Director~~	~~Ceased Directorship 22 November 2024~~	
~~James Parsons~~	~~TBFree New Zealand Limited~~	~~Current~~	~~Director~~	~~Ceased Directorship 22 November 2024~~	
James Parsons	Halter USA Inc	Current	Advisor		1 July 2023
~~James Parsons~~	~~M. Bovis Free New Zealand Limited~~	~~July 24~~	~~Director~~	~~Ceased Directorship 22 November 2024~~	25 July 2024
~~David Philip Jensen~~	~~Colebrook KiwiFruit Orchard GP Limited~~	~~2020-current~~	~~Chair~~	Advised 2 February 2025	1 February 2022
~~David Philip Jensen~~	~~Pongakawa Kiwifruit GP Limited~~	~~2020-current~~	~~Chair~~	Advised 2 February 2025	

Councillor	Name of Company / Institution	Dates Applicable	Position	Comments	Updated
~~David Philip Jensen~~	~~Riverview Kiwifruit GP Limited~~	~~2020 current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~Otamarakau Kiwifruit GP Limited~~	~~2020 current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~Awakeri Orchard GP Limited~~	~~2019 current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~El Dorado Orchard GP Limited~~	~~2018 current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~Expressway Orchard GP Limited~~	~~2017 current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~Gold Income GP Limited~~	~~2021 current~~	~~Chair~~	Advised 2 February 2025	
David Philip Jensen	MyFarm Kiwifruit Fund	Jun 2024 - current	Chair		1 June 2024
David Philip Jensen	Eastpack Limited	2018-current	Director		
David Philip Jensen	Merrijig Development sLImited	Current	Shareholder		
David Philip Jensen	Figured Limited	Current	Shareholder		
David Philip Jensen	New Zealand Dairy Dessert Company	Current	Shareholder		
David Philip Jensen	Fonterra	Current	Shareholder		
David Philip Jensen	Zespri	Current	Shareholder		
David Philip Jensen	Eastpack Limited	Current	Shareholder		
David Philip Jensen	LIC	Current	Shareholder		
David Philip Jensen	Ballance Agri Limited	Current	Shareholder		
David Philip Jensen	Farmlands Co-operative Society Limited	Current	Shareholder		
~~David Philip Jensen~~	~~Napoli Orchard GP~~	~~2018-current~~	~~Chair~~	Advised 2 February 2025	
~~David Philip Jensen~~	~~Eastern Orchards Orchard GP~~	~~2019 current~~	~~Chair~~	Advised 2 February 2025	
David Philip Jensen	Chair Gliding NZ Trust	Current	Trustee		
David Philip Jensen	PinPoint Labs	Current	Chair and Director	Elected Chairperson January 2023	Jan-23
David Philip Jensen	Pasture Accelerator	Current	Chair	JV between MPI, PGW, DairyNZ and Barenburg NZ	Apr-23
Professor Grant Edwards	Lincoln University	Current	Vice-Chancellor		1 February 2022
Professor Grant Edwards	Lincoln University Council	Current	Ex-officio Member		
Professor Grant Edwards	Universities New Zealand, (Vice-Chancellors Committee)	Current	Chair		
Professor Grant Edwards	New Zealand Food Innovation Ltd	Current	Director	New Zealand Food Innovation Auckland & New Zealand Food Innovation (South Island) LImited	1 October 2024
Professor Grant Edwards	Lincoln Agritech Limited	Current	Director		
Professor Grant Edwards	Lincoln University Foundation	Current	Ex-officio Trustee		
Professor Grant Edwards	Lincoln University Centennial Trust	Current	Ex-officio Trustee		
Professor Grant Edwards	Lincoln University Alumni Association	Current	Ex-officio Patron		
~~Professor Grant Edwards~~	~~Member of Steering Governance Group, Forage Value Index, 2014 present~~	~~Current~~	~~Member~~		
Professor Grant Edwards	South Island Dairying Development Centre Leaders Forum	Current	Chair		
~~Professor Grant Edwards~~	~~Biological Heritage National Science Challenge, Challenge Parties Working Group (Co-Chair as UNZ representative)~~	~~Current~~	~~Co-Chair~~		~~18 February 2025~~
Professor Grant Edwards	Committee of University Academic Programmes (CUAP)	Current	Chair		
Professor Grant Edwards	Don Hulston Foundation	Current	Ex-officio University Trust		
Professor Grant Edwards	Ivey Hall and Memorial Hall 125th Anniversary Appeal Gifting Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	Ivey Hall and Memorial Hall 125th Anniversary Appeal Taxable Activity Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	John Mowbray Howard Tripp Agricultural Scholarship Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	J W and Carrie McLean Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	Kathleen Ann Stevens Scholarship Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	Leslie John and Lola June Struthers Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	Sir Arthur Sims Scholarship Trust	Current	Ex-officio University Trust		
Professor Grant Edwards	Vernon Willey Trust	Current	Ex-officio University Trust		
~~Professor Grant Edwards~~	~~Academic Quality Agency Board (as UNZ representative)~~	~~Current~~	~~Member~~	~~Ceased in February 2025~~	~~18 February 2025~~
Puamiria Parata-Goodall	Lincoln University	Current	Council Member and Cultural Advisor	Cultural Advisor to Mana Whenua Cultural N	1 March 2024
~~Puamiria Parata-Goodall~~	~~Te Taumutu Rūnanga~~	~~Current~~	~~Portfolio Leader, Member of Executive~~		
~~Puamiria Parata-Goodall~~	~~Selwyn District Council~~	~~Current~~	~~Pou Kaiawhā, Executive Cultural Advisor~~		
Puamiria Parata-Goodall	AgResearch	Current	Consultant - Cultural Narrative		

Councillor	Name of Company / Institution	Dates Applicable	Position	Comments	Updated
Puamiria Parata-Goodall	Te Taumutu Rūnanga	Current	Chair	Effective from 1 May 2025	
Puamiria Parata-Goodall	Te Māori Manaaki Taonga Trust	Current	Member	Effective from 1 May 2025	
Puamiria Parata-Goodall	Te Pakura Limited	Current	Director & Cultural Advisor to Mana Whenua Cultural Narrative		
Puamiria Parata-Goodall	Ngāi Tahu Fund	Current	Chair		
Puamiria Parata-Goodall	Canterbury Museum Board	Current	Member, Kaiurungi - Ōhākī o Ngā Tīpuna, Cultural Advisor		
Puamiria Parata-Goodall	Te Pae Korako Ngāi Tahu Archives & Whakapap	Current	Member		
Puamiria Parata-Goodall	Rarotoka Management Limited	Current	Director, Shareholder		
Puamiria Parata-Goodall	Arts Council	Current	Member, Co-Chair - Komiti Māori		1 May 2024
Elizabeth Hill-Taiaroa	Te Taumutu Rūnanga	Current	Secretary & Oranga leader		1 April 2023
Professor Derrick Moot	Lincoln University	Current	Professor		1 June 2022
Professor Derrick Moot	Tertiary Education Union	Current	Member		1 June 2022
Professor Derrick Moot	Free Speech Union	Current	Member		1 June 2023
Dr Maria Janna van den Belt	Cogo Connecting Good Limited	Current	Shareholder		1 June 2021
Dr Maria Janna van den Belt	College of Assessors of MBIE	Current	Member		
Dr Maria Janna van den Belt	EHF Fellowship	Current	Fellow		
~~**Dr Maria Janna van den Belt**~~	~~MPI-Fisheries New Zealand~~	~~Current~~	~~Chief Economist~~	~~Updated name of organisation~~	~~17 May 2024~~
~~**Dr Maria Janna van den Belt**~~	~~Global Research consortium (USA, China, Europe) Safe Seaweed by Design (research p~~	~~Current to Feb 2023~~	~~Member of Advisory Board~~	~~Research project involving representatives f~~	~~1 September 2022~~
Gabrielle Thompson	Olsen Thompson Limited	Current	Director & Shareholder		
Gabrielle Thompson	Hollyfort Farm Limited	Current	Shareholder		
Gabrielle Thompson	Thompson Family Farm Limited	Current	Shareholder		
Gabrielle Thompson	Silver Fern Farms Co-Operative Limited	Current	Director		
Gabrielle Thompson	Thompson Family Trust	Current	Trustee		
Gabrielle Thompson	Pretty in Pink Charity Trust	Current	Trustee		
Gabrielle Thompson	Ballance	Current	Shareholder		
Gabrielle Thompson	Farmlands Co-Operative Ltd	Current	Shareholder		
Gabrielle Thompson	Thompson Property Trust	Current	Trustee		
Gabrielle Thompson	Ravensdown	Current	Shareholder		
Gabrielle Thompson	Thompson Forestry Limited	Current	Director and Owner	Effective from 15 December 2022	
Zara Weissenstein	Lincoln University Students' Association	Current	President		1 December 2024
Zara Weissenstein	Lincoln University Accommodation Services	Current	Residential Assistant	January - November 2025	

Register of interests – Senior Leadership Team – 2025

SLT member	Organisation	Date	Position	Notes
Grant Edwards	Lincoln University	Current	Vice-Chancellor	
	Lincoln University Council	Current	Ex-officio Member	
	Universities New Zealand, (Vice-Chancellors Committee)	Current	Chair	
	New Zealand Food Innovation Limited	Current	Director	
	Lincoln Agritech Limited	Current	Director	
	Lincoln University Foundation	Current	Trustee	
	Lincoln University Centennial Trust	Current	Trustee	
	Lincoln University Alumni Association	Current	Ex-officio Patron	
	South Island Dairying Development Centre Leaders Forum Chair	Current	Chair	
	Committee of University Academic Programmes (CUAP)	Current	Chair	
	Don Hulston Foundation	Current	Ex-officio University Trust	
	John Mowbray Howard Tripp Agricultural Scholarship Trust	Current	Ex-officio University Trust	
	J W and Carrie McLean Trust	Current	Ex-officio University Trust	
	Kathleen Ann Stevens Scholarship Trust	Current	Ex-officio University Trust	
	Leslie John and Lola June Struthers Trust	Current	Ex-officio University Trust	
	Sir Arthur Sims Scholarship Trust	Current	Ex-officio University Trust	
	Vernon Willey Trust	Current	Ex-officio University Trust	
Karen McEwan	Lincoln University	2019-	Executive Director, People, Culture, and Wellbeing	
	Senior Leadership Team, Lincoln University	2019-	Member	
	Ceiling Clean WGTN Limited	1982-	Shareholder	
Susie Roulston	Lincoln University	2021-	Chief Operating Officer	
	Senior Leadership Team	2021-	Member	
	Hayden Roulston Limited	2017		Susie's Partner (sports Coaching)
	Lincoln University Property Joint Venture Limited	2022-	Director	From 1 December 2022

Updated July 2024

Chad Hewitt	Royal Society of New Zealand	Current	Member	
	Universities New Zealand, Research Committee	Current	Ex-officio member	
	Universities New Zealand, Education Committee	Current	Ex-officio member	
	~~Universities New Zealand, CUAP~~	~~Current~~	~~Ex-officio member~~	Effective 31/10/2023
	NZ Synchrotron Group Ltd	Current	LU Representative	
	College of Assessors	Current		
	Better Border Biosecurity Collaboration Council	Current	Member	
	LU Senior Management Team	2023-		
	HZAU Lincoln Joint Institute Joint Management Committee	2024-	Vice-Chair	Effective 3/7/24
	Bioprotection Aotearoa Strategic Advisory Board	2024-	Host Representative	Effective 3/7/24
	Universities New Zealand, Open Research Working Group	2025-	Chair	
Merata Kawharu	Tūrama Trustees Limited	Current	Director	
	Nukuroa Consulting Limited	Current	Director & Shareholder	
	Takarangi Limited	Current	Director	
	E Mara E Limited	Current	Director & Shareholder	

Updated July 2024

LINCOLN UNIVERSITY COUNCIL

Minutes of a meeting held on Tuesday 29 April 2025 at 9:00am in Memorial Hall, Lincoln University and online via MS Teams

Meeting Minutes

Present: Prof. Grant Edwards (Vice Chancellor), Michelle Ash, Janice Fredric, Prof. Derrick Moot, Dr Marjan van den Belt, Liz Hill-Taiaroa, Puamiria Parata-Goodall, Gabrielle Thompson, and Zara Weissenstein (each a Council Member).

Via MS Teams: David Jensen, James Parsons

In attendance: Mrs S Roulston (Chief Operating Officer)
Mr N Heslop (Council Secretary)
Prof C Hewitt (Provost)
Prof H Bigsby (Dean, Agribusiness & Commerce Faculty)
Mrs M Clayton & Prof E Stewart (Item 10)
Mr Damian Lodge (DVC, Student Life)
Mrs M Kawharu (DVC, Māori)
Mr S Hunter (Health & Safety Manager, Item 11&12)
Mrs P Morrison (Academic Quality & Policy Manager, Item 15)

Meeting started at 9.02am.

1.   Welcome/Karakia/Apologies

The Pro-Chancellor welcomed Councillors to the meeting and opened the meeting with karakia.

Resolution
That Council:

RESOLVE to receive an apology for absence from Bruce Gemmell.   *Resolution*

MOTION CARRIED

2.   Disclosures of interests

The Register of Interests was NOTED.

3.   Confirmation of the Previous Meeting Minutes

Council RESOLVED:

To confirm the minutes from the Council meetings held on 25th March 2025 as a true and correct record.   *Resolution*

MOTION CARRIED

4. **Matters arising from the Minutes**

    The action register was NOTED.

    The Council Secretary provided a verbal update advising that draft terms of reference for a People and Culture Committee have been distributed to the working group for feedback with a view to bring a report back to Council in May 2025.

5. **Notice of items of General Business**

    There were no items of general business.

    AgriBusiness & Commerce Faculty Presentation

    Professor Hugh Bigsby gave a presentation to Council. The slide deck of the presentation is in the Minutes Attachment (**Appendix A**).

    The Pro Chancellor thanked staff for the informative presentation.

6. **Chancellors Report**

    The report was taken as read.

    Resolution
    That Council:

    Resolution

    1. **RECEIVE** the information in the Chancellor's Report.

    MOTION CARRIED

7. **Vice Chancellors Report**

    The report was taken as read.

    Council Resolution
    That Council:

    Resolution

    1. **RECEIVE** the information in the Vice Chancellor's Report.

    MOTION CARRIED

8. **Vice Chancellor Delegations**

    The report was taken as read.

    LUSA advised that frequency of the service offered is to ascertain the level of demand and a report will come back to Council on the level of take up at the end of the year.

    Action: LUSA President

9. **LUSA Report**

The report was taken as read. The LUSA President highlighted the following:

- A new constitution has been adopted by LUSA.

Council Resolution

That Council:

1. **RECEIVE** the information in the LUSA Report.   *Resolution*

MOTION CARRIED

10. **Academic Board Report**

The report was taken as read which included two major items requesting Council approve proposals to introduce two new qualifications.

The Pro-Chancellor welcomed Megan Clayton and Emma Stewart who talked to two qualifications that are proposed to be introduced.

The report introduced an 'A, B, C, D' framework to analyse qualifications at Lincoln . Suggestion that this is included in future AB reports.

Council Resolution

That Council:

1. **RECEIVE** the information in the Academic Board report.

2. **APPROVE** the proposals to introduce the Bachelor of Landscape   *Resolution*
    Management and the Postgraduate Certificate in Academic Practice to
    be submitted to CUAP for Round 2, 2025.

MOTION CARRIED

11. **Health and Safety Report**

The report was taken as read.

No serious harm events during the March period.

No Worksafe interactions currently.   The corrective actions have been implemented and Steve ensuring they are ongoing.

LU follows a process to identify high risk areas by looking at the volume of incidents in Risk Manager and benchmarking against other universities.

Council Resolution

That Council **NOTE**:

1. The Health and Safety team continues to focus on maintaining and
    improving hazard identification and risk assessments, reviewing and
    establishing clear safety policies and procedures, align training
    requirements relevant to roles and work collaboratively with the University   *Resolution*

community in all areas of health and safety.

2. Identifying trends in the health and safety performance of the University and measures taken to improve the robustness of the data.

3. The actions being taken to improve the culture of health and safety across the University.

MOTION CARRIED

12. Health and Safety Deep Dive: Field Trips & Tours

The H&S Manager spoke to the report.

Purpose of a deep dive is to ensure that Council is aware of its responsibilities and to receive assurance that its due diligence responsibilities are well managed.

The University does have systems in place and a strong culture towards student safety. There are adequate resources in place to address risks on field tours.

Meeting with a stakeholder identified that it is possible that not all incidents are being reported. This will be a piece of ongoing work for the H&S Manager to clarify reporting thresholds and what are appropriate incidents' to be reported.

Council discussed impact of Health & Safety reporting thresholds and the resulting "sanitised experience" that can be had on field trips to limit risk factors.

Resolution

That Council:

Resolution

1. **RECEIVE** the information in the Health & Safety Deep Dive

MOTION CARRIED

13. Appoint members to Human Ethics Committee

The report was taken as read.

Resolution

That Council:

1. **RECEIVE** the information in this report.

2. **NOTES** the recommendation by Prof. Grant Edwards, Vice Chancellor of the member candidates, their skills and expertise, and experience in consensus decision making.

3. **APPOINT** the following people as members of the Human Ethics Committee with effect from 7 May2025:
   (a) Nazmun Ratna (general staff)
   (b) Himashsa Gunasekara (general staff)
   (c) Thomas Kavanagh (general staff)
   (d) Claire Beattie (general staff)

Resolution

(e) Dr Melanie Betts (health representative& qualified health practitioner)

for a three-year term ending on 6th May 2028.

MOTION CARRIED

14. Policy Review – Human Ethics Committee

The report was taken as read.

Resolution

That Council:

Resolution

1. **APPROVE** the amendments to the Human Ethics Committee Policy as outlined in **Appendix A.**

MOTION CARRIED

15. Policy Review – EDI

The report was taken as read.

Council discussed the implications of having an EDI, its impact on stakeholder and research relationships.

Council noted the next steps are to stand up an EDI Taskforce and Framework reported to Council within the next three months as a priority.

Resolution

That Council:

Resolution

1. **APPROVE** the revised Equity, Diversity and Inclusion Policy as attached in **Appendix A.**

MOTION CARRIED

16. General Business

There were no items of general business.

14. Motion by the Chancellor for Resolution to Exclude the Public Pursuant to s48 of the Local Government Official Information and Meetings Act 1987

I move that the public be excluded from the following parts of the proceedings of this meeting, namely:

General Subject Matter	Reason for passing this resolution in relation to each matter	Grounds under section

Freedom of Expression Legislation	To avoid prejudice or disadvantage to the commercial activities of the University	7(2)(h)
	To maintain legal professional privilege	7(2)(g)
International Student Enhancement Plan		
Executive Committee 1. Report – appointing co-chair HEC	To protect the privacy of natural persons	7(2)(a)
Audit, Risk, & Assurance Committee Report to Council 1. Report – business of Committee 2. Minutes from meeting on 15 April 2025 3. 2024 Annual Report 4. Hudson Accommodation Conversion 5. Whare Wānaka Detailed Design 6. IT Network Preplacement Project Contingency Release	To avoid prejudice or disadvantage to the commercial activities of the University To prevent the disclosure or use of official information for improper gain or improper advantage To maintain legal professional privilege	7(2)(h) 7(2)(j) 7(2)(g)
Proposal to disestablish the Farms Committee	To protect the privacy of natural persons	7(2)(a)
Q1 2025 HR & Wellbeing Report	To avoid prejudice or disadvantage to the commercial activities of the University To prevent the disclosure or use of official information for improper gain or improper advantage	7(2)(h) 7(2)(j)
Finance Report	To avoid prejudice or disadvantage to the commercial activities of the University To prevent the disclosure or use of official information for improper gain or improper advantage	7(2)(h) 7(2)(j)
Appoint Members to Council Appeals Committee	To protect the privacy of natural persons	7(2)(a)

I move also that: Prof Chad Hewitt (Provost), Mr S Hunter (Health, Safety & Wellbeing Manager), Prof Merata Kawharu (Deputy Vice Chancellor, Māori and Pasifika), Mr Timothy Lester (General Counsel), Mr Alistair Pearson (Property Director), Mr Justin Greenhalgh (Project Manager), Mrs E Rooney (Finance Director), Mrs S Roulston (Chief Operating Officer), Mr D Lodge (Deputy Vice-Chancellor, Student Life), Tumuaki-Takirua Te Awhioraki, and Mr Nathaniel Heslop (Council Secretary), be permitted to remain at this meeting after the public has been excluded, because of their knowledge of the various matters being discussed. This knowledge, which will be of assistance in relation to the matters to be discussed, is relevant to those matters because of their involvement in the development of reports to Council on these matters.

MOTION CARRIED

14. Closure and next Meeting

The Pro-Chancellor led the closing karakia.

The meeting closed at 1:18pm.

The next meeting is scheduled for Tuesday, 27th May 2025 at 10:15am and will be held in Memorial Hall at Lincoln Campus.

CONFIRMED THIS 27th DAY OF May 2025

BRUCE GEMMELL

CHANCELLOR

Action Number	Action Summary	Action Type	Originating Meeting	Destination Meeting	Responsibility	Due Date	Notes
Completed Actions since 29 May 2025							
In Progress							
643	Improve the information provided in the Health & Safety Report	Update Report	Council	Council	Hunter, Steve	24/06/2025	Met Health & Safety Manager and will be updating H&S report throughout 2025.
635	Education Performance Indicators (EPI) Dashboard	Update Report	Council	Council	Lodge, Damian & Pierce, Kelly	24/06/2025	Council suggested a dashboard that provides information on Education Performance indicators across all courses & shaping the agenda against strategy so that Council can understand success against strategic initiatives and measures of success.
650	Course Profitability Reports.	Report	Council	Council	Hewitt, Chad	28/10/2025	Council requested *each Faculty* develop a course profitability model and present to Council.
653	Organise LU Council Visit to Lincoln Agritech	Arrange	Council		Heslop, Nathaniell	27/05/2025	
654	Update Council on frequency of services use	Report	Council	Council	Weissenstein, Zara	2/12/2025	

	Chancellor's Office	Version: 1.0
	Chancellor's Meetings & Correspondence	
	Author/s: Nathaniel Heslop	Date: 21 May 2025

Purpose

This report summarises the stakeholder meetings undertaken by the Chancellor in between 30 April 2025 through to Council on 27 May 2025.

Executive Summary

Stakeholder meetings

30 April 2025	Lincoln Agritech Limited Board Meeting
8 May 2025	Council Appeals Committee
20 May 2025	Audit, Risk, & Assurance Committee
21 May 2025	Council Appeals Committee

Other Engagements

7 May 2025	1:1 meeting with Lincoln Agritech CEO
7 May 2025	Chancellor Reception
8 May 2025	Graduation Ceremony
9 May 2025	Graduation Ceremonies
15 May 2025	Chancellor and Vice Chancellor Catch Up

Correspondence

1 May 2025	Letter to Minister Reti's Office re: Council Appointments to Lincoln University

Vice-Chancellor's Report to Council

May 2025

The Te Whakapōtaetaka Graduation Ceremony in May 2025 marked a truly historic occasion for Lincoln University. Not only did the University confer a record 1,613 qualifications for the graduation period – the highest number in the University's 147-year history and a significant 22% increase from the previous year – but the event also saw notable innovations. For the first time, the Graduation Ceremony was held across three sessions, each honouring the graduates of the Faculty of Environment, Society and Design, Faculty of Agribusiness and Commerce, and the Faculty of Agriculture and Life Sciences. Beyond the formal conferral of degrees, 2025 also saw the introduction of a new Campus Celebration Day, an initiative designed to strengthen connections between staff and students and bring the vibrant spirit of Graduation onto campus. The day commenced with Rā Whakamana, our celebration recognising the achievements of our Māori and Pasifika tauira along with their friends and whānau. This was followed by a series of engaging events, including the Vice-Chancellor's PhD lunch, the Sports and Future Leaders Scholarship celebration, the Bledisloe Medal address by this year's recipient Dr Robyn Dynes and the Chancellor's Reception.

It is pleasing to note that the University's strong and sustained graduating cohort growth complements our growth in enrolments in recent years, signalling the University's increasing influence in shaping the future of the land-based sectors in Aotearoa and globally. Lincoln University stands apart as the only specialist university among New Zealand's eight universities, and our specialisation for the land-based sector allows us to prioritise applied impactful research and educational programmes that are directly relevant to the challenges and opportunities facing the agrifood, tourism and conservation sectors. In an increasingly fast-paced world, land-based industries are facing significant productivity, economic, environmental and social issues, and Lincoln graduates are uniquely equipped with the knowledge and skills needed to address those challenges to help shape a more sustainable and productive future for the benefit of industry and our communities.

Graduation week at Lincoln University also celebrated the remarkable achievements of its alumni through five prestigious awards. An Honorary Doctorate was awarded to Andrew Macfarlane in recognition of his distinguished career in farming, farm consultancy and leadership. The Lincoln University Alumni Medal was jointly bestowed upon Samuel Martin and Leighton Pace, co-owners of a leading UK landscape architecture firm. The Global Science Medal honoured Emeritus Professor David Palmer for his dedication to Batten Disease research and Professor Julian Rayner for his impactful work on malaria. The University's highest honour, the Bledisloe Medal, was awarded to Dr Robyn Dynes for her outstanding leadership in world-leading agricultural research and adoption programmes.

New Zealand universities and science dialogue

In May, the Vice-Chancellor, who is also the current Chair of Universities New Zealand | Te Pōkai Tara, hosted a significant meeting, bringing all eight Vice-Chancellors to Lincoln University. A key focus was a joint session with the Chief Executives of Crown Research Institutes and the Minister for Universities, Hon Dr Shane Reti, where discussions were held on opportunities arising from the public research system reforms.

Pause on MBIE Endeavour Fund

More recently, the Government announced a temporary pause on the 2026 MBIE Endeavour application round. Instead available funding will be directed to extend eligible contracts nearing their end. This one-off measure is intended to facilitate the implementation of science system reforms, and the 2025 round will proceed as planned and as scheduled according to the Gazette Notice. The assessment of eligible contract extensions will prioritise alignment with government priorities and value for taxpayer money, with the Science Board making the final decisions. A contestable round is expected to resume in 2027, subject to the progress of science reforms.

While acknowledging the challenges this may present for our academics, we note the Government's reaffirmed commitment to funding excellent science through the Endeavour Fund, recognising its positive impact on New Zealand's economy, environment, and society. The University remains committed to supporting all our academics in navigating these changes and will provide ongoing updates.

Food Transitions 2050 inaugural graduation

The Joint Postgraduate School Food Transitions 2050 programme celebrated a significant milestone in May, with its first cohort of students successfully completing their PhDs. Notably four of these doctoral students had their degrees conferred at Lincoln University's graduation ceremony. Recognising the critical need for world-class and innovative research to support the transition towards more sustainable national and international food, the Joint Postgraduate School:Food Transitions 2050 was established. This collaborative initiative includes key Canterbury-based research organisations: Lincoln University, the University of Canterbury, Plant & Food Research, Manaaki Whenua Landcare Research and AgResearch.

The programme supports PhD students in conducting cross-disciplinary research, guided by co-supervisors from at least one of the universities and one Crown Research Institute. Student research aligns with key themes such as food and future landscapes, food for a zero-carbon future, food consumer transitions or food governance. One of Lincoln University's first graduates, Chrystal O'Connor, successfully defended her thesis *Edible Insects, Mātauranga, Diet and Lifestage to Explore the Potential of Aotearoa New Zealand Insects as Food*, in early 2025. She has since returned to Lincoln University as a Lecturer within the Māori Early Career Academic Programme.

Advancing sustainability with updated plan

Lincoln University continues its commitment to being an exemplar in sustainability within the land-based sectors, proactively addressing the challenges of climate change. Building upon our significant progress since 2020, including the decommissioning of the coal boiler and the anticipated launch of the Lincoln University Agrivoltaic Energy Farm, the Sustainability Steering Committee recently updated the Sustainability Plan for 2025-2028. The plan outlines ambitious goals, such as achieving carbon neutrality and expanding research and educational initiatives in sustainability, to guide the University's future efforts in this critical area. The updated plan has been shared with staff for consultation and feedback.

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Kia ora koutou

Since the last council meeting, the Tumuaki Takirua of Te Awhioraki and LUSA President had the opportunity to attend the various graduation ceremonies and celebrations as part of council. This was a great experience for us to support and celebrate the success of our graduates and engage with the student body of postgraduate students as well. We celebrated Rā Whakamana on campus for the first time in a long time, which was also great for our teina to support our tuakana and be inspired by their great achievements.

Over the past month, there have been an incredible amount of events in the student space, ranging from Grad ball to Reo Māori hour, to our international morning tea.

All events have been a great success, especially grad ball which has sold out at 350 tickets for a number of years. This year, due to the demand of previous years, we increased our capacity for the event, selling 434 tickets in total. This came with a larger venue to hold that many people, and we also made the decision to have St. John's on site to mitigate any medical issues we might see.

We have also seen a big increase this semester in new clubs being created by students, with a total of seven new clubs formed such as the Fishing and Diving Club, Public Speaking Club, and Music Club. We also worked with the postgrad rep to ensure a new exec was formed for the Postgrad Society which is now officially up and running again. So many of the new and returning clubs' execs have been extremely passionate about what they're doing, with one of our most recent events (the Chinese Cultural Day on Forbes Lawn) being a huge success and pulling a fantastic turnout.

Marama Hauora has been in full swing with various events across LUSA, Te Awhioraki, and Lincoln University itself. Te Awhioraki are progressing with our Mauri Tū fundraiser. Our goal is to raise funds going towards healthy lifestyle initiatives for Māori and Pasifika communities. This has given us the opportunity to collaborate with the LU Gym, LU Run Club and Waihora Kī o Rahi.

Te Awhioraki have also been running Reo Māori hour in partnership with the library team to better utilize Ngā Kete E Toru. This Kaupapa is open to staff and students who are looking for help with pronunciation, confidence and basic sentence structures.

The Tumuaki went to the first Hui Kaiarahi recently; a quarterly weekend wananga with all of the māori student leaders from each NZ university. Te Mana Akonga have also been facilitating fortnightly hui for regular communication. Through this we are able to support one another with various issues of which some rōpu have had previous experience dealing with. It has also allowed us all to discuss the details of the upcoming Te Huinga Tauira national māori students conference which has been confirmed to be hosted in Waikato in early September. The early notice has given us the push to start preparing with our weekly student run kapa haka practices, which Te Awhioraki has not had the capacity to facilitate for several years.

We have also recently held our course rep feedback to the deans meeting which revealed a lot of great feedback which we are looking forward to getting resolved for future year groups.

Ngā mihi
Grace, Halle, & Zara

Vice-Chancellor's Office	Version:
Academic Board	
Author/s: Paula Morrison	
SLT Authoriser: Professor Grant Edwards, Chair	Date: May 2025

1. Purpose

To submit a proposal to introduce a new master's degree.

Content

1. Executive Summary

2. **Appendix 1:** Proposal to Introduce a New Qualification: Master of Artificial Intelligence for Land Use

3. **Appendix 2:** Concept Proposal for New Programme: Masters in AI/Machine Learning, Land Use and Innovation

4. **Appendix 3:** Concept Proposal for New Programme – Section B

2. Recommendation

1. That Council **APPROVES** the proposal to introduce the Master of Artificial Intelligence for Land Use to be submitted to CUAP for Round 3, 2025.

3. Executive Summary

At its meeting on Wednesday 9 April 2025, the Board endorsed the proposal to introduce a Master of Artificial Intelligence for Land Use subject to further consultation and amendments. These actions have now been completed, and the proposal is presented to Council today for approval to progress to CUAP.

Master of Artificial Intelligence for Land Use
The proposed Master of Artificial Intelligence in Land Use will directly address global and domestic demand for expertise in machine learning and artificial intelligence – fields that are transforming industries worldwide. The programme aligns with the government's priorities in economic growth and technology-driven innovation and fills a critical gap in postgraduate education. Currently there are no programmes, worldwide, that integrate artificial intelligence and land use which makes this programme a unique and competitive offering. The Master of Artificial Intelligence for Land Use is intended to lead to work as a professional in an Artificial Intelligence or Machine Learning role and graduates will have the technical and professional skills to work independently on projects. The programme is delivered in an experiential manner and includes an Industry Project to help graduates be work ready. Subject to appropriate performance, students may undertake a dissertation pathway to a doctoral degree and independent research.

PROPOSAL TO INTRODUCE A NEW QUALIFICATION or MAJOR

Refer to the [2024 Guide for Completing Proposals for Qualifications or Majors](#) for guidance on completing this form.

Title of qualification or major	Master of Artificial Intelligence for Land Use
Year of introduction	2026
Owner (Faculty/Unit)	ESD

Round	Submission date
One **(1 March 2025)**	**Final LTC meeting of preceding year**
Two **(1 May 2025)**	**5 March 2025**
Three **(1 August 2025)**	**18 June 2025**

Process

1. Contact Patrick Coleman, Kaikōtui | Academic Programme Partner, to advise you are beginning the proposal.

2. Refer to the **[2024 Guide for Completing Proposals for Qualifications or Majors](#)**.

3. Complete all sections: A, B and C.

4. Obtain sign-off from first four parties listed in the table below. Refer to the Guide for signatory responsibilities.

5. Attach the approved Concept Proposal with this proposal when sending to the Kaikōtui | Academic Programme Partner. Proposals submitted without the Concept Proposal will be returned to the Dean/Director.

6. Send the completed proposal to Patrick Coleman, Kaikōtui | Academic Programme Partner, prior to the LTC submission dates noted above.

Role	Name and/or E-signature	Date endorsed	Comment (if any)
Proposer	Merata Kawharu	12/02/2025	
Chair, Teaching Committee	Roy Montgomery	18/2/2025	Passed by vote subject to proposers amending or adjusting per comments and suggested at meeting and contained in minutes of meeting NB the relevant extract is attached as Appendix One
Associate Dean (Academic) or equivalent	Roy Montgomery	20/2/2025	Discussed at Faculty Dean handover meeting where above approval was noted
Dean / Director	Emma Stewart, Interim Dean	4/03/2025	Resourcing discussed at Faculty and SLT level.
Deputy Vice-Chancellor Māori , or nominee	Sheree Jahnke-Waitoa Director Te Manutaki	27/03/2025	Whakaae katoa ki tēnei kaupapa hei ārahi i a tātou. Discussed with The Office of Māori & Pasifika Development.
Chair, Learning and Teaching Committee	David Dannenberg	31/03/2025	Approved with modifications at LTC on 12/03/25.
Chair, Academic Board	Prof Grant Edwards	16/05/25	Approved for submission to Council.

Master of Artificial Intelligence for Land Use

SECTION A

PURPOSE OF PROPOSAL

This proposal is to introduce a new 180-credit master's degree, the Master of Artificial Intelligence for Land Use at Lincoln University | Te Whare Wānaka o Aoraki to equip graduates with deep expertise and practical knowledge in artificial intelligence for the land-based sector.

As New Zealand's only specialist land-based university, Lincoln University brings a strong reputation in land-use science, sustainability, and applied innovation. This programme builds on that foundation, ensuring graduates are equipped with the skills, values, and insight to lead in AI-driven environmental and land use futures.

JUSTIFICATION

This new programme directly addresses growing global and domestic high demand for expertise in machine learning (ML) and artificial intelligence (AI), fields that are rapidly transforming industries worldwide.

Global context

Increasing pressures on natural resources, a growing world population, food insecurity and increasing instability in climate require adaptive and mitigating responses. AI and ML are providing innovative solutions that are greatly needed across the board now. FAO Chief Information Officer put it simply, 'As we urgently need new solutions, disruptive digital technologies such as Artificial Intelligence (AI) have now emerged as powerful tools that can revolutionize the agricultural sector by enhancing efficiency, precision, and sustainability... The examples of successful uses of digital technologies to tackle climate change challenges for a transformed and modernized agriculture are numerous across the world. For example, by leveraging AI algorithms, predictive analytics, and sensor technologies, farmers can now make informed decisions to optimize irrigation, planting, and harvesting, thereby increasing yields and reducing resource wastage' he adds. FAO Chief Economist added, "To support the most vulnerable, we need to prioritize investments in interventions with the maximum returns and assuring minimizing trade-offs, a measure that needs accurate and up-to-date data and information to take the right decisions' says Máximo Torero, FAO Chief Economist, stressing out the many needs to 'build resilience and increase productivity in the face of climate change' (https://www.fao.org/agroinformatics/news/news-detail/fao--ai-and-digital-tools-for-climate-resilient-agri-food-systems--on-the-spotlight-at-the-science-and-innovation-forum-2023/).

Strategic Alignment with Aotearoa New Zealand's Economic Priorities

Aotearoa New Zealand's economy is deeply rooted in agri-sector industries, which continue to show strong growth and resilience. Food and fibre exports reached a record NZD 57.4 billion by June 2022, representing an 8% increase from the previous year. The Māori food and fibre asset base is rapidly growing by over 200%

from $6 billion in 2013 to over $19 billion in 2023. The Ministry for Primary Industries projects continued expansion across key sectors, including dairy, forestry, horticulture, viticulture, seafood, and arable farming.

To maintain its competitive edge, particularly in light of global technological advancements, Aotearoa New Zealand must equip itself with a workforce proficient in AI/ML applications. This workforce will be vital for:

- Improving productivity and innovation in agri-business.
- Addressing urgent challenges such as climate change, biodiversity loss, and environmental disruptions.
- Enhancing sustainable management practices and land use strategies.

Economic growth is a cornerstone of government policy, with increasing emphasis on technology-driven innovation. This programme directly aligns with these national priorities by developing the human and technological skills and tools needed for future-ready industries.

In terms of productivity growth and the utility of AI, consultants from Microsoft and Accenture argue that "Generative AI could significantly boost annual productivity growth, meaning New Zealand's productivity will be 15% higher by 2038." And "Generative AI is expected to add NZ$76B to New Zealand's annual GDP by 2038." The opportunity to leverage 'lighthouse industries" such as dairy which captures approximately one quarter of the global market, among other many other growing industries with ML/AI are significant. New Zealand has proven track records as an open export driven economy based on high performing industries. On a global scale, New Zealand has been amongst the fastest adopters of generative AI at work and in innovation including across the Agri sector. New Zealand is an ideal global testbed for emerging Generative AI use-cases due to its high digital penetration, diversified economy, skilled workforce, and small size, which allows for cost effective testing of new products at a national scale (Accenture 2024, p.17 at https://msftstories.thesourcemediaassets.com/sites/433/2024/08/New-Zealands-Generative-AI-Opportunity.pdf). Employers, however, lag in developing their own generative AI solutions (Accenture 2024, p.18) meaning that it is crucial for New Zealand to develop a skilled workforce competent in AI/ML to lead in solution development and to maintain competitiveness.

National environmental and climate contexts

Beyond economic markets, AI/ML solutions can help address and improve climate, environmental and biodiversity health problems. New Zealand faces critical challenges such as biodiversity loss, deforestation, and freshwater degradation. Nationally, we have climate commitments which require interventions, technology, collective community action, policy-drivers among other things to effect change. AI/ML will increasingly play critical roles now and into the future.

Attractiveness to Māori

This programme offers a transformative opportunity for Māori students to be leaders in a rapidly evolving field that directly impacts their whenua, kai, wai, and whānau. Grounded in land use, environmental stewardship (kaitiakitanga), and ethical AI design, the programme supports Māori aspirations for rangatiratanga, data sovereignty, and sustainable development on their own terms. It creates pathways for Māori students with technical, cultural, or sector-based experience to contribute to, shape and lead climate resilience, food systems innovation, and other Indigenous-led solutions. With a kaupapa Māori–aligned curriculum that includes tikanga-informed ethics, cultural intelligence, and applied land-based learning, the programme enables Māori students to advance both their communities' priorities and their own careers in high-growth areas of agri-tech, AI, and environmental leadership. In addition to the growing Māori Food and Fibre asset base, Māori are becoming increasingly involved in the leadership and management of land assets

and taonga through Treaty of Waitangi settlements. Technical understanding of AI tools will be essential to guide good decision-making in relation to these assets and taonga. Ethical understanding of AI will be of particular importance. Dan Te Whenua Walker of Microsoft, for example, asked, "What if we started applying the same concepts around pepeha? "As an AI – where do you come from? Who are your creators? Where's your whakapapa from? Bringing that stuff forward so that concerns around bias, or whether Māori were involved in its creation, all of that can be put to the front." (https://climateconnectnz.com/news/tech-good-maori-and-maori-good-tech). It is these sorts of issues that Māori and all students will be exposed to, to interrogate and find responses to. New Zealand is a global leader in 'predict and prevent' AI tools, exemplified by its Predator Free programmes. Many advancements are possible by for example incorporating mātauranga—localized insights about ecosystems, species interactions, maramataka —enhancing the deep-learning algorithms driving these tools. This integration would help improve the accuracy and effectiveness of AI systems, and ensure they align with community aspirations rooted in environmental trusteeship. The Master's programme would provide the technical tools and opportunities for investigating these kinds of opportunities.

Programme Design and Target Audience

The programme is designed to:

- Prepare graduates to lead innovation in land-based sectors through the application of cutting-edge AI/ML methods and tools.

- Support multiple intertwined goals: economic growth, environmental sustainability, and social well-being.

- Ensure students remain at the forefront of technological advancements in a rapidly evolving global landscape.

The programme will attract a diverse range of students, including those with a focus on the agri-sector, land use, land and environmental management, planning, conservation, land / environmental law, Māori community development or data interpretation.

Industry stakeholders, especially in agriculture, forestry, and environmental management, face challenges in finding skilled professionals who can apply AI and machine learning to land use and sustainability. This programme would produce graduates who are immediately valuable in filling skill gaps and driving data-driven innovation, making it attractive for industry investment and sponsorship opportunities. One influential Māori land-based organisation has already offered two masters scholarships for this programme.

Students will be well equipped to undertake computer science/AI/ML-based jobs in high demand areas regarding agriculture, horticulture, viticulture, conservation, land management and planning, bio-diversity conservation, climate adaptation and mitigation and many other fields within public and private sectors relating to land, water and beyond.

Job listings from environmental and technology recruitment firms show high demand for professionals skilled in machine learning and data science who can apply these skills to sustainability challenges. Job market analyses indicate demand for roles such as "AI Engineer in Agri-Tech," "Data Scientist for Sustainability," and "Machine Learning Specialist in Resource Management". There are many other more specific roles throughout the land-based sector requiring ML/AI expertise.

LINCOLN UNIVERSITY TE WHARE WĀNAKA O AORAKI

Fit with Lincoln University's Strategic Goals

This degree aligns strongly with Lincoln University's Strategy, particularly:

Goal 4: A world-class research and teaching precinct: The programme anticipates workforce needs in land-based sectors by providing innovative academic offerings focused on current and future technological developments.

Goal 6: Facilitating student growth: It addresses the workforce needs and challenges of land-based sectors, contributing to economic, environmental, and socio-cultural outcomes.

Furthermore, the degree will:

- Bridge critical gaps in current academic offerings by specifically targeting AI/ML applications for land-based industries.

- Respond to emerging workforce demands and ensure Lincoln University remains a leader in relevant, future-focused education.

A Unique Offering in the Market

This programme fills a critical gap in postgraduate education. Unlike existing general master's programmes in applied computing, this degree offers a more targeted focus on AI/ML methods and technologies, and their applications in land-based sectors. It provides:

- A specialised understanding of the transformative potential of AI.

- Insights into how these technologies can be leveraged for sustainable land management, climate resilience, and agricultural innovation.

There are currently no other master's programmes in Aotearoa New Zealand and worldwide that integrates AI and land use, making this degree a unique and competitive offering. This positioning is expected to enhance Lincoln University's international reputation and ranking, particularly as AI applications become increasingly ubiquitous across industries.

The proposed programme is designed to:

- Prepare graduates to lead innovation in land-based sectors through the application of cutting-edge AI/ML methods and tools.

- Support multiple intertwined goals: economic growth, environmental sustainability, and social well-being.

- Ensure students remain at the forefront of technological advancements in a rapidly evolving global landscape.

By addressing critical skills gaps and future industry needs, this programme offers a future-proofed educational pathway that supports both immediate and long-term workforce demands. Its focus on AI for land use aligns directly with Aotearoa New Zealand's strategic priorities, ensuring economic competitiveness and resilience for the nation. It also helps to equip students internationally to participate in land-based sectors in their own countries with high demand tech skills.

The programme sits alongside other technology focused programmes at Lincoln University each filling their own niche, the Master of Applied Computing and Master of Fintech and Investment Management are programmes open to students from any background without prior preparation. The Master of Precision Agriculture and Master of Artificial Intelligence for Land Use are specialist programmes that require prior

preparation. The Master of Precision Agriculture is focused on the use of technology in the Agricultural or Horticultural domains, where the Master of Artificial Intelligence for Land Use is focused on Artificial Intelligence and Machine Learning specifically and is more broadly applicable across a range of Land Use contexts such as agriculture, horticulture, viticulture, conservation, land management and planning, bio-diversity conservation, climate adaptation and mitigation and many other fields within public and private sectors relating to land, water and beyond.

This programme is a natural fit for Lincoln University, leveraging the institution's expertise in land-based industries while meeting national and global demands for AI/ML skills. Its unique focus on applying AI/ML to address pressing environmental and societal challenges positions it as a strategic addition to Lincoln University's offerings, delivering transformative benefits for students, industries, and the wider Aotearoa New Zealand economy.

QUALIFICATION

This proposed qualification meets the CUAP definition for Master's degree under Section 5.1 of the CUAP Handbook.

ACCEPTABILITY OF THE PROGRAMME AND CONSULTATION

The Master of Artificial Intelligence for Land Use was designed with input from subject matter experts across the University facilitated by Dave Burgess, an International Expert Advisor. These included Merata Kawharu, Stuart Charters, James Ross, Wim de Koning, Don Kulasiri, GIS Team (Crile Doscher, Helen de Klerk) and AI/Machine Learning (Patricia Anthony, Sandhya Samarasinghe, Thilini Bhagya). Dr Burgess, an AI, data engineering, and Machine Learning leader, and former VP of Data Engineering at Pinterest, also helped lead the initial phases of course content development. The team considered historical and current developments in Machine Learning and Artificial Intelligence as well as the Land Use context the programme is situated with. The programme was designed with allow current issues in Land Use to drive the problem sets in courses whilst allowing the technical content to evolve with the latest research developments.

We have undertaken the following consultation and have incorporated the feedback into the programme design and development.

Professor Don Kulasiri (Lincoln University), A world-leading researcher in computational biology and mathematical modelling, with expertise spanning environmental systems, memory and disease modelling, stochastic processes, and AI applications: commented I support this course given that we need to take the intelligent and cultural sensitive use of AI among Maori and bring their perspectives into the platforms that are going to be built to address some of the pressing issues related to environmental conservation, climate change etc.

Ms Liz Taiaroa-Hill, Te Taumutu Rūnaka, had only positive general comments to offer, "I really like the sound of this Masters programme and the papers that make it up. Genius."

Ngati Kawa Taituha, Chair, Waitangi Marae Committee, Chair, Ko Waitangi Te Awa Trust, similarly saw the direct opportunities for Māori communities saying, "The AI Masters is amazing. What a great opportunity. I can see it attracting the hottest talent from around the motu if not the world. I particularly liked seeing the ethics of AI in the curriculum which is typical Maori thinking so well done. I will encourage the whanau to get into it because AI, tech and I.T. is already a big part of our modern life and our people are always looking at ways to advance. This is an opportunity to be a leader in a specialized industry."

LINCOLN UNIVERSITY TE WHARE WĀNAKA O AORAKI

Wendy Shaw, (Land Information New Zealand | Toitū Te Whenua) (LINZ,) in supporting the development of the programme, she together with one of her staff suggested, "In which of the courses below is the methodology, criteria and outcome/results assessed between using AI and manual analysis - what does this tell us in terms of the level of detail that needs to be fed in so as to achieve the expected results?"

She also asked clarity around whether Intellectual Property (IP) would be covered in the course "Legal, Business, International, Ethical and Cultural Considerations for AI". In the same course, she suggested that in relation to business, we "Need to assess cost savings and resource efficiencies". On ethical matters, it will be important to "… make interested parties aware that AI is being applied to their information, why and what will it be used for.

On the Industry/Capstone Project: apply skills to solve a real-world problem course, she suggested that the UN could be examined in terms of what they are doing with AI. For student projects, she offered the idea of examining a New Zealand Geographic Board case study where for example the Board plans to assess the Peto One submissions using AI and compare with the analysis done manually. She would be happy to provide information for the course. Finally, she suggested that improvements from students could be fed back to industry too.

Associate Professor Paerau Warbrick, lawyer and lecturer, Te Tumu, University of Otago, commented that "I have looked at this proposal and support its introduction as a Master program. This degree addresses the major gap within academia regarding the knowledge economy. Artificial Intelligence has not only impacted tertiary institutions but also whole industries since 2022. It is a fast every-changing subject, and Lincoln University is to be commended in trying to tackle this subject and implement a program at masters' level. My only observation is in regard to the credit amounts for each paper. There has been a move at some other universities to have a master's level paper valued at 30 points and a dissertation / project valued at 60 or 90 points. This will then alter the number of papers that are needed to make up a 180-point program. So, Lincoln University may wish to reflect upon this. Overall, though, I support this Master level program. I wish Lincoln all the best with its introduction and implementation."

Dr John Reid, Senior Research Fellow, Ngāi Tahu Research Centre, University of Canterbury saw the need for the programme as well as urging the importance for ensuring ethics on data treatment from Māori (and by implication, Indigenous) perspectives to be addressed, "there [are] so many ways that AI can be applied in the service of sustainable land management …. I see a significant opportunity for Māori (hapu, iwi, and communities) to lead AI training in developing environmental models that integrate indigenous insights and values. Additionally, generating environmental data can empower communities, with the potential to enhance environmental management—particularly integrated catchment-scale management (ki uta ki tai).

However, this technology also presents risks if Māori worldviews and mātauranga are not embedded in these approaches, potentially leading to further alienation. Data sovereignty remains a critical concern, which I expect will be addressed in the ethics component of the course."

Dr Charlotte Severne ONZM, Māori Trustee said Land management and administration is a complex set of decisions based on the interpretation of multiple datasets for the whenua and the businesses on it, you are looking at trends for H and S, employee behaviour and delivery, your business plan (and all parts of strategy delivery), farm environment plans, asset plans, land jurisdiction (including MLC compliance). This qualification will deliver into the sector kaimahi who know how AI and machine learning can aid these decisions and be curious about what is missing, what is wrong, what is right here that we can do there! They will also be able to ask questions of the data that we pay consultants to do-which is not ideal).

LINCOLN UNIVERSITY TE WHARE WĀNAKA O AORAKI

Mr Waata Papali'i-Smith (Ministry for Primary Industries), "Overall, it's a great offering. Its applications would enhance and streamline so much of the onerous, burdensome and viscous processes associated with assessing, analysing and examining land. A pipeline of graduates with this particular skill would demand competitive salaries, especially with pressure on governments and business to operate sustainably, to offset carbon and to invest in green outcomes (green tokenisation, blue carbon, green carbon, afforestation etc). The emergence of AI coincidentally converges on a promising future – so long as we use AI and ML in positive, ethical, equitable and environmentally sound ways."

Dr Shane Reti (Minister of Science, Innovation and Technology, Minister of Statistics and Minister for Universities) is fully supportive of the proposed programme and noted the government's approach to OECD benchmarks including NZ's productivity growth and where programmes like this can directly help develop the skills needed to then contribute towards improved productivity and economic growth. Dr Reti was especially interested in how New Zealand can act as a 'first follower' in the rapidly evolving digital technology landscape. He viewed the programme as an important contributor to this ambition, helping ensure the country remains globally competitive and digitally capable.

Karen Haigh (Christchurch NZ, The Canterbury Economic Development Agency)

"The opportunities in Machine Learning and Artificial Intelligence (AI) are expanding rapidly in our region. Christchurch is home to a growing technology and innovation ecosystem, underpinned by sector strengths in aerospace, health-tech, clean-tech, agritech, and Antarctic science. There is a clear and urgent need for applied AI expertise, particularly in industries like sustainable land management, climate change resilience, and food and fibre innovation. These industries are not only critical to Canterbury's economy, but also to New Zealand's long-term global competitiveness.

There is a recognised gap in talent with advanced AI capabilities tailored to land use, environmental science, and regenerative agriculture. Addressing this gap is essential if our region is to lead in the development of scalable, technology-driven solutions for the major environmental and economic challenges we face. Lincoln University's proposed programme will address this gap and provide high-quality, ready-to-work graduates.

We believe the Master of Artificial Intelligence in Land Use will:

- Help build a highly skilled, future-ready workforce aligned to Canterbury's and New Zealand's priority sectors.
- Strengthen the capability of businesses, research institutions, and government agencies.
- Enhance Christchurch and Canterbury's positioning as a hub for innovative, purpose-driven STEM education, technology application, and industry collaboration.

ChristchurchNZ endorses Lincoln University's submission and the vision behind this programme. We are excited about the opportunities it will unlock for our regional economy and future workforce, and we look forward to supporting its success."

TE TIRITI O WAITANGI

Lincoln University is committed to meeting its obligations as defined by Te Tiriti o Waitangi. This is reflected in the University's Māori Plan, which outlines the institution's engagement with Māori at all levels (whānau, hapū and iwi), as well as defining key principles and objectives to develop opportunities to promote Māori ambitions and aspirations, in areas of Mātauranga Māori and Pūtaiao Māori. Our proposed degree aligns with several attributes in the Māori plan.

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Attribute 1: Support and contribute to the Māori economy

Lincoln University's focus on supporting and contributing to the Māori economy (Te Ōhanga Māori) acknowledges the vital and growing need for skilled Māori graduates. The proposed degree recognises the importance of Māori graduates to innovate and contribute to the Māori economy. Integrating Māori knowledge into teaching supports Ahu Whenua research through sustainable land management and community development, thereby growing the already significant contribution that Tākata Whenua makes to Aotearoa New Zealand's overall economic development.

Attribute 2: Support and enhance engagement with relevant Māori communities to support student and staff aspirations.

Kaitiakitaka holds the degree responsible to a sustainable delivery of information through technology and engagement with mana whenua and tātaka whenua.

Engagement and partnerships with iwi and hāpu are increasingly important for many initiatives under co-governance or iwi-led.

Attribute 3: Developing a culture of leadership amongst student and staff to support Māori and Lincoln University's aspirations

We invite Māori leaders in their field of knowledge to contribute to our courses where necessary as well as current Māori staff available to feed into this degree sharing teachings and learning opportunities for staff and students to engage in a values-led leadership activity that provides staff and students a space to lead.

Attribute 4: Implement a programme that contributes towards a bicultural campus.

Implementation of Kaupapa Māori content will be integrated throughout the programme, utilising current Māori staff and experience Māori in the industry. Promotion of Te Reo Māori and Uara Māori will be weaved throughout the course eventually becoming normalised.

Attribute 5: Contribute to the achievement of Māori research and learning outcomes

This degree supports the direction of Lincoln University becoming a stronger partner with hapū led initiatives benefiting hāpori Māori to realise their aspirations. It not only adds to more research opportunities and learning outcomes for hāpori Māori, but rather an in-depth view of Te Ao Māori working in tandem with technology.

GOALS OF THE PROGRAMME

The Master of Artificial Intelligence for Land Use is a future-focused programme that equips students with advanced capabilities in artificial intelligence (AI) and machine learning (ML), grounded in their transformative application across land-based sectors. It responds to urgent national and global challenges at the intersection of technological innovation, environmental stewardship, and sustainable land use—particularly in agriculture, horticulture, forestry, viticulture, biodiversity, climate adaptation and mitigation, and environmental monitoring, management and policy.

The programme adopts a multidisciplinary approach that integrates technical AI/ML skills, ethical and policy frameworks, and applied learning for real-world problem solving. Students will learn to harness emerging technologies to enhance productivity, improve resource use, and address the social, economic, cultural, and environmental dimensions of land-based systems.

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Lincoln University aims to develop a diverse cohort of graduates who are not only technically proficient, but also critical and ethical thinkers prepared to lead innovation and navigate complex sustainability transitions—both within Aotearoa New Zealand and globally. With its strong emphasis on applied and context-relevant AI, the programme contributes to national capability in food and fibre, STEM, and environmental resilience—core priorities of the Tertiary Education Commission and Vision Mātauranga.

Delivered in a hybrid format for both on-campus and remote learners, the programme is accessible to a wide range of students—including computer science graduates, working professionals, and learners from diverse disciplinary and cultural backgrounds. It recognises that some may enter with strong technical expertise, while others—including Māori and other Indigenous students—may bring advanced knowledge from different domains. Tailored preparatory options will be available to support those without prior training in AI/ML, ensuring all students are well-positioned to succeed in advanced study and contribute their strengths to a dynamic learning environment.

This programme builds on Lincoln University's specialist expertise in land-based disciplines and its strategic position within New Zealand's agri-tech ecosystem. By linking academic knowledge to industry, community, and government needs, it aims to produce graduates ready to lead innovation and shape sustainable, tech-enabled futures for land-based sectors worldwide.

OUTCOME STATEMENT

The Master of Artificial Intelligence for Land Use prepares graduates for professional roles in Artificial Intelligence and Machine Learning, with a specialised focus on applications in land-based sectors. Graduates will possess the technical and professional expertise to work independently on complex projects, along with the ethical and policy understanding required to engage meaningfully with industry, government, communities, and businesses. The programme is delivered through experiential learning and includes a substantial Industry Project to enhance work-readiness. Alternatively, students who meet performance requirements may complete a research dissertation, providing a pathway to doctoral study and enabling them to undertake independent research.

GRADUATE PROFILE

Graduates of the Master of Artificial Intelligence for Land Use will be able to:

Knowledge

1. Comprehend advanced Artificial Intelligence and Machine Learning methods. [employable and grounded]

2. Apply advanced Artificial Intelligence techniques with a focus on land-based contexts. [employable and grounded, research capable, sustainability]

3. Apply advanced Machine Learning techniques with a focus on land-based contexts. [employable and grounded, research capable, sustainability]

Skills

1. Create Artificial Intelligence solutions independently through design, code, verify, document, amend and refactor activities. [employable and grounded, research capable]

2. Develop competence in Artificial Intelligence and Machine Learning. [employable and grounded]

3. Analyse, learn and apply appropriate tools, methods and technologies. [employable and grounded, research capable]

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4. Produce effective oral, written and diagrammatic presentations and documents. [employable and grounded]

Values

1. Question and reflect on their professional practice to identify areas of development. [employable and grounded, culturally competent]

2. Operate as a culturally competent, ethical and professional practitioner. [employable and grounded, culturally competent]

Graduate Profile	COMP6ML Machine Learning for land use	COMP6EC Ethics, Policy, and Cultural Intelligence in Artificial intelligence Design	COMP6DL Deep Learning for environmental applications	COMP6GI Generative AI for land use	COMP6OA Optimisation Techniques	COMP6AA Advanced Topics in AI for land use	COMP660/COMP693 Dissertation / Industry Project
K1 Comprehend advanced Artificial Intelligence and Machine Learning methods	X	X	X	X	X	X	X
K2 Apply advanced Artificial Intelligence techniques with a focus on land-based contexts				X		X	X
K3 Apply advanced Machine Learning techniques with a focus on land-based contexts.	X		X			X	X
S1 Create Artificial intelligence solutions independently through design, code, verify, document, amend and refactor activities.			X	X		X	X
S2 Develop competence in Artificial Intelligence and Machine Learning.	X		X	X	X	X	X
S3 Analyse, learn and apply appropriate tools, methods and technologies.	X		X	X	X	X	
S4 Produce effective oral, written and diagrammatic presentations and documents		X				X	X
V1 Question and Reflect on their professional practice to identify areas of development.		X				X	X
V2 Operate as a culturally competent, ethical and professional practitioner.		X				X	X

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PROGRAMME OVERVIEW

The Master of Artificial Intelligence for Land Use provides advanced training in Artificial Intelligence and machine learning techniques with applications in land use and environmental sustainability. The programme is structured into six core courses, covering data science, deep learning, generative Artificial Intelligence, optimisation techniques, ethics & policy, and applied and advanced Artificial Intelligence methodologies for land use, culminating with a research dissertation or industry project. This Master's programme is a specialised qualification designed to ensure all students gain core foundations in Artificial Intelligence techniques and their applications to land use. The syllabus has been deliberately structured to cover essential and interrelated topics. Because these areas are tightly connected and necessary for professional competency in this emerging field, students are required to complete the full suite of courses. Students do, however, have choice at the research stage of the programme. There are two options to conduct a self-chosen topic via an industry project or a dissertation.

The entry requirement for the programme is a relevant undergraduate degree with an average grade of B or better. An undergraduate degree relating to the agri-sector, land use, land and environmental management, planning, conservation, land / environmental law, Māori community development or data interpretation and analysis are relevant pathways to prepare students to further specialise in the techniques of AI as applied in these fields.

The Master of Artificial Intelligence for Land Use is a sequenced three-semester programme.

PROPOSED REGULATIONS

Master of Artificial Intelligence for Land Use   **M.A.I.Land.Use**

1. Every candidate for the degree of Master of Artificial Intelligence for Land Use shall, before entry upon a course of study for the degree, fulfil the following conditions:

(a) Qualify for the award of a bachelor's degree in a related discipline of an accredited higher education institution in New Zealand approved for the purpose by the Academic Board with at least a B average with coursework in programming, quantitative methods and statistics desired; or

(b) Qualify for the award of a degree of an accredited higher education institution in New Zealand approved for the purpose by the Academic Board; provided that the Academic Board may, at its discretion, require any such person to complete, to its satisfaction, a course of study prescribed for the purpose, either as a prerequisite to, or concurrently with, the course of study for the degree of Master of Artificial Intelligence for Land Use; or

(c) Be admitted with equivalent status (ad eundem statum) as entitled to proceed to the degree of Master of Artificial Intelligence for Land Use.

If at any time during a candidate's enrolment for the degree, the Academic Board find the candidate's progress to be unsatisfactory, then the Board may, at its discretion, cancel the candidate's enrolment or allow the candidate to continue a provisional enrolment subject to such conditions as may be specified in the relevant House Rules, including the requirements to meet grade averages for courses taken by examination.

3. A candidate who has been admitted to the degree of Master of Artificial Intelligence for Land Use shall:
    (a) Enrol in and pursue a course of study for not less than 12 months.
    (b) Pass examinations in the courses as determined by the Academic Board.

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4.   (a) The examination for the degree of Master of Artificial Intelligence for Land Use comprises the 180 credits listed in Schedule A to these regulations.

    (b) In exceptional circumstances, the Academic Board may approve a course of study for a candidate that does not conform in every detail to the requirements set out in these regulations.

5. A candidate who, in the opinion of the examiners, completes with special merit the requirements for the degree of Master of Artificial Intelligence for Land Use may be awarded the degree with distinction.

6. Pathway to other qualifications
(1) Candidates who have completed the academic requirements of the Master of Artificial Intelligence for Land Use with a 40-credit dissertation with a grade of not less than B, may be admitted to the Doctor of Philosophy, with the permission of the Dean of the relevant Faculty.

(2) A candidate who has not met the academic requirements for the Master of Artificial Intelligence for Land Use and who wishes to exit with a Postgraduate Certificate in Applied Science or a Postgraduate Diploma in Applied Science may apply to the Academic Administration Committee for admission and waiver of Regulation H, 4 (6) and (7) [General Course and Examination Regulations], where appropriate.

Schedule of Courses
The examinations prescribed under Regulation 3 of the Master of Artificial Intelligence for Land Use regulations consist of not fewer than 180 credits chosen from the courses listed below, to form a coherent programme of study.

Note: All courses are the equivalent of 20 credits unless otherwise stated.

Schedule A
Compulsory Courses (140 credits)
COMP6ML Machine Learning for Land Use (40 credits)
COMP6EC Ethics, Policy, and Cultural Intelligence in Artificial Intelligence Design (20 credits)
COMP6DL Deep Learning for environmental applications (20 credits)
COMP6GI Generative Artificial Intelligence for Land Use (20 credits)
COMP6OA Artificial Intelligence Optimisation Techniques (20 credits)
COMP6AA Advanced Topics in Artificial Intelligence for Land Use (20 credits)

Plus one of:
COMP693 Industry Project (40 credits)
or
COMP660 Dissertation (40 credits)*
* Only students who have demonstrated sufficient academic ability are permitted to take COMP660.

PROPOSED TEACHING/DELIVERY METHODS
The programme will be delivered in a flexible manner to cater to both on-campus and remote students. In-person learning activities will be live-streamed and recorded as appropriate with online support sessions provided for those studying remotely.

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The industry project provides work integrated learning typically through a placement in industry (or an internal or industry sourced project), with supervision by both an industry mentor and an academic staff member. The project will involve both formal written and oral reporting and presentations alongside more regular informal reporting. Reporting will be against learning outcomes with assessment rubrics that focus on the learning process.

PRESCRIPTIONS FOR NEW COURSES

COMP 6ML Machine Learning for Land Use (40 credits)
Machine learning techniques to analyse and model land-use data.

COMP 6EC Ethics, Policy, and Cultural Intelligence in Artificial intelligence Design (20 credits)
Explore the ethical, policy, and cultural implications of Artificial Intelligence applications, ensuring responsible and equitable technology deployment across Māori and other communities.

COMP 6DL Deep Learning for environmental applications (20 credits)
Discover deep learning techniques for analysing environmental data.

COMP 6GI Generative Artificial Intelligence for Land Use (20 credits)
Utilise generative Artificial Intelligence to create synthetic data and enhance land-use simulations.

COMP 6OA Artificial Intelligence Optimisation Techniques (20 credits)
AI-driven optimisation strategies for resource allocation and planning.

COMP 6AA Advanced Topics in Artificial Intelligence for Land Use (20 credits)
Apply AI/ML techniques to real-world environmental and land-use challenges through hands-on projects.

ASSESSMENT AND MODERATION PROCEDURES
Assessment of student learning will primarily be through project work using a variety of methods including, coding, presentations, written reports, demonstrations and oral defence. Conceptual material will be assessed through lab exercises, assignments and mini projects. The industry project assessment will be based on a combination of written reports, oral presentation and industry mentor feedback along with input from the academic supervisor. Lincoln University moderation procedures will apply for all assessment items and assessment of presented work will be done by a minimum of two staff independently.

RESOURCES
Lincoln University currently has nine staff members with appropriate expertise in computing, is currently appointing an additional Assistant Lecturer, and will support the appointment of one additional teaching staff member to ensure ongoing resource capacity. Staff also have strong links to industry, government and iwi for industry or applied projects where students will apply skills to problem solve in a real-world situation. Expansion of resources will be reviewed as the programme matures.

PLANS FOR MONITORING PROGRAMME
All course outlines, internal assessment items will be moderated via the faculty moderation process. The moderation process includes a review of the suitability of the assessment for the level and learning outcomes of the course, as well as a review of the readability of the assessment information.

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Each course in the programme is reviewed at a Faculty Examiner's meeting, convened by the Associate Dean (Academic / Learning and Teaching), where the student numbers, pass rate, and results are compared to historical grades. These results are then reviewed, along with the student's overall academic progress, at the University Examination's Meeting convened by the Academic Administration Committee (AAC).

Student satisfaction and feedback is obtained through course evaluations undertaken each semester the course is offered, and reviewed by the Examiner, Head of School, and Dean. The course evaluations also provide information about teaching quality. Student feedback is also received through the Course Representative programme managed by the Lincoln University Students' Association.

Lincoln University regularly reviews qualifications on an annual basis to monitor their performance and quality. These reviews are undertaken using data acquired from student questionnaires and feedback, student progression and assessment data, feedback from staff engaged in the programme, and from other stakeholders.

REVIEW OF THE PROGRAMME

The programme will be reviewed as part of a regular review cycle for the Faculty of Environment, Society and Design, including the annual Academic Programme Reflection, and will be subject to a Graduating Year Review in 2029.

STATEMENT RE SECTION B

Section B has been prepared and will be made available to CUAP on request.

(a) EFTS value

1.5 EFTS

(b) A statement regarding funding

All courses are at the postgraduate level and meet the criteria to be fully funded at the postgraduate level.

(c) Information about the Agreement

Not Applicable.

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LEARNING AIMS AND OUTCOMES FOR EACH NEW COURSE

COMP 6ML Machine Learning for Land Use (40 credits)
Learning Aims:
- Develop expertise in data preprocessing and feature selection methods for machine learning applications.
- Enhance skills in creating data visualisations and leveraging them to critically interpret and derive meaningful insights from real-world datasets.
- Gain proficiency in building, evaluating, and optimising machine learning models for accurate predictive outcomes.

Learning Outcomes:
- Perform data preprocessing and feature selection tasks for machine learning applications.
- Create insightful and accurate data visualisations for land-use analysis.
- Develop machine learning models using real-world datasets for accurate predictive modelling.
- Evaluate the performance of machine learning algorithms for their suitability in forecasting outcomes.

COMP 6EC Ethics, Policy, and Cultural Intelligence in Artificial Intelligence Design (20 credits)
Learning Aims:
- Evaluate the ethical, legal, and cultural implications of Artificial Intelligence applications in land use, including Māori data sovereignty rights and responsibilities.
- Develop awareness of bias, fairness, and inclusivity in Artificial Intelligence models, particularly with Māori and/or other Indigenous communities.
- Analyse policy and governance frameworks relevant to Artificial Intelligence in environmental and social contexts, emphasising tikanga-based data governance and responsible Artificial Intelligence deployment.

Learning Outcomes:
- Evaluate Artificial Intelligence-driven policies and their implications for land use.
- Implement bias detection and mitigation strategies in Artificial Intelligence applications.
- Evaluate Artificial Intelligence-driven land management decisions according to ethical, legal, and policy standards.
- Critically assess Artificial Intelligence fairness and equity in diverse cultural contexts.

COMP 6DL Deep Learning for environmental applications (20 credits)
Learning Aims:
- Develop skills to construct deep learning models for land-based data.
- Gain expertise in spatial data modelling and sequential approaches for land-use forecasting.
- Build proficiency in optimising deep learning models through hyperparameter tuning.

Learning Outcomes:
- Construct deep learning models tailored for land-based data.
- Implement spatial data modelling techniques to classify high-resolution spatial imagery.
- Develop sequential models to forecast land-use patterns using time-series data.
- Optimise deep learning models through advanced hyperparameter tuning techniques.
- Evaluate the performance of deep learning models in land-use applications.

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COMP 6GI Generative Artificial Intelligence for Land Use (20 credits)
Learning Aims:

- Examine generative Artificial Intelligence techniques for creating synthetic datasets in land-use modelling.
- Investigate the applications of advanced generative models in Artificial Intelligence-driven land-use modelling.
- Develop expertise in prompt engineering and retrieval-based generation techniques to improve model performance.

Learning Outcomes:

- Construct Artificial Intelligence-generated synthetic datasets for training land-use models.
- Implement advanced generative techniques to produce high-resolution satellite imagery for land management.
- Optimise language models for policy recommendation and land-use scenario planning.
- Design Artificial Intelligence-powered chatbots for environmental and policy advisory services.
- Critically assess the performance of generative Artificial Intelligence models in land-use scenarios.

COMP 6OA Artificial Intelligence Optimisation Techniques (20 credits)
Learning Aims:
- Explore Artificial Intelligence optimisation algorithms for land-use applications.
- Examine reinforcement learning for adaptive decision-making in land-use contexts.
- Gain expertise in hyperparameter tuning and model performance enhancement across Artificial Intelligence models.

Learning Outcomes:
- Implement advanced optimisation and adaptive learning techniques for land-use planning.
- Optimise Artificial Intelligence models to facilitate real-time decision-making in sustainable development.
- Integrate optimisation strategies to elevate Artificial Intelligence model performance.
- Improve computational efficiency in large-scale, Artificial Intelligence-driven land monitoring systems.
- Evaluate the impact of optimisation techniques on model performance.

COMP 6AA Advanced Artificial Intelligence Topics for Land Use (20 credits)
Learning Aims:
- Develop hands-on experience in designing and deploying Artificial Intelligence workflows for land management applications.
- Enhance expertise in advanced statistical modelling, explainable Artificial Intelligence methods, and time-series forecasting approaches.
- Assess the role of Artificial Intelligence in real-world environmental and urban planning applications.

Learning Outcomes:
- Construct Artificial Intelligence pipelines for effective data analysis.
- Apply agent-based modelling approaches to simulate and predict land-use changes.
- Integrate time-series forecasting techniques for predictive modelling in environmental applications.
- Incorporate explainable Artificial Intelligence techniques to enhance the transparency and trustworthiness of Artificial Intelligence-based decisions.

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STUDENT WORKLOAD, TERMS REQUIREMENTS AND ASSESSMENT PROCEDURES FOR EACH NEW COURSE

COMP 6ML Machine Learning for Land Use (40 credits)
Workload: 400 hours total student commitment
Assessment: A variety of applied projects

COMP 6EC Ethics, Policy, and Cultural Intelligence in Artificial intelligence Design (20 credits)
Workload: 200 hours total student commitment
Assessment: Combination of essays and reports based on case studies

COMP 6DL Deep Learning for Environmental Applications (20 credits)
Workload: 200 hours total student commitment
Assessment: A variety of applied projects

COMP 6GI Generative Artificial Intelligence for Land Use (20 credits)
Workload: 200 hours total student commitment
Assessment: A variety of applied projects

COMP 6OA Artificial Intelligence Optimisation Techniques (20 credits)
Workload: 200 hours total student commitment
Assessment: A variety of applied projects

COMP 6AA Advanced Topics in Artificial Intelligence for Land Use (20 credits)
Workload: 200 hours total student commitment
Assessment: A combination of applied projects and reports

AVAILABILITY OF TEACHING AND SUPPORT STAFF
Existing Geospatial and Computing Technologies academic staff will contribute to the delivery of courses alongside additional staff to be appointed (1.0 FTE). Professional and tutor support will be available through existing staff in the Faculty of Environment, Society & Design.

AVAILABILITY OF TEACHING SPACE AND OTHER REQUIRED FACILITIES (E.G. LABORATORY, THEATRE, ETC.)
Appropriate timetabled Teaching Spaces are available for all courses.

AVAILABILITY OF LIBRARY RESOURCES
LU's Library Content confirms it currently has a reasonable amount of resources available on the topic of machine learning and AI. We note this is a rapidly developing area and the Library is happy to be advised of new titles that may need to be acquired to remain current with this area.

TIMETABLING ARRANGEMENTS
Normal Lincoln University timetable arrangements for postgraduate degree courses will apply.

THE REQUIRED EXTRACTS FROM ANY MEMORANDUM OF UNDERSTANDING AGREED WITH ANOTHER NEW ZEALAND UNIVERSITY OR OVERSEAS PROVIDER IN RESPECT OF A JOINTLY-TAUGHT OR JOINTLY-AWARDED QUALIFICATION (SEE SECTION 13 OF THE CUAP HANDBOOK).
N/A

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SECTION C

TEACHING/TUTORIAL/LABORATORY HOURS PER WEEK

Tuition/Teaching (FTE) weeks per year	45
Vacation Weeks	7
Total Gross Weeks	**52**
Teaching hours per week	8.5
Work Experience / Practical Work hours per week	6.5
Self-Directed Learning hours per week	25
Total Learning hours per week (this cannot exceed 40 hours)	**40**
Duration of qualification	12 months full time 24 months part time

OUTCOME STATEMENT

The Master of Artificial Intelligence for Land Use is intended to lead to work as a professional in an Artificial Intelligence or Machine Learning role and graduates will have the technical and professional skills to work independently on projects. The programme is delivered in an experiential manner and includes an Industry Project to help graduates be work ready or for those who choose (subject to appropriate performance) a dissertation. Those students undertaking a dissertation will be able to progress to a doctoral degree and conduct independent research.

CONTENTS

This 12-month full time programme will prepare students to enter professional or research roles which include Artificial Intelligence. Professional Skills are embedded in the programme through the assessment approaches. Students can be placed in a professional organisation to work on industry research and development projects supervised by an industry mentor with the support of academic staff or undertake a research focused project under the supervision of an academic staff member. The programme is designed to reflect the knowledge, skills, values, ethics and work practices relating to Artificial Intelligence that are faced by and/or required by industry, government and communities. The programme therefore provides learning environments that reflect the professional working scenarios that students are likely to encounter on entering a role in industry, government or community.

ASSESSMENT MODE/S

Assessment of student learning will primarily be through project work using a variety of methods including, presentations, written reports, demonstrations and oral defence. Conceptual material will be assessed through lab exercises, assignments and mini projects. The industry or research project assessment will be based on a combination of written reports, oral presentation and industry mentor feedback along with input from the academic supervisor.

NZ STANDARD CLASSIFICATION OF EDUCATION (NZSCED) FIELD OF STUDY CODE

020119 AI

PROPOSED ACADEMIC HOOD COLOUR

Turquoise (BCC 118)

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CONCEPT PROPOSAL FOR NEW PROGRAMME OR MAJOR

- This template is to elicit sufficient information for the Provost to endorse the preparation of a full CUAP proposal.

- The template is to be completed by the Dean/Director and should provide a viability assessment of introducing a new programme or major.

- Following endorsement by the Provost, the full CUAP proposal may be developed.

- The completed template will accompany the CUAP proposal to Academic Board and to Council.

Title of New Programme or Major
Masters in AI/Machine Learning, Land Use and Innovation

Name of Faculty / Division
Faculty of Environment, Society and Design

Market Assessment / Demand Please assess the proposed new programme / major against the market assessment criteria below.

Acceptability	How will the programme appeal to prospective students? The programme aligns with high demand fields involving machine learning (ML) and artificial intelligence (AI). New Zealand's economy is traditionally founded on agri-sector industries and continues to grow. To maintain its competitive edge and competitive advantage in agri-business, as well as address the challenges of climate change and improve responses to biodiversity loss and environmental disruptions, it is essential to be equipped with human and technological tools. This programme aims to be at the forefront of learning the latest AI/ ML skills, offer courses associated with AI ethics and policy, and offer other papers that apply these skills across land-related sectors concerning land use, sustainable management and innovation, and technology-driven sustainable practices. It appeals directly to both computer science (CS) students and a wider cohort with interests in these fields, domestic and international students, including Māori and other indigenous peoples. The learning will be a flexible online method with delivery to students in mixed short and longer formats by experts in their chosen fields. These may include pre-recorded modules. The programme will attract a range of students including those who have just completed undergraduate CS or related discipline degrees, working professionals and other

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students who prefer to remain in their home settings who want to benefit from Lincoln's collective expertise without relocating. Guiding courses will be available for non-CS students who need foundation skills to engage further in the advanced courses on offer.

What evidence is there of market demand?

1. Growing Global Focus on Sustainable Agriculture and Land Management

There is increasing awareness of the need for sustainable practices in agriculture and land use, driven by concerns around food security, environmental degradation, and biodiversity loss. Globally, sectors such as agriculture, forestry, and environmental management are actively seeking ways to incorporate AI and machine learning for more efficient, sustainable practices.

The agri-tech market is projected to grow significantly, driven by innovations like precision agriculture, predictive analytics, and data-driven decision-making.

Reports by McKinsey and the World Economic Forum indicate high demand for digital technologies in agriculture to optimize resource use and enhance sustainability, especially in regions like New Zealand with significant agricultural output.

Other reports from organizations like the Food and Agriculture Organization (FAO) and the United Nations highlight the importance of technology-driven approaches to address productivity and sustainability challenges.

2. Demand for Data-Driven Solutions in Agriculture

According to recent research, precision agriculture is one of the fastest-growing fields within AI applications. This involves using data from sensors, satellite imagery, and predictive analytics to optimize crop yields, reduce waste, and improve water and land use and quality. With global revenue from precision agriculture expected to rise, companies are seeking skilled professionals who can manage data and AI applications as well as develop new AI tools for these purposes, within climate sensitive and community-centric contexts.

3. Increasing Need for Skilled Professionals in AI and Environmental Sustainability

Many governments, including New Zealand's, have committed to ambitious environmental targets, such as reducing carbon emissions and addressing biodiversity loss. As a result, industries and public sectors are keen to adopt digital tools that help balance economic growth with environmental goals, creating demand for professionals who understand both AI and environmental impacts.

Job listings and reports from environmental and technology recruitment firms show high demand for professionals skilled in machine learning and data science who can apply these skills to sustainability challenges. Job market analyses indicate demand for roles such as "AI Engineer in Agri-Tech," "Data Scientist for Sustainability," and "Machine Learning Specialist in Resource Management." There are many other more specific roles throughout the land-based sector requiring ML/AI expertise (see also below).

4. International Demand for Flexible, Online Education Programmes

There is growing demand for online education globally, particularly for specialized fields that may not be locally available. A unique master's program like this would attract New Zealand and international students seeking expertise in ML/AI for land use without needing to relocate.

Surveys from organizations like Coursera and the Online Learning Consortium show a marked rise in interest in one-year programmes that fit professionals' schedules, allowing them to gain advanced skills while continuing to work.

2

5. Gap in Existing Educational Programs

There are 4 Masters programs in AI/ML in New Zealand, by Universities of Auckland, Canterbury, Victoria and Waikato. However, there are no masters programmes in the world that focus specifically on the intersection of AI/ML with land use and innovation. Lincoln University's programme is a response to this gap and to the increasing need to upskill for the land-based sector.

6. Alignment with Regional and International Agri-Tech Priorities

New Zealand's economy, largely dependent on agriculture, forestry, and related industries, is increasingly investing in agri-tech innovations, with ML/AI driving this next generation of solutions. The government's support for such sectors provides a strong foundation for educational programmes that prepare graduates to lead and to innovate in agri-tech.

Similarly, international markets such as Europe, North America, and Asia are investing in AI for agriculture, seeing it as critical for sustainable growth. The programme is likely to appeal to international students who want to progress their skills in these fields and work in their home countries or here in NZ because there aren't other courses tailored to ML/AI and the land-based sector at graduate level.

A master's program from Lincoln University that combines machine learning, AI, and land use would therefore meet growing demands from both industry and educational markets, filling a gap in current offerings while addressing critical local and global challenges in the land-based sector and concerning environmental sustainability.

How will the programme appeal to and have support from external stakeholders / industry?

Preliminary discussions with iwi, external research organisations and industry in New Zealand all indicate interest and support for this proposed programme because there are limited, available ML/AI skills to help address economic, productivity, environmental, biodiversity and community – based goals.

More specifically there is:

1. Alignment with Industry and Government Agendas on Sustainability and Agri-Tech

The programme aligns closely with New Zealand's governmental and industry priorities and environmental agencies' goals (e.g. Ministry for Primary Industries (MPI), the Ministry for the Environment, the Department of Conservation, Fonterra, Ravensdown, NZ Kiwifruit Growers, Fruitometry, Deloittes NZ, Agritech NZ, PlantTech Research Institute, the New Zealand eScience Infrastructure (NeSI), Robotics Plus, Qrious, Verum Group, the Cacophony Project, AgResearch and Landcare to name a few).

The masters programme would help prepare students to better innovate and address issues relating to sustainable agriculture, biodiversity preservation, environmental management and climate change. The government is keen to support educational programmes that contribute to sector-wide improvements in productivity and sustainability, particularly those that address biodiversity loss and environmental resilience.

2. Workforce Development and Skill Shortage Mitigation

Industry stakeholders, especially in agriculture, forestry, and environmental management, face challenges in finding skilled professionals who can apply AI and machine learning to land use and sustainability. This programme would produce graduates who are immediately valuable in filling skill gaps and driving data-driven innovation, making it attractive for industry investment and sponsorship opportunities.

3

3. Collaboration on Real-World Projects and Applied Research

The programme's practical focus would invite industry, tech-research and iwi partnerships, as companies and organisations could collaborate on research projects, offer case studies, or co-develop coursework that reflects real-world challenges. These collaborations provide businesses with valuable research insights, while students gain hands-on experience, creating mutually beneficial relationships and outcomes.

4. Development of Solutions to Sector-Specific Challenges

Given New Zealand's economic reliance on agriculture, forestry, and conservation, stakeholders are keenly interested in solutions that address sector-specific challenges like low productivity, environmental degradation, and resource management. The programme's emphasis on applying ML/AI to these issues would attract stakeholders seeking innovation in areas like precision agriculture, regenerative practices, and biodiversity monitoring. New Zealand is often at the forefront of innovation in the agrisector. The Masters course would help New Zealand maintain and grow its innovation, 'number 8 wire' approach(es) to challenges.

5. Enhanced Innovation and Competitiveness

Supporting a programme that fosters skills in AI and machine learning directly benefits industry competitiveness, allowing companies to leverage new technologies for optimized resource use, improved crop yields, and reduced environmental impact. Companies investing in future talent and innovation gain competitive advantages, making the programme appealing for corporate sponsorship, scholarships, or research grants.

6. Pathway for Ongoing Industry-Education Partnerships

By engaging with this programme, several stakeholders can create pathways for long-term collaboration with Lincoln University. Opportunities for internships, guest lectures, and knowledge exchange benefit both the university and external partners including iwi, industry, research organisations, other private sector organisations, therefore building sustained relationships that contributes to sector-wide knowledge and development.

There is also an opportunity for employees in industry to take select courses in the masters programme and for companies to sponsor / partner on joint Capstone projects.

7. Corporate Social Responsibility (CSR) and Environmental Stewardship

Many businesses today have strong CSR commitments, and supporting educational programmes that prioritize environmental stewardship aligns with these goals. Funding or collaborating with a programme dedicated to sustainable land use and AI innovation allows companies to demonstrate social responsibility and environmental commitment, appealing to stakeholders who prioritize these values.

Will the programme lead to employment outcomes at the right level?

Yes; students will be well equipped to undertake computer science/AI/ML-based jobs in high demand areas regarding agriculture, horticulture, viticulture, conservation, land management and planning, bio-diversity conservation, climate adaptation and mitigation and many other fields within public and private sectors relating to land, water and beyond. Jobs include Artificial intelligence engineer, ML engineer, Data Scientist and others.

4

Some specific jobs at varying levels of seniority include the following:

1. Environmental Data Scientist

Role: Use ML and AI to analyze large datasets related to climate, land use, soil health, and water resources.

Tasks: Develop predictive models for soil erosion, water quality, and land degradation; monitor ecosystems; and assess environmental impacts.

2. Agricultural Data Analyst or Scientist

Role: Apply ML to optimize crop production, reduce resource use, and improve yield forecasts.

Tasks: Use AI-driven analytics on soil health, water usage, and crop data to guide precision agriculture practices, such as irrigation scheduling, fertilization, and pest control.

3. Hydrologist or Water Resources Data Specialist

Role: Focus on the management and optimization of water resources

Tasks: Use AI models to forecast water supply and demand, optimize water distribution networks, and monitor water quality, especially in areas facing scarcity or contamination issues.

4. Remote Sensing Specialist

Role: Utilize satellite data and aerial imagery to monitor land use, vegetation, and water bodies.

Tasks: Employ AI algorithms for image recognition and classification to track changes in land cover, deforestation, urban expansion, and water levels.

5. Conservation Scientist

Role: Use AI to aid in conservation and restoration efforts.

Tasks: Develop ML/AI algorithms and models that assess biodiversity loss, predict species distributions, and optimize land management strategies for conservation purposes.

6. Precision Agriculture Engineer

Role: Design and implement smart farming technologies to enhance efficiency and sustainability.

Tasks: Develop IoT systems powered by AI that automate water and nutrient delivery, track soil health, and minimize the environmental impact of farming.

7. Soil and Water Quality Analyst

Role: Monitor and maintain soil and water health for agricultural or environmental purposes.

Tasks: Use ML to predict soil fertility, analyse pollutant levels in water sources, and assess the impacts of land management practices on soil and water quality.

5

8. Climate Change Analyst or Modeler

Role: Focus on understanding and mitigating climate change impacts on land and water resources.

Tasks: Use AI to model climate-related changes in ecosystems, predict future scenarios for land and water availability, and support strategies for adaptation and resilience.

9. Sustainable Land Management Consultant

Role: Advise on land management practices that balance productivity with environmental sustainability.

Tasks: Apply data-driven insights to guide sustainable practices for soil conservation, forest management, and water resource allocation.

10. GIS Data Analyst / GIS Specialist

Role: Use Geographic Information System (GIS) data to support land and water management.

Tasks: Integrate ML algorithms with GIS to analyse spatial data on land use, soil moisture, water flow, and vegetation cover, supporting decisions in agriculture, conservation, and water management.

11. Natural Resource Data Analyst

Role: Assess and optimize the use of natural resources like water, soil, and forests.

Tasks: Use AI to analyse resource consumption patterns, predict future demand, and suggest efficient resource allocation strategies to avoid over-extraction and degradation.

12. Environmental Policy Advisor (AI-Focused)

Role: Inform policy development with insights from AI models

Tasks: Provide policymakers with data-driven forecasts and recommendations on land and water use, helping shape sustainable practices and regulations.

Accessibility	By what means will future students be able to access the teaching and learning opportunities? Online and in person.
	How will this programme be delivered? Online in modules and in person over 12 months, and up to 18 months.
Accreditation	Does the programme have the potential to be accredited formally? If so, with whom? No
	Could it impact our international ranking and student barometers? Yes, the programme's unique focus on AI/ML in land use positions Lincoln University as a global leader in this emerging field. Successful graduates and research outputs could enhance international rankings and increase Lincoln's visibility in global education indices.

6

Affordability	Where does the programme sit in the market in terms of cost, with respect to our current portfolio?
	The programme is expected to be competitively priced relative to other master's programmes offered by Lincoln University. Given its unique specialisation in AI and land use, it is positioned as a premium offering (i.e. similar to $57,000 for international students studying at 180 credit masters).
	What are the costs of teaching and delivery?
	Key costs include developing online learning modules (in house through LTL) and hiring/contracting one specialized faculty (~$110k/annum). Additional expenses involve marketing the programme, supporting technical infrastructure, licensing AI-related software and platforms, and administrative costs related to enrolment and student support services.
	It would likely take the equivalent of 2-3 full-time lecturers to prepare and deliver the new courses. Modules could be pre-recorded and include invited guests.
	What is the projected profitability of this programme?
	The programme is projected to become profitable within its second year, assuming steady enrolment growth.
	The estimated EFTS in Year 2 will be 10 domestic EFTS at net earnings of ~$15,000 per EFT and 10 international EFTS at net earnings of ~$22,000 = $370,000 in total. This results in a positive movement in faculty contribution margin.
	Initial investments in module development and marketing will be offset by increasing student numbers. Corporate sponsorships, government upskilling initiatives, and scholarships from industry and iwi partnerships are expected to contribute to long-term financial sustainability and profit.
Appropriate	How does this new programme align with the Lincoln University Strategy 2019-2028, and the Vision: To be a globally ranked top five land-based university, unlocking the power of the land to enhance lives and grow the future?
	The degree is highly aligned to the Lincoln University Strategy, in particular goal 4 "A world-class research and teaching precinct", in relation to the action to provide "innovative academic programmes that anticipate the workforce needs of land-based sectors" and similarly goal 6 "facilitating student growth", specifically in relation to the action "Meet[ing] land-based sector workforce needs and challenges."
	The degree is a natural fit for the University. It bridges gaps in teaching that are specifically targeted towards workforce needs, current technology developments and their application towards land-based sectors.
	The degree should also help contribute towards the University's international ranking because the degree is a gap (and opportunity) response.
Programme Comparability	Provide an assessment of how this programme compares to similar programmes offered by other institutions.
	A number of *general* online AI/ML programmes are offered over 12-24 months. These include:
	USA universities:
	1. University of Texas at Austin: Offers an online Master of Science in Artificial Intelligence designed to be completed in one year. The curriculum covers topics such as deep learning, ethics in AI, and machine learning.

7

[CDSO](#)

2. Rice University: Provides an online Master of Data Science with a Machine Learning track. This program can be completed in 12 months and includes courses in machine learning algorithms, statistics, and deep learning.

[Masters in AI](#)

3. Purdue University: Offers an online Master of Science in Artificial Intelligence with two different majors tailored towards specific interests. The program focuses on programming, computer science, and mathematics.

[Purdue University](#)

4. Drexel University: Provides an online MS in Artificial Intelligence & Machine Learning, designed for current practitioners. The program can be completed in as little as two years.

[Drexel University Online](#)

5. Johns Hopkins University: Offers an online Master of Science in Artificial Intelligence that balances theoretical concepts with practical knowledge. The program is designed to be completed part-time.

6. Penn State World Campus: Provides an online Master of Artificial Intelligence program that delves into machine learning, deep learning, natural language processing, and computer vision. The 33-credit program is designed to equip students with skills to develop intelligent systems.

[World Campus](#)

7. Stanford University: Provides online and part-time master's degree programs focusing on developing deep expertise in AI. The programs are taught by Stanford faculty and are designed to advance careers without interruption.

[Stanford Online](#)

8. George Washington University: Offers an online Master of Engineering in Artificial Intelligence and Machine Learning, focusing on data science, advanced algorithms, and computational methods underpinning AI technologies.

[GWU Online Engineering](#)

9. University of Pennsylvania: Provides an online Master of Science in Engineering in Artificial Intelligence, enabling students with a computer science background to explore algorithms for knowledge-based agents, large language models, and deep learning.

10. University of San Francisco: Provides an online Master of Science in Data Science with an AI concentration.

11. Northeastern University: Offers an online Master of Professional Studies in Analytics with a focus on AI.

12. Boston University: Provides an online Master of Science in Artificial Intelligence that can be completed in 12 months with an accelerated schedule.

13. University of Illinois at Urbana-Champaign: Offers an online Master of Computer Science in Data Science with AI courses, which can be completed in 12 months.

14. University of California, Berkeley: Provides an online Master of Information and Data Science with AI courses, designed for completion in 12 months.

UK universities:

15. University of Hertfordshire: Offers a fully online MSc in Artificial Intelligence designed for part-time study over 24 months. The program covers AI programming, machine learning, and data science.

[Hertfordshire University Online](#)

16. University of York: Provides a 100% online MSc in Computer Science with Artificial Intelligence, designed to be completed part-time over two years. The program includes modules on algorithms, data structures, and machine learning.

[York Online](#)

17. Imperial College London: Offers an online MSc in Machine Learning and Data Science, designed to be completed part-time over 24 months. The program covers machine learning models, data processing, and real-world applications.

[Imperial College London](#)

18. University of Bath: Offers an online MSc in Artificial Intelligence, covering topics such as robotics, mathematics, machine learning, and natural language processing. The program is designed to equip students with skills applicable across various industries.

[Bath Online](#)

19. University of Liverpool: Provides an online MSc in Artificial Intelligence, focusing on developing, designing, and evaluating intelligent systems. The curriculum includes machine learning, deep learning, and natural language processing.

[Liverpool Online](#)

20. University of Essex Online: Offers an online MSc in Artificial Intelligence, designed for non-computing graduates aiming to enter the AI field. The course covers machine learning, data analytics, and AI programming.

21. University of Leeds: Provides an online MSc in Artificial Intelligence, covering machine learning, robotics, algorithms, and data mining. The program is designed for professionals aiming to apply AI solutions in real-world scenarios.

[Leeds Courses](#)

22. University of Wolverhampton: Provides an online MSc in Computer Science with Artificial Intelligence, covering AI programming, machine learning, and data analytics. The program is designed for professionals aiming to advance their careers in AI.

Australian universities:

23. La Trobe University: Offers an online Master of Artificial Intelligence designed to equip students with skills in machine learning, data mining, computer vision, cybersecurity, and natural language processing. The program emphasizes practical applications and includes industry-based projects.

[La Trobe Online Courses](#)

24. Monash University: Provides an online Master of Computer Science with a specialization in Artificial Intelligence. The course integrates foundational learning with specialist knowledge in AI, covering areas such as deep learning, reinforcement learning, and AI ethics.

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[Monash Online](#)

25. University of Southern Queensland (USQ): Offers an online Master of Data Science with a specialization in Artificial Intelligence and Machine Learning. The program covers big data management, machine learning, data mining, and deep learning, preparing graduates for roles in data science and AI.

26. Deakin University: Provides a Master of Applied Artificial Intelligence, which can be studied online. The course focuses on designing and developing AI-driven software solutions, covering topics like deep learning, computer vision, and natural language processing.

[Deakin University](#)

27. University of Technology Sydney (UTS): Offers a Master of Artificial Intelligence that can be completed online. The program includes studies in data analytics, neural networks, deep learning, reinforcement learning, and ethics in AI.

New Zealand universities:

28. University of Canterbury: Offers a Master of Artificial Intelligence that can be completed over 1–1.5 years full-time, or part-time for up to 3 years. The program includes a mixture of compulsory and elective taught courses and a practical project.

29. University of Auckland: Provides a Master of Artificial Intelligence designed to meet the needs of both developers and researchers. The program can be completed full-time in 1 year or 18 months, with part-time study also available.

[University of Auckland](#)

30. Victoria University of Wellington: Master of Artificial Intelligence offers a mix of coursework and research, with options to focus on areas like big data, natural language processing, and AI ethics. It typically takes 12 to 16 months to complete full-time and offers flexibility with part-time options.
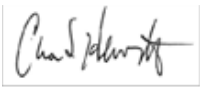
31. University of Waikato: Master of Artificial Intelligence focuses on advanced AI technologies, including machine learning and ethical AI. Students gain understanding and practical skills in AI applications. The program is typically completed over 1.5 years of full-time study.

There are no tailored masters (online or in person) programmes for ML/AI and land use. This proposed new Masters would comprehensively deepen students' skills in ML/AI as applied to land use. It is also a 12 month course which is designed to keep up with rapidly advancing AI technologies and advancements.

Options available in New Zealand are otherwise at 2 universities where students can gain some AI and AI applied land – focused skills (less comprehensively than this proposed course):

1. The University of Auckland MAI provides opportunities to apply AI techniques to various domains, including environmental management and urban planning. Students can tailor their research projects to focus on land use applications.

2. The University of Canterbury MAI has elective courses that can be aligned with interests in land use, environmental monitoring, and related areas. The capstone project allows for specialization in specific applications of AI, potentially including land use.

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Resourcing	Please note any implications for existing and additional resources (staff, facilities, equipment, online development) needed to ensure the high quality of the proposed programme / major. We anticipate resources for the equivalent of 1-2 new staff and online development will be needed for the new courses while existing courses (e.g. MAC) will be offered as well. These are already funded/resourced. Depending on resourcing and programme shaping, we are also looking at ideas for module development that may be offered by established, external experts.
Predicted EFTS	Year 1: 2 international + 5 domestic Year 2: 10 international + 10 domestic Year 3: 20 international + 40 domestic subject to fee waiver We predict these kind of numbers based off the existing technology masters programmes being offered as the below table shows:

		2020	2021	2022	2023	2024
MAC	DOM	5	57	75	281	417
	INT	1.5	13.2	12.8	36.6	70.7
	TOTAL	6.5	70.2	87.8	317.6	487.7
MFIM	DOM			14	75	157
	INT			0.7	9.2	25.3
	TOTAL	0	0	14.7	84.2	182.3
MPAg	DOM	1	1		2	6
	INT	2	0.5		2.8	10.8
	TOTAL	3	1.5	0	4.8	16.8

Contributors to numbers (as per above):

1. **The Unique Selling Point (USP)** of the programme: It's the only programme focusing on ML/AI specifically for land use.

2. **Expected Growth Rate**: Assuming initial curiosity and a growing reputation over time, the programme could see increased interest each year, similar to Lincoln's MAC programme which has seen rapid growth since its inception (offered hybrid).

3. **Online**: catering to employees and individuals in their own home contexts

4. Corporate sponsorships

5. Government-funded programs for upskilling in land management could further boost numbers.

6. Iwi scholarships

7. University scholarships

8. Industry and iwi links

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ENDORSEMENT FROM THE PROVOST

Name of Dean / Director: Interim Dean Emma J Stewart

Signature:

Prof Chad Hewitt, Provost

Signature:

Date: 28 January 2025

Master of Artificial Intelligence for Land Use

CONCEPT PROPOSAL FOR NEW PROGRAMME OR MAJOR

Section B

What was the basis of the initiative? Was it instigated from an external stakeholder, Graduating Year Review, + other?

The development of this programme was internally initiated and driven by education gap analysis and market insights from the DVC(Māori), from Master of Applied Computing students interest in Artificial Intelligence related courses, market insights from International Agents, government, industry and tech fields.

What market analysis or insights have you achieved through engagement with International and Domestic recruitment, + other.

Domestic and international market analysis has been undertaken relating to industry, economy, environment and land use case scenario investigations and research relating to skill need and employment from industry, tech, government and UN sources (for example, FAO, MBIE, MPI, Microsoft, Accenture, BERL and others).

Benchmarking for the proposed Master of Artificial Intelligence for Land Use (MAILU) can be reasonably undertaken by comparison with Lincoln University's established Master of Applied Computing (MAC). MAC is offered in the Faculty of Environment, Society and Design; MAILU expects to be housed there as well. Both share a similar delivery model—namely flexible online learning suited to both domestic and international students. While similar in format, the MAILU differs in its focused scope on artificial intelligence, machine learning, and their applications to land-based and environmental systems.

Student enrolment data for the MAC from 2021 to 2025 (see table below) reveals a consistent and healthy trend in both domestic and international recruitment. Domestic enrolments rose steadily from 26 in 2021 to a peak of 48 in 2024, with a slight decline to 40 in 2025, reflecting current macro-level constraints such as government funding limitations and broader pressures on domestic enrolments across the tertiary sector.

International student enrolments have demonstrated strong growth particularly from **China, India, Malaysia, Taiwan, and Korea**, with China and India making up the largest shares. The presence of both international **domestic-based** and **offshore** international students further supports the idea that the programme has global resonance, especially when grounded in applied and emerging technologies.

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Given the increasing interest globally in AI/ML expertise—especially when linked with agriculture, sustainability, and land use management—these same countries present compelling recruitment markets for the new MAILU degree. This is particularly true for students with backgrounds in computing, environmental science, and agri-business seeking advanced AI qualifications with real-world applicability.

	2021	**2022**	**2023**	**2024**	**2025**
NZ					
Domestic	26	32	38	48	40
China					
Domestic	23	113	316	358	135
International	9	15	33	62	49
India					
Domestic	3	6	8	7	6
International	4	9	11	9	18
Malaysia					
Domestic	1	1	11	18	8
International	0	0	0	0	2
Taiwan					
Domestic	0	4	10	7	7
International	0	4	9	6	2
Korea					
Domestic	0	0	0	1	2
International	0	0	1	3	7

The MAILU differs from the MAC and the Master of Fintech and Investment Management (MFIM) in its unique, specialist focus on applying AI and machine learning specifically to land-based sectors such as agriculture, environmental management, conservation, and climate adaptation. While the MAC provides a broad foundation in applied computing suitable across multiple domains, and the MFIM focuses on fintech innovations, blockchain, and data strategies for financial systems, the MAILU programme is purpose-built to address real-world land use challenges by integrating AI tools with sustainability, policy, Indigenous knowledge, and sector-specific applications. Its curriculum is tightly aligned to Aotearoa New Zealand's economic and environmental priorities, offering a domain-specific pathway not covered in either of the other two programmes.

Provide an estimate of student numbers for the next three years, across each year, taking into account attrition.

14

Domestic	2026	2027	2028
Year 1	5	10	40
Net Income (~$15,000/EFT)	$75,000	$150,000	$600,000

International	2026	2027	2028
Year 1	2	10	20
Net Income (~$22,000/EFT)	$44,000	$220,000	$440,000

TEC National Priorities
Indicate alignment with TEC's national priorities

Qualification Code (Yes or No)	% of Courses in alignment with priorities (Identify %)
The programme would be NZSCED code of study 020119 AI and courses DQ7+ Funding B3	01 - Agriculture, Horticulture, Forestry - 06 – Computing – 100% 11 - Engineering, Technology - 18 – Science - 39 - Specialist Large Animal Science -

LU Strategy
Indicate alignment with agriculture, agribusiness, environment, conservation, tourism, recreation, Maori, Pathways, Research

Qualification Code (Yes or No)	% Course alignment with priorities
All courses would include domain content across Agriculture, Agribusiness, Environment including Māori contexts	100%

Signed: Emma Stewart Acting Dean, Faculty of Environment, Society and Design	Date: 15 May 2025
Signed: Prof Chad Hewitt, Provost	Date: 20 May 2025

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Master of Artificial Intelligence for Land Use

CONCEPT PROPOSAL FOR NEW PROGRAMME OR MAJOR

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International	0	0	0	0	2
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Korea Domestic	0	0	0	1	2
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Signed:	Date: 15 May 2025
Emma Stewart Acting Dean	
Signed:	Date: 20 May 2025
Prof Chad Hewitt, Provost	

LINCOLN UNIVERSITY
TE WHARE WĀNAKA O AORAKI

Vice-Chancellor's Office	Version: 2
Health and Safety Report	
Author/s: Health and Safety	
SLT Authoriser: Karen McEwan, Executive Director, People, Culture and Wellbeing	Date: 21/05/2025

1. Purpose

This report for the month of April 2025 provides Lincoln University Council with assurance that appropriate arrangements are in place for managing health and safety risks across the University.

2. Content

1. Leading and lagging indicators
2. Significant health and safety incidents for the month and updates on past incidents
3. Health and Safety Committee meetings
4. Health and Safety Critical Risk Elements and Mitigations
5. Campus Development Programme and Health and Safety summary

3. Recommendations

That the following are noted:

- The Health and Safety team continues to focus on maintaining and improving hazard identification and risk assessments, reviewing and establishing clear policies and procedures, aligning training requirements relevant to roles and working collaboratively with the University community in all areas of health and safety.

- Identifying trends in the health and safety performance of the University and measures taken to improve the robustness of the data.

- The actions being taken to improve the culture of health and safety across the University.

4. Executive Summary

April period produced no serious harm events and no interactions with WorkSafe.

We are aware that periods where there are no serious harm events does not necessarily mean that there won't be any events in the future. These are perfect times to focus on why things are going right as well as why they could be going wrong. We are working towards a Safety 2 approach which defines safety as the presence of positives, such as workers capabilities and competencies that make things go right. This is a proactive rather than a reactive approach to safety where the focus is to try to anticipate developments and events in an uncertain future. Progress on this approach will be submitted in future Council reports.
There were two incidents of significance reported for the April period:

1

- 28 April, smoke emanating from Plant and Food "burn-off" (source of aerial particulates under investigation) caused discomfort to LU staff. An investigation is underway in liaison with LU H&S. We are awaiting outcomes from Plant and Food following ongoing meetings between the LU H&S Manager, the Plant and Food H&S Manager, and discussions with affected parties.
- On 30 April during a heavy continuous rainfall weather event, George Forbes building suffered flooding mainly to 2nd floor areas requiring occupants to operate from alternative locations for several working days. Affected floor coverings were tested for mold, results proved positive for non-toxic allergens. A comprehensive deep clean and drying out process has been carried out to address any health risk, enabling all occupants to return to their offices. Works are underway by Property Services and Leigh's Construction to determine the root cause and apply remedial actions to prevent a similar occurrence.

The recruitment process is underway for the Health, Safety and Wellbeing Coordinator.

Lagging Indicators

The data below provides an overview of reported workplace incidents at the University (LU and Lincoln Agritech staff), with the exception of main CDP contracts where principal contractors have primary oversight of secure worksites (that data set is reported in the CDP H&S dashboard due to differences in contractor reporting periods).

Note: Lagging Performance Indicators indicate the number of events which have already occurred, an indication of where you have been rather than where you are going. Improving Leading indicators significantly reduces Lagging Indicators.

	Jan 25	Feb 25	Mar 25	Apr 25	2025 cumulative
Fatalities	0	0	0	0	0
Lost Time	0	0	1	0	1
Restricted Work	0	0	0	0	0
Medical Treatment	0	0	0	1	1
First Aid	2	1	1	4	8
Non-injury event	2	6	2	2	12
Damage to property	2	1	1	2	6
Near Misses	4	12	13	3	32
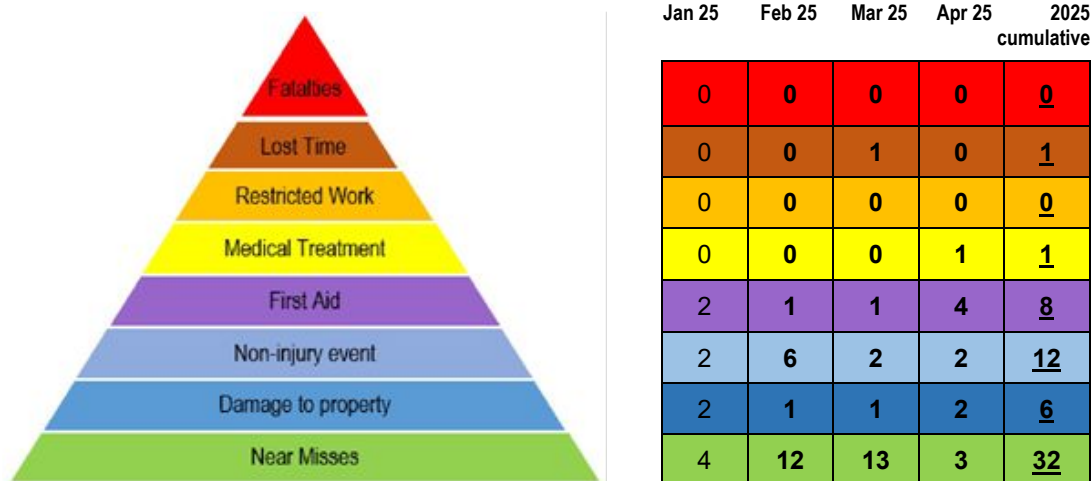
Medical treatment: x 1
- 1 x employee suffered acid splash into right eye, medical treatment required, no lasting injury.

First aid injuries: x 4
- 1 x employee hit toe on doorway when walking in bare feet inside.
- 3 x employees suffered respiratory discomfort from a local burn off.

Non injury events: x 2
- 1 x employee working in a lab with chemicals was startled when overhead lights blew.
- 1 x employee minor slip on wet floor.

2

Damage to property: x 2
- 2 x events of reported leaks in the building at JML and level 2, Forbes.

Near misses: x 3
- A fire exit door was propped open.
- Identified that stairwell doors may cause injury to passers-by when those exiting stairs push open the door.
- Vehicle's being driven in Orchard car park were seen not observing the road signs.

Total Recordable Injury Frequency Rate (LU and Agritech employees)
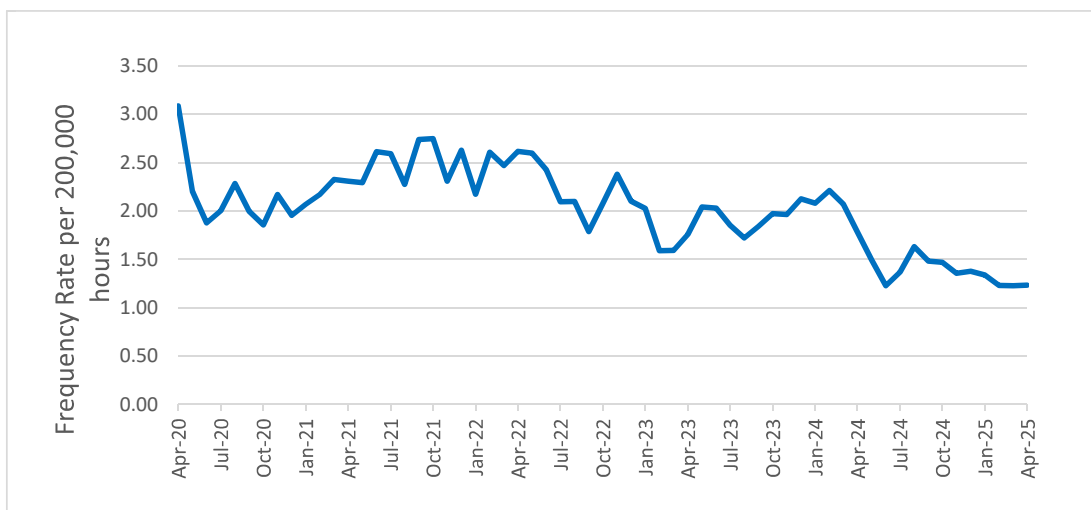
The above chart shows Total Recordable Injury (TRI) frequency per 200 000 hours worked by our staff. TRI is defined as reported work-place medical injuries, restricted work, lost time injuries, and fatal injuries. Using this measure, which has a wider scope than LTI, provides more detailed reporting on incidents and emerging risks however, it should be noted that TRIFR does not indicate *the severity* of injuries. *Note TRIFR includes any injuries that occur to staff while on the campus, even if not task/work-related.*

Leading Indicators

Leading Indicators can be measured without an incident, accident or property damage occurring and are extremely useful in being able to predict or prevent future events. These are favourable statistics where an improvement of health and safety culture is desired

Reporting via Risk Manager	Apr 2025	2025 Total	2025 Target
Total reported safety/hazards observations	3	18	50
- Safety observations related to external contractors	0	2	
Reported opportunities for improvement	0	5	12

3

Processes	Apr 2025	2025 Total
H&S inductions for new staff (within 4 weeks of start date) *Process is underway to determine percentage of new staff inductions within the 4-week period to add value to these stats*	9	37
Contractor inductions (Campus Development Programme)	12	46
Contractor inductions (Property Services)	13	55
Contractor inductions (Faculties and Business Units)	0	2
First Aid training	12	37
Building and Warden training *Process is underway to provide assurance that all buildings are manned by trained staff*	0	14
Workstation assessments	0	5
Return to work programmes: work-related injuries	0	2
non-work injuries	1	3
ACC now refer to Return to Work as Recovery at Work. Future Council reports will use this new terminology		

Health and Safety Committees

Committee	Next meeting
University H&S committee *(Representation from Faculties, Service Areas, Business Units)*	10 June 2025
AGLS sub-committee	28 May 2025
Property Services sub-committee	TBA
Catering sub-committee	TBA

Health and Safety Critical Risk Elements

The Health and Safety team focus is to ensure that as an organisation we have robust assurances in place to evidence our management of health and safety. We undertake internal audits on a regular basis for our high-risk work areas (laboratories, workshops, farms, JML), along with regular inspections of construction and work sites (Property Group and Property Services). We commission external Health and Safety professionals to audit different areas of the university where residual risk following mitigations remains medium to high.

Throughout the year, the Health and Safety team will focus on deep dive reviews of the following identified Critical Risks:
- Field Trips and Tours – Completed
- Farms
- Research Activities
- Construction Activities

Although we focus on reporting critical risk incidents, we continue to encourage all workplace incidents, events and safety observations to be entered into our Health and Safety Management System (Risk Manager), via the OnSide app for our Farms, or the SAFELU app for students, visitors and contractors.

4

The following chart indicates current areas of LU critical risk for Health & Safety, and the residual risk where mitigation processes are in place noting that Residual Risk ratings are under continuous review.

4 Critical H&S Risks			
Risk element	**Mitigations**	**Verification**	**Residual Risk**
Construction activities (including infrastructure and landscaping)	Contractor inductions On-boarding processes	Site inspections Audits of lead contractor processes	No change
Farms	Training records Visitor management (OnSide) Farms Compliance Officer Contractor management	Training assessment OnSide reports Internal audits	No change
Post-grad research activities (field-based)	Training – equipment, processes Driver training	Assessment records External providers	**NEW**
Radiation	Training and Procedures, monitoring	External (MoH)	No change
Events held on Campus	Safety Plans in Risk Manager for LU and external events Events Committee oversight	Sign-off from H&S Post-event reviews	No change
Field Trips & Tours	Findings and mitigations from deep dive including current processes and areas for improvement under review with delegated actions.	Sign-off from H&S	No change

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Lincoln University Campus Development Programme Dashboard

LINCOLN UNIVERSITY
TE WHARE WĀNAKA O AORAKI

April 2025	Programme Sponsor: Susie Roulston	Programme Lead: Alistair Pearson

PROGRAMME HEALTH & SAFETY DASHBOARD

	Glasshouses CW0035	Forbes Stage 3 CW0037	Heating Upgrade CW0052	Burns Demo & Landscaping CW0090	Hudson Conversion CW0110
Activity Levels	Active	Low Activity	Active	No Activity	No Activity
Inspections Conducted	5 (LU)	5 (LU)	5 (LU)	-	-
Lead Contractor Reports: Observations (Safety, Hazardous & Opportunity for Improvement)	-	-	-	-	-
Near Miss Events	-	-	-	-	-
No Treatment Injury	-	-	-	-	-
First Aid Injuries	-	-	-	-	-
Medical Treatment Injuries	-	-	-	-	-
Restricted Work Injury	-	-	-	-	-
Lost Time Injuries	-	-	-	-	-
Other Events e.g. Property Damage	-	-	-	-	-
Activity Summaries	Siteworks near completion. Electrical works in progress. Fletcher Glasshouse heating system installed. Temporary heating provided for Aluminex Glasshouse.	Heating system now operational. Minor works completed such as mezzanine door access and shelf unit secured. External wayfinding signs ordered and in fabrication.	Airtech have now handed over all buildings back to LU, except NRE. Work at NRE Office and NRE Soil & Water underway and due for completion May 2025.	All works completed February 2025, excluding planting. Stage 1 of planting scheduled for May 2025.	All drawings are complete and the consent was lodged with Selwyn District Council 11th April 2025.
Event Information:	-	-	-	-	-
Investigations / Corrective Actions	-	-	-	-	-

1

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Section 1 - Audits completed in last reporting period April 2025

Project name	Contractor	Audits/inspections				
		Internal Audits	External Audits	Client-led Inspections	H&S Safety Visits	PM Safety Visits
HV Upgrade – various sites	Air Tech				5	
George Forbes Stage 3	Leighs Construction				5	
Glasshouse	D Hillman				5	

HV Upgrade - Various sites (SoLA, Ross, Accommodation, Te Kete Ika, Forbes) – Air Tech
- 5 x informal visits past site

George Forbes Stage 3 - Leighs Construction
- 5 x informal walk-by visits

Glasshouse – D Hillman
- 5 x visits to work area

Total Contractor Events	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total 2025
Fatalities	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Lost Time Injury	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Restricted Work Injury	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Medical Treatment	0	0	0	0	0	0	0	0	0	0	0	0	**0**
First Aid	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Non-Injury Incident	5	3	0	0	0	0	0	0	0	0	0	0	**8**
Damage to Property	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Near Miss	2	0	0	0	0	0	0	0	0	0	0	0	**2**
Hazardous / Safety Observations	4	4	1	0	0	0	0	0	0	0	0	0	9

Section 2 – Summary of events reported April 2025

No events reported for this period.

Section 3 – Commentary for April 2025

Non-Campus Development Contractors working on campus

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Two low risk events were reported pertaining to non-CDP contractors that had the potential to cause harm.

1. Two reports of electrical leads presenting tripping hazards in the library and SOLA areas:

What controls were put in place to prevent these re-occurring?

- Observations were forwarded to the electrical team to have covers and/or other remediations put in place to reduce the risk of harm. Mitigation was completed within 24hrs of reporting the observations.

2. One medium risk event reported relating to parking on campus.

What controls were put in place to prevent these events re-occurring?

- This was escalated to the Property Services Manager to educate and issue parking warning notices.

5. Strategic and Policy Framework Implications

Strategic alignment with priority objective areas in Lincoln University Strategy 2019-2028	Goal **1**	A distinctive Aotearoa New Zealand end-to-end student experience	☑
	Goal **2**	Improved assets and sustainable operating models	☑
	Goal **3**	A culture which stimulates and inspires staff and students	☑
	Goal **4**	A world-class research and teaching precinct	☑
	Goal **5**	An organisation focussed on meaningful partnerships	☑
	Goal **6**	Facilitating Growth	☑

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LINCOLN UNIVERSITY
TE WHARE WĀNAKA O AORAKI

Vice-Chancellor's Office	Version: 1
Lincoln University Human Ethics Committee Annual Report	
Author/s: Caitriona Cameron and Fiona Hewitt	Date: 21/05/2025

1. Purpose

This report seeks one decision from Council to approve the Lincoln University Human Ethics Committee Annual Report for the 2024 calendar year.

2. Contents

3. Recommendation
4. Executive Summary
5. Resource Implications
6. Strategic and Policy Framework Implications
7. Next Steps
8. **Appendix A:** Lincoln University Human Ethics Committee 2024 Annual Report incl. Acting Chair cover letter
9. **Appendix B:** Human Ethics Committee membership

3. Recommendations

Resolution
That Council:

1. **RECEIVE** the information in this report.

2. **APPROVE** the Human Ethics Committee 2024 Annual Report and delegate authority to the Vice Chancellor to sign the Annual Report on behalf of Lincoln University.

3. **NOTE** the addition of five members to the HEC in April and the total committee membership as outlined in **Appendix B** and not appoint a Council member to the Human Ethics Committee.

4. Executive Summary

The Lincoln University Human Ethics Committee (LUHEC) is an accredited committee of the Health Research Council (HRC) and conducts independent ethics assessments of research proposed by staff and students at Lincoln University.

LUHEC is required to present an Annual Report to the HRC to maintain its accreditation and comply with legislative requirements.

The Health Research Council (HRC) extended the accreditation of LUHEC in 2023 for a three-year term until 2026.

LUHEC Membership

At the start of 2024 the HEC had 13 members and finished with 9. Members are appointed by Council on recommendation of the Vice Chancellor.

In April 2025 Council appointed five members to the Committee and currently has sixteen members.

The Deputy Chair wishes to thank Prof. Derrick Moot for his longstanding and valuable contribution to this Committee. Prof. Moot's term on the Human Ethics Committee ended on 12 May 2025.

In the past Council the terms of reference of the Human Ethics Committee required a member of Council be appointed to the Human Ethics Committee. When Council reviewed the terms of reference in July 2024 this requirement was removed.

Considering the healthy committee membership, it is recommended that a member of Council not be appointed to the Human Ethics Committee in place of Prof. Derrick Moot.

Workload

The number of applications reviewed has continued to increase. Apart from 2019 (when 95 applications were reviewed), the LUHEC has typically reviewed 50-70 applications each year. In 2024, the Committee reviewed 80 full applications and received one Pilot Study notification. As well, the Chair, Deputy Chair and Secretary continued to manage a high number of inquiries and requests for advice from students and staff.

The increased number of applications put considerable pressure on Committee members, particularly in June/July and October/November. Typically, the LUHEC reviews 4-6 applications per month, but there were 12 in July and 18 in October, largely reflecting increased numbers from academic staff during non-teaching periods. To better manage the end of year workload, the Committee introduced a formal closedown period from mid-December to mid-January and improved communications to researchers to reduce the number of very late applications.

HRC Feedback

Following requests from the Health Research Council as part of the accreditation process in 2023, the LUHEC addressed several action points:
- Recruited two Māori members to ensure more sustainable Māori membership.
- Instituted a lay Chair role.
- Developed a risk-based review structure.

The LUHEC Policy was significantly revised to include these changes, along with other changes initiated by the Committee as part of ongoing reflection and improvement.

In late 2024 the HRC provided feedback on the new LUHEC Policy specifically around the "exemption from review" criteria. The Policy wording change to address this point was finalised and accepted by Council in April 2025.

5. Resource Implications

There are no resource implications for Council.

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6. Strategic and Policy Framework Implications

Strategic alignment with priority objective areas in Lincoln University Strategy 2019-2028	Goal 1	A distinctive Aotearoa New Zealand end-to-end student experience	☐
	Goal 2	Improved assets and sustainable operating models	☑
	Goal 3	A culture which stimulates and inspires staff and students	☐
	Goal 4	A world-class research and teaching precinct	☑
	Goal 5	An organisation focused on meaningful partnerships	☐
	Goal 6	Facilitating Growth	☐

Strategic Alignment

This report supports the Lincoln University Strategy 2019-2028 by ensuring appropriate governing arrangements are in place to provide appropriate oversight and monitoring of health research at Lincoln University.

Policy Consistency

This decision is consistent with the University's Plans and Policies.

7. Next Steps

If Council resolves to approve the resolution and delegate authority to the Vice Chancellor, the LUHEC Annual Report will be signed before it is submitted to the Health Research Council by June 1st 2025.

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7th May 2025

Members

Lincoln University Council
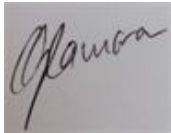
Lincoln University
PO Box 85084, Lincoln University,
Lincoln 7647, New Zealand
0800 10 60 10
www.lincoln.ac.nz

Dear Council Members

Please find attached the 2024 Annual Report of the Lincoln University Human Ethics Committee, a committee of the Lincoln University Council. It is part of the Committee's Policies and Procedures that it provides an Annual Report to the Lincoln University Council and the Health Research Council Ethics Committee (the national accrediting body for the Committee).

If you have any questions or comments on the report or require any clarification, I will be happy to respond.

Yours sincerely

Caitriona Cameron

Deputy Chair, Acting Chair during the 2024 reporting period.

Lincoln University Human Ethics Committee

hrc nz Health Research Council
of New Zealand
Te Kaunihera Rangahau Hauora o Aotearoa

ANNUAL REPORT FROM AN ETHICS COMMITTEE

The HRC Ethics Committee (HRCEC) is established under the Health Research Council Act (1990) as a committee of the Health Research Council. Section 25 of the Act covers the Committee's functions. Set out below are the functions relevant to the approval of ethics committees:

- **To ensure that, in respect of each application submitted to the Council for a grant for the purposes of health research, an independent ethical assessment of the proposed research is made either by the Ethics Committee itself or by a committee approved by the Ethics Committee (section 25(1)(c)).**
- **To give, in relation to ethics committees established by other bodies, advice on –**
  i. **the membership of those committees; and**
  ii. **the procedures to be adopted and the standards to be observed, by those committees (section 25(1)(f)).**

Approved ethics committees are able to undertake independent assessment on behalf of the HRCEC.

Health and Disability Ethics Committees (HDECs) are established as Ministerial committees under Pae Ora (Healthy Futures) Act 2022, section 87. The function of an HDEC is to secure the benefits of health and disability research by checking that it meets or exceeds established ethical standards. The HDECs act in accordance with procedural rules contained in *The Standard Operating Procedures for Health and Disability Ethics Committees (the SOPs)*.

Institutional Ethics Committees (IECs) are established by organisations, such as universities or private companies and review research applications directly related to the organisation or their agent. Often the research that they review is not health related and they have policies and procedures that reflect the nature of the research that they review.

NOTE:
In compiling this report, ethics committees should not provide information which would breach the Privacy Act 2020 and/or the Health Information Privacy Code 2020.

SUBMISSION

Please complete the annual report electronically and email to the Secretary of the HRCEC:

ethicsinfo@hrc.govt.nz

Relevant declaration page with signatures may also be submitted electronically via email.

INQUIRIES

If you have any queries, please contact the Secretary of the HRCEC at the above e-mail address or by telephone on (09) 303 5221.

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IEC Annual report form 2025

CONTENTS

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> **SECTION 1:**
> **GENERAL INFORMATION**

1.1 Name of Ethics Committee (EC)

Lincoln University Human Ethics Committee (LUHEC)

1.2 Dates of current HRCEC approval

January 2024 – December 2026

1.3 Reporting period

January 2024 – December 2024

1.4 Lead Administrator of Ethics Committee

Name	Mrs	Fiona	Hewitt
	Title	First Name	Last Name

Phone   (+64) 3 423 0308)

E-mail   fiona.hewitt@lincoln.ac.nz

1.5 Chairperson (01/01/25 – 4/10/24)

Name	Mr	Grant	Tavinor
	Title	First Name	Last Name

Phone   (+64) 3 4230501

E-mail   grant.tavinor@lincoln.ac.nz

1.5.1 Chairperson #2 – (Deputy chair – stepped into acting chair role from 4/10/24 – 31/12/24)

Name		Caitriona	Cameron
	Title	First Name	Last Name

Phone   (+64) 3 4230328

E-mail   caitriona.cameron@lincoln.ac.nz

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SECTION 2:
CHAIRPERSON'S REPORT

2.1 The HRCEC requests that the Chairperson of the approved EC provide a report which includes the following information:

1. Please summarise the main progress, changes, and any issues for the committee from the last reporting year.

2. Topics often mentioned are:
   - workload
   - resources
   - changes to committee policies
   - changes to structure of review (e.g. introduction of low risk expedited review)
   - any other substantive changes which the committee or its Chair wishes to note institutional climate (e.g. undergoing restructure)
   - areas or kinds of review that were challenging to assess, and why
   - requests for advice to the HRCEC on how to review particular topics or matters

---

Committee composition

The most significant change was the resignation of Grant Tavinor, who had been a Lincoln University Human Ethics Committee (LUHEC) member for 15 years, and Chair for over 10 years. Grant resigned in July but remained in the role until early October to support the Committee while a successor was formally confirmed. After Grant's resignation, the Deputy Chair, Caitriona Cameron, was appointed Acting Chair and two Committee members, Paula Morrison and Paula Arbouw, were appointed interim co-Deputy Chairs.

The number of Committee members increased to 13 this year (11 in 2023). Having a strong base of active members has been essential not only to ensure sufficient input into application review, but also to support the leadership team. In 2024 there were several periods during which the Chair or Deputy Chair were absent on study, annual, or sick leave, and Committee members were able to cover some roles (for example, providing advice and training for student researchers) when neither the Chair nor Deputy was available.

Three new members were appointed at the start of the year: Dyanna Jolly, Harley Ogier and Oluwafemi Olajide. As well as being experienced researchers, these three brought expertise in areas particularly relevant to research reviewed by the Committee: indigenous planning, environmental management and impact assessment, cross-cultural research, and data security.

In September, a fourth new member joined the Committee: Hoani Smith (Ngāi Tahu) brought much needed guidance in tikanga Māori, as well in the discipline of exercise science. Hoani's appointment has filled a long-standing gap in Māori representation on the Committee. In addition, Merata Kawharu (Ngāti Whatua, Ngāpuhi), Deputy Vice-Chancellor Māori, has been appointed to the Committee for an interim period of a year from January 2025 to support Hoani and to provide advice and guidance on cultural aspects of specific LUHEC applications.

Hanley Chen resigned his role as a student representative after graduating but was reappointed as a staff Committee member after being employed as a lecturer at the University.

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There were several resignations /retirements. Due to workload pressures, Dyanna Jolly and Peter Tait resigned at the end of the year. Annu Mehta resigned as student representative after graduating and being employed at another institution. Caitriona Cameron will reach the end of her fifth term in January 2025 and will leave the committee.

As a result of the resignations/retirements and the change in the LUHEC Policy to require a lay Chair, the Committee recruited for several new positions in late 2024. A non-lay (Internal) Chair was appointed in early 2025, and University management overseeing the recruitment of a lay (External) co-Chair. Two new student representatives were appointed, to begin their roles in January 2025. In early 2025, negotiations began to fill the role of a health professional member, and recruitment started for general member vacancies.

Workload

The number of applications reviewed has continued to increase. Apart from 2019 (when 95 applications were reviewed), the LUHEC has typically reviewed 50-70 applications each year. In 2024, the Committee reviewed 80 full applications and received one Pilot Study notification. As well, the Chair, Deputy Chair and Secretary continued to manage a high number of inquiries and requests for advice from students and staff.

The increased number of applications put considerable pressure on Committee members, particularly in June/July and October/November. Typically, the LUHEC reviews 4-6 applications per month, but there were 12 in July and 18 in October, largely reflecting increased numbers from academic staff during non-teaching periods. To better manage the end of year workload, the Committee introduced a formal closedown period from mid-December to mid-January and improved communications to researchers to reduce the number of very late applications.

Actions in response to HRC feedback

Following requests from the Health Research Council as part of the accreditation process in 2023, the LUHEC addressed several action points:
- Recruited two Māori members to ensure more sustainable Māori membership.
- Instituted a lay Chair role
- Developed a risk-based review structure
- Clarified the meaning of scope and exemptions.

The LUHEC Policy was significantly revised to include these changes, along with other changes initiated by the Committee as part of ongoing reflection and improvement. (See section 3.)

Actions for 2025

A range of actions are planned for 2025 as a result of the Policy changes and other projects undertaken by the Committee in 2024. These include revising the application process in relation to risk-based review, and consultation with Māori; formalising new data security guidelines and aligning with the use of data management plans; adopting an online application form; and revising application forms to encompass these changes. The Committee also expects to further revise the LUHEC Policy to reflect the changes (e.g. sections 8.7 Te Tiriti o Waitangi and Māori research, and 8.11 Security, retention and destruction of data).

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SECTION 3:
POLICIES AND PROCEDURES

A.   CHANGES IN POLICIES AND PROCEDURES

3.1   Please provide details of any changes in EC policies, procedures or Ethics Application forms since the last report.

- Please attach any amended documents/procedures/policies
- For each change, please include the specific section and/or page number in the materials attached to this annual report.
- If there are no changes within the reporting period, please indicate "No changes" and proceed to Section 4.

The following changes were included in the revised LU Human Ethics Policy (attached) approved by the University Council in June 2024.

Section 4
Inclusion of detail from the Health Research Council Guidelines which have been followed by the LUHEC but not specifically included in the Policy document.

Section 4.4
Inclusion of requirement for a lay Chair, as requested by Health Research Council.

Section 6.1, 6.2
Clarify the meaning of 'exemptions' and 'scope', as requested by the HRC co-Chairs.

Section 6.3
Inclusion of risk-based review, as requested by Health Research Council.

Section 8.12
Clarification of Lincoln University restrictions on research involving human remains, tissue and bodily fluids, and explanation of compliance requirements.

Section 9.1.1
Change to responsibility for application for Honours dissertation applications; these must now be made by the examiner or supervisor.

Section 9.1.3
Clarification of requirement for manager to sign off applications for research by LU employees.

Section 9.2
Clarification of formal closedown period for the LUHEC from mid-December to mid-January.

Sections 6.5.4, 9.5, 9.6, 9.7
Additional post-completion reporting requirements for researchers and clarification of compliance procedures.

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SECTION 4:
COMPOSITION OF COMMITTEE AND MEMBERSHIP

TO NOTE:

1. Abbreviations:
   L = lay person
   NL = non-lay person

2. A "lay person" is a person who:
   - has no affiliation to the institution that sponsors, funds, or conducts research reviewed by that committee; and
   - is not a registered health practitioner, and has not been a registered health practitioner at any time during the five years preceding the date of their appointment; and
   - is not involved in conducting health or disability research, or employed by an organisation whose primary purpose relates to health and disability research; and
   - may not otherwise be construed by virtue of employment, profession, and relationship or otherwise to have a potential conflict of bias with the work of the committee.

3. Understanding 'qualified Health Practitioner':
   - Clinically trained: has completed the necessary education and training to work in their field (e.g., medical, nursing, allied health), but they are not currently engaged in the direct provision of healthcare services or clinical work. While they may still hold the qualifications and competence to practice, they are not actively using those skills in a clinical setting.
   - In active practice: is currently and regularly engaged in the practice of their healthcare profession. They should hold a current practising certificate (i.e. be both legally registered and engaged in ongoing professional activities that involve the provision of healthcare services).

4.1 List of EC members throughout the reporting period.

NOTE:

1. All members attending at least one meeting need to be listed. Please include both new and retired members.

2. An '*' after a name indicates Māori member (see definition at 4.6 below).

3. Gender is defined as per Statistics New Zealand guidelines (i.e., male, female, another gender, prefer not to say)

#	Name of member	Gender	Membership Category (L/NL)	Short biography of expertise and experience	How Appointed	Start - finish date	Number of meetings attended
1	**Dr Grant Tavinor (Chair)**	**M**	**NL**	**Philosophy of technology, the arts, media ethics**	**By Lincoln University Council on recommendation of the Vice Chancellor**	**23/08/2010 – 4/10/24**	**2**

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IEC Annual report form 2025

2	Caitriona Cameron (Deputy Chair) (Acting chair)	F	NL	Academic writing, English Language and communication skills	By Lincoln University Council on recommen dation of the Vice Chancellor	14/01/10 – 15/01/25 4/10/24- 15/01/25	5
3	Paula Morrison (interim deputy co-chair) (Acting co-Chair)	F	NL	Academic Quality and Policy Manager	By Lincoln University Council on recommen dation of the Vice Chancellor	14/06/19 – 04/10/24 – 15/01/25 15/01/25 – 3/10/25	3
4	Ben Sutton	M	L	Lawyers' ethics	By Lincoln University Council on recommen dation of the Vice Chancellor	24/07/18 -	2
5	Peter Tait	M	NL	Senior Research Officer Agribusiness and Economics Research Unit	By Lincoln University Council on recommen dation of the Vice Chancellor	20/10/17 – 01/01/25	4
6	Professor Derrick Moot	M	NL	Council Representative	By Lincoln University Council on recommen dation of the Vice Chancellor	13/05/22 -	4
7	Paula Arbouw (interim deputy co-chair) (Acting co-Chair)	F	NL	Marketing	By Lincoln University Council on recommen dation of the Vice Chancellor	24/08/22 – 04/10/24 – 15/01/25 15/01/25 - 3/10/25	5
8	Annu Mehta	F	NL	Student representative (Food and Sensory Science)	By Lincoln University Council on recommen dation of the Vice Chancellor	10/07/23 – 10/10/24	2
9	Hanley Chen Student rep Staff member	M	NL	Landscape Architecture	By Lincoln University Council on recommen dation of the Vice Chancellor	10/07/23 – 01/10/24 01/10/24 -	4
10	Dyanna Jolly	F	NL	Indigenous planning, environmental management, and impact assessment	By Lincoln University Council on recommen dation of the Vice Chancellor	15/01/24 - 01/01/25	3

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11	Oluwafemi Olajide	M	NL	Planning, and environmental management	By Lincoln University Council on recommendation of the Vice Chancellor	15/01/24 -	4
12	Harley Ogier	Pre fer not to say	NL	Computer science, writer, and researcher in the emerging field of machine behaviour	By Lincoln University Council on recommendation of the Vice Chancellor	15/01/24 -	5
13	Hoani Smith* (Ngāi Tahu)	M	NL	Māori rep, exercise physiology and load management	By Lincoln University Council on recommendation of the Vice Chancellor	01/09/24 -	2

4.2   No. of members in the following core membership categories.

Māori	Gender	L	NL	Total members
1	M	1	5	7
	F		5	5
	Prefer not to say		1	1
				13

4.3 Provide a short biography for each NEW member on the list.

#	Name of member	Short biography
	Dyanna Jolly	Geographer with a focus on Indigenous planning, environmental management, and impact assessment.
	Harley Ogier	Computer scientist, writer, and researcher in the emerging field of machine behaviour.
	Oluwafemi Olajide	Planning, and environmental management
	Hoani Smith	Māori representative and Specialist on exercise physiology and load management. Strength and conditioning coach.

4.4   Indicate all retirements / resignations of members within the reporting period.

Name of Member	Retirement / Resignation date
Grant Tavinor	04/10/24 (Resigned)
Annu Mehta	10/10/24 (Resigned)
Dyanna Jolly	01/01/25 (Resigned)
Peter Tait	01/01/25 (Resigned)

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4.5 **Include any additional comments specific to the list of membership.**

N/A

4.6 **Summary of experience and expertise of members.**

	Yes	No
Person with a recognised awareness of te reo Māori and the understanding of tikanga Māori (Māori member)	☒	☐
Person with experience and expertise in ethical and moral reasoning	☒	☐
Lawyer (in active practice)	☒	☐
Person from the wider community Annu Mehta, Hanley Chen and Oluwafemi Olajide have experience as ethnic minorities.	☒	☐
Person with experience and expertise in the design and conduct of intervention studies	☐	☐
Person with experience and expertise in the design and conduct of observational studies	☒	☐
Person with experience and/or expertise in the provision of health and disability services	☐	☐
Person with experience and expertise to review either qualitative or quantitative research	☒	☐
Person from student community	☒	☐
Other experience and expertise		

4.7 **If a category above is selected as 'No' please clarify why, and how this perspective has been accounted for in review:**

No intervention studies were undertaken by Lincoln University researchers in 2024. Dorothy Tavinor, a trained nurse, and health data manager at Ryman Health, acted as health consultant for any applications requiring expertise in health matters.

FOR HEALTH ECS ONLY

4.8 **For an EC that reviews health research, identify the members who are qualified health professionals and note their affiliations.**

	Name of qualified health professional	Affiliation
Clinically trained		
In active practice		

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4.9 **If there were limitations to the number of qualified health professionals (i.e., one category above was not retained), explain how the EC ensured that the review of health research was carried out appropriately.**

N/A

SECTION 5:
TRAINING FOR COMMITTEE GOVERNANCE

5.1   Specify the training undergone by new members.

Date	Details of training for new members
December 2023/January 2024	Induction for Dy Jolly, Olwafemi Olajide and Harley Ogier
31/10/2024	Induction for Hoani Smith

5.2   Specify any new or on-going training for EC members.

Date	Details of on-going training for EC members	No. of attendees
19/4/2024	In depth review and discussion of one application	10
14/6/2024	In-house training session: historical and philosophical background of IECs (Grant Tavinor; Aotearoa Research Ethics Committee video); data security for research (LU Records and Research Data Analyst)	10
26/7/2024	HRC Joint IEC online training day	3

5.3   Specify any new or on-going training for Chairs of the EC:

Date	Details of on-going training for Chairs

5.4   Specify any new or on-going training for members of the Ethics Secretariat (Team)

Date	Details of on-going training for Ethics Secretariat
26/7/2024	HRC Joint IEC online training day

5.5   If no training was undertaken, provide reasons below.

N/A

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SECTION 6:
OPERATIONS OF COMMITTEE

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A. MEETING QUORUM

NOTE:

- In the HRC Ethics Committee guidelines, quorum means at least half of the appointed members of the committee were present at the meeting.
- However, the HRCEC understands an EC may have additional criteria for meeting quorum at their institution.
- Please defer to your institutional policies when considering if quorum was reached at each meeting

6.1: Attendance Grid

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Meeting in quorate		Y		Y		Y		Y		N Cancelled	Y		
Māori member present		N		N		N		N			Y		
Total no. of members present		7		10		10		11			7		
No. of applications considered*		16		11		11		17			28		83

* Includes applications ratified at meetings; some applications ratified in February were received in 2023.

6.2 Define what 'quorum' is for your EC.

> Section 5.4 of LUHEC - The Committee quorum for any meeting is when a majority of the total membership (including either Chair or Deputy Chair) is present.

6.3 If a meeting was not in quorate (at quorum), please explain why and describe how the EC managed the inclusion of the member perspective not present, particularly prior to a final decision on an outcome being reached.

> N/A

B. ASSESSMENT TIME

6.4 Indicate the average assessment time for ethics approvals and provide an explanation for review timelines.

> Average = 39 days.
> 57 (of 74) applications were reviewed within the advertised review time frame of 6 weeks. Review times longer than 6 weeks occurred when applicants needed additional time to respond to Committee requests for further information.

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C. DELEGATION

6.5 Indicate the scope of the Chairperson's delegation to consider applications on behalf of the EC.

The Chairperson has delegated authority in relation to pilot study/focus group applications. Full applications require approval of the full Committee.

6.6 Indicate the scope of the Ethics Secretariat/Team/Office delegation to consider applications on behalf of the EC.

N/A

D. CONSULTATION OUTSIDE THE COMMITTEE

6.7 List and provide details of any occasions in which the EC has consulted with experts or groups outside the EC during the reporting period.

None

E. REVIEW OF APPLICATIONS

6.8 Summary of applications received by full EC.

No. of applications approved at first review	0
No. of applications approved subject to conditions	6
No. of applications where further information was requested prior to granting approval	73*
No. of applications deferred/asked to resubmit and subsequently approved	0
No. of applications currently seeking further information/deferred/asked to resubmit as at time of this report	1
No. of applications declined	0
No. of applications which do not require ethics committee approval	0
No. of applications withdrawn by researcher	5
No. of applications terminated by sponsor	0
No. of applications transferred to another EC	0
Total number of applications received by full EC	**79**

*Includes the 6 applications that were approved subject to conditions

6.9 Summary of applications received under expedited / low risk review.

No. of applications approved	1
No. of applications approved subject to conditions / seeking further information / pending / asked to resubmit	
No. of applications which do not require ethics committee approval	
No. of applications referred for full committee review	
No. of applications withdrawn by researcher	
No. of applications currently seeking further information/deferred/asked to resubmit as at time of this report	

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Total number of applications received under expedited / low risk review	1

6.10 Total number of applications received (combine the total number of applications in 6.7 and 6.8).

80

6.11 If any applications were declined briefly outline the reasons for declining approval for these applications.

None

6.12 If any applications were transferred to another EC, briefly outline the reason for the transfer.

N/A

F. REPORTING

6.13 Describe the requirements for researchers to report upon the status or outcomes of their research and how those reports are reviewed.

Under the Policy current until July 2024, researchers were required to report to the committee (a) any changes in methodology that were being proposed after approval; (b) any adverse events or unexpected circumstances during the research, and (c) at the conclusion of the field work component of the project to report that the field work had been completed and complied with the terms of the approval. Under the revised Policy, researchers are required to provide a more detailed post-completion report that includes a brief summary of findings and dates of research activities.

G. AUDIT

6.14 Describe any auditing of research undertaken by, or for, the EC.

The Committee conducts a yearly random audit of completed research projects. In 2024 this was not completed due to Chair illness.

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SECTION 7:
CULTURAL RESPONSE

A. RESPONSE TO CULTURAL ISSUES

7.1 **Briefly outline any challenges and/or successes the EC has with regard to researchers' consultation with Māori/whānau/iwi/hāpu.**

> With the appointment of Hoani Smith to the Committee, researchers will have greater opportunities to consult.

7.2 **Briefly outline any challenges and/or successes the EC has with regard to researchers' consultation with other cultural groups.**

> Researchers at Lincoln University represent a range of cultures and ethnicities and have a wealth of knowledge about their own communities. In research projects involving particular cultural groups, typically the researcher will be a member of that group; if not, they consult colleagues from that group.

7.3 **Briefly outline any challenges and/or successes the EC has with regard to ensuring the affected communities have a voice within their EC and how they have managed this challenge/achieved this success.**

> For several years the Committee has struggled to recruit Māori members. The appointment of Hoani Smith and Merata Kawharu this year has been a significant milestone.
> Many of the projects reviewed by the LUHEC are conducted outside Aotearoa New Zealand by researchers from a range of cultures and ethnicities, with participants from those cultures. Applications from, and engagement with, these researchers builds Committee members' understanding and knowledge.

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SECTION 8:
COMPLAINTS AND INCIDENTAL FINDINGS

A.   COMPLAINTS

8.1   List and provide details of any complaints received during the reporting period. Describe how the complaints were dealt with.

A complaint was received that an internal study conducted by the University had not been reviewed by the LUHEC and did not protect participant anonymity. The Deputy Chair discussed this with the lead researcher and formally reported the complaint to the Vice Chancellor. The Vice Chancellor directed that any future iterations of the project be subject to LUHEC review.

B.   UNEXPECTED EVENTS

8.2   List and provide details of any incidental findings/unexpected events that occurred during research within the reporting period. Describe how the events were dealt with.

None

C.   ASSOCIATED ETHICAL ISSUES

8.3   Describe in broad terms any issues your EC has encountered associated with research involving the following topics, and how these have been managed:

- Vulnerable populations (as per section 6 of NEAC Standards)
- Data pertaining to humans (including databanks)
- AI and/or machine-learning
- Intervention studies not related to health and disability research
- Research conducted overseas
- Other trends you believe are relevant/of interest

Data pertaining to humans:

Data security was a strong focus during 2024. In many applications, a number of weaknesses were apparent, particularly poor understanding of data security/privacy issues and the security challenges inherent in cloud-based storage. The HEC was also aware of the need to improve its own understanding of data security and to develop more explicit requirements and guidance for applicants. The Committee sought expert advice from Talia Skinner, the Lincoln University Records and Research Data Analyst.

In conjunction with LU Information and Technology Services data security staff, Talia developed a risk/security matrix which outlines data storage and retention protocols for six risk levels: Public, Private, Sensitive, Sensitive-Cultural, Very Sensitive, and Very Sensitive-Cultural. Talia will work with the Committee in 2025 on updating the LUHEC Policy and creating data security guidance for applicants, including advice on

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appropriate recording devices, data storage, and data transmission between devices. The Committee will integrate the University's Data Management Tool (DMP) into the LUHEC application process and review the implications of the data security risk matrix for the HEC risk-based review process.

AI:

The Committee reviewed several applications in 2024 that proposed using AI transcription software. The advice to applicants was based on advice from the Lincoln University Records Management Office described above in relation to data security. The LUHEC also had discussions with Inclusive Education staff about the use of AI transcription (via Otter) to support students with disabilities. Although this use is not within the HEC's scope, there are common areas of interest.

Collaborative research with tangata whenua:

The Committee has been working with a group of LU researchers on how ethical issues could be addressed in a way that balances tikanga and 'Western' human ethics processes. Long-term collaboration is planned between the researchers and Te Tāwharau o Te Whakatōhea. Both the Committee and the researchers regard this as an important area for ongoing discussion; as the researchers point out, "the developing relationship between LU and Te Whakatohea provides a unique opportunity to establish a template for IP/mātauranga sharing".

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SECTION 9:
DETAILS OF APPLICATIONS

NOTE:

1. Please provide details of all protocols considered by the EC in the reporting period.

2. In the "outcome of first review" and "status at time of report" columns, please use the categories (as indicated in 7.6 and 7.7) "Approved/ Approved subsequent to conditions/ Declined/ Deferred/ Transferred".
   (For outcome category "transferred", please include the name of the committee the proposal was transferred to or from.)

Reference no.	Protocol title	Name of principal investigator	Date received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-01	The textural dynamics of plant based milks and their effects on sensory perception.	Olivia Goodwillie	5-Dec-23	Not reviewed	Withdrawn prior to review	Withdrawn 21/02/24	N/A	No	
HEC2024-02	Consumption Motives for Luxury Fashion Products: Effect of Social Comparison and Vanity on Purchase Behaviour	Samantha White	1-Feb-24	15-Feb-24	Deferred	Approved		No	
HEC2024-03	Pūharakekenui 'Living Lab' AR Project	Gillian Lawson	12-Feb-24	19-Feb-24	Deferred	Approved		No	
HEC2024-04	An exploration into living in connection with food at the rural-urban fringe in Ōtautahi Christchurch.	Marcus Robinson	16-Feb-24	4-Mar-24	Deferred	Approved		No	
HEC2024-05	New Zealand Case Studies on Contemporary Marketing Topics	Paula Arbouw	29-Feb-24	14-Mar-24	Deferred	Approved		No	
HEC2024-06	Evaluating entrepreneurial capabilities of rice farmers in Thailand	Wacharat Thomthong	2-Mar-24	18-Mar-24	Deferred	Approved with conditions		No	
HEC2024-07	Enhancing marketing agility in Chinese B2C e-commerce SMEs through AI-powered integration techniques	Pu Luoxi	6-Mar-24	21-Mar-24	Deferred	Approved		No	

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-08	MKTG301 Class Research Project	David Dean	8-Mar-24	11-Mar-24	Approved by Chair (no review)	Approved		No	
HEC2024-09	Farm assurance and accreditation schemes participation survey	Meike Guenther	14-Mar-24	28-Mar-24	Deferred	Approved	4-Mar-25	No	
HEC2024-10	Assessing New Zealand Farmers' Understanding and Capacity for Transformational Adaptation in response to Climate Change Challenges in Agriculture	Sara Rauf	19-Mar-24	2-Apr-24	Deferred	Approved		No	
HEC2024-11	Post Qualification Outcomes Survey (Renewal) (Prior to 2019 was called the Graduate Destinations Survey)	Jude Wilson	20-Mar-24	3-Apr-24	Deferred	Approved		No	
HEC2024-12	Impact of agricultural cooperative membership on household food security in Mchinji district, Malawi	Bertha Mwalabu	26-Mar-24	11-Apr-24	Deferred	Approved	23-Aug-24	No	
HEC2024-13	What's happening to our lake? Characterizing the development of a high mountain Kapuche Lake in Nepal	Roshni Gurung	5-Apr-24	19-Apr-24	Deferred	Approved		No	
HEC2024-14	Cardiac Screening of the New Zealand Elite Police Tactical Team	Mike Hamlin	10-Apr-24	24-Apr-24	Deferred	Approved		No	
HEC2024-15	Post-disaster regeneration projects and their value creation: A case study of community perceptions of regeneration projects post-earthquakes in Ōtautahi, Christchurch.	Sundeep Daggubati	12-Apr-24	26-Apr-24	Deferred	Approved		No	
HEC2024-16	Young people and future generations in Aotearoa New Zealand environmental policy and planning.	Angie Nelson	22-Apr-24	6-May-24	Deferred	Approved	4-Mar-25	No	
HEC2024-17:	Making sense of collective action in the hill and high country environment in New Zealand; Initiating Participatory Action Research	Mike Bennett	28-Apr-24	13-May-24	Deferred	Approved		No	

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-18	Environmental policy and planning communication in rural Aotearoa New Zealand with a focus on Te Tai Tokerau Northland	Kaya Tobin	2-May-24	16-May-24	Deferred	Approved	26-Sep-24	No	
HEC2024-19	Residential construction and disruptive events in the greater Christchurch region: A study of the factors affecting the interplay between timber and steel framing	Himali Wijesinghe	3-May-24	17-May-24	Deferred	Approved	23-Aug-24	No	
HEC2024-20	Rangatahi Māori and Local Government Planning and Decision-making in Aotearoa	Alice Docking	9-May-24	23-May-24	Deferred	Approved		No	Mana whenua – Māori with territorial rights and authority over land or territory. "Power associated with possession and occupation of tribal land". The research kaupapa was determined following multiple kōrero with rangatahi Māori from my time on the ECan Youth Rōpū raising questions on local government processes. The research aims and questions were discussed over several hui with rangatahi Māori connected to the ECan Youth Rōpū.
HEC2024-21	Establishing social licence to operate grid-scale solar farms in New Zealand: An analysis of community perceptions in Canterbury	Portia Rose Sutherland	10-May-24	27-May-24	Deferred	Approved		No	
HEC2024-22	Exploring Action Bias in the Pursuit of Innovation	Faith Jeremiah	23-May-24	6-Jun-24	Deferred	Approved		No	
HEC2024-23	The Endless Ascent: High Achievers and Their Irrational Rationale	Faith Jeremiah	23-May-24	6-Jun-24	Withdrawn after 1st review	Withdrawn	N/A	No	
HEC2024-23A	Exploratory Insights into High Achievers' Behaviours: A Sensemaking Approach	Faith Jeremiah	24-Jun-24	8-Jul-24	Deferred	Approved		No	
HEC2024-24	Lincoln University Student Diversity Survey 2024	Paul Rutherford	4-Jun-24	18-Jun-24	Deferred	Approved	05-Sep-24	No	A draft copy of the survey has been shared with Te Awhioraki and Office of Maori and Pasifika Development Their advice has been incorporated into the survey.

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-25	The future of the Residential Red Zone: Understanding young people's hopes and visions of the red zone.	Raven Cretney	5-Jun-24	20-Jun-24	Deferred	Approved		No	This research workshop does not aim to specifically engage with Māori partners however the themes and findings will be relevant to the research project which has been developed in consultation with Ngāi Tūāhuriri, mana whenua in the RRZ. The consultation has been led by Dr John Reid (Ngati Pikiao, Tainui), a key researcher in, and advisor to, the programme. John has worked for years at the Ngāi Tahu Research Centre. He has been appointed by Ngāi Tūāhuriri to the transitional board for co-governance of the Avon Ōtākaro River Corridor (AORC). Dr Reid's role on the board is to channel mana whenua insights and future visions into the formation of plans for the development of the RRZ – particularly in relation to the development of blue-green infrastructure. The research team will work with Dr Reid to ensure any relevant findings are developed and shared in a culturally appropriate manner.
HEC2024-26	Demand for hyper-transparency: Exploring consumer's attitudes towards the validation of credence attributes along the food supply chain.	Bryan Le (ANH PHUC LE)	7-Jun-24	21-Jun-24	Deferred	Approved		No	
HEC2024-27	Co-creating Diversity-Equity-Inclusion (DEI) policy in Tertiary Education	Mohini Vidwans & Nazmun Ratna	10-Jun-24	24-Jun-24	Deferred	Approved		No	
HEC2024-28	The impact of processing factors on the sensory properties of edible native New Zealand plants for food applications	Elizabeth Ham	13-Jun-24	27-Jun-24	Deferred	Approved		No	The research team has previously consulted with Dr. Nick Roskruge, who is an expert in New Zealand native plants and is chairman of Tahuri Whenua, a Maori horticultural collective. He has given advice on how to conduct this research project in a way that is culturally respectful towards Māori, including how to forage for these plants in accordance with Tikanga Māori.

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Reference no.	Protocol title	Name of principal investigator	Date received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-29	Enhancing Potato Farming in Bhutan: Improving Market Access, Sustainability, and Supply Chain Efficiency	Han Sun and Erdal Karacan	14-Jun-24	1-Jul-24	Deferred	Approved		No	
HEC2024-30	Role of FinTech on Financial Inclusion in Rural Thailand	Nittaya Khwankaew	18-Jun-24	2-Jul-24	Deferred	Approved		No	
HEC2024-31	LASC 415 / 612 Landscape Architecture Professional Practice	Don Royds	19-Jun-24	3-Jul-24	Approved	Approved		No	
HEC2024-32	Bioprotection for foliar diseases and disorders of radiata pine programme - 2024	Helen Whelan	24-Jun-24	8-Jul-24	Deferred	Withdrawn by applicant 14/02/25		No	
HEC2024-33	Eco-Friendly Chew Cards – Student Identification Trial	Katie Pitt	5-Jul-24	19-Jul-24	Deferred	Approved	4-Mar-25	No	
HEC2024-34	The Role of Dairy Farmers in Driving Supply Chain 4.0 Adoption : A Case Study from the New Zealand Dairy Supply Chain	Diyalagoda Pathirathnahalage Manju Prasanna	9-Jul-24	24-Jul-24	Deferred	Approved		No	
HEC2024-35	Drinking a Global Culture: The Intersection of Globalisation, Craft Beer Industry and Consumers in Chengdu, China	Xiao Xu (Sean)	11-Jul-24	26-Jul-24	Deferred	Approved		No	
HEC2024-36	CuttingGardens sustainable conferencing model	Dr Trudie Walters	12-Jul-24	26-Jul-24	Deferred	Approved	04-Nov-24	No	
HEC2024-37	Population trends, habitat use and factors impacting bird populations utilising mangrove ecosystems in and around Meinmahla Kyun Wildlife Sanctuary, Myanmar	Phyo Win	15-Jul-24	30-Jul-24	Deferred	Approved	04-Feb-25	No	
HEC2024-38	Farmer feedback on a prototype bulk milk-based indicator tool	Racheal Bryant	16-Jul-24	30-Jul-24	Deferred	Approved		No	
HEC2024-39	Association between Sedentary Behaviour, Sleep Patterns, and Health Indicators in New Zealand Primary School Children	Yixin Zhang	17-Jul-24	31-Jul-24	Deferred	Approved		No	

Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-40	Learning experience in landscape architecture site visits using the Peek app	Gill Lawson, Nada Toueir, and Tracy-Anne De Silva	23-Jul-24	2-Aug-24	Approved	Approved		No	
HEC2024-41	From roots to fruits: the integration of mahika kai and agroforestry	Hiraina Tangiora, Jorie Knook, Chrystal Te Ohorere O'Connor	24-Jul-24	7-Aug-24	Deferred	Approved		No	Hiraina is a descendant of the Ngāti Kahungunu (ki Heretaunga) and Rongomaiwahine. Chrystal is a descendent of Ngāti Hauā and Ngāti Paoa. Their own connections and knowledge of Te Ao Māori (the Māori worldview) provides them with a solid understanding of consultation processes with Māori. If further consultation is needed, the project team will approach Te Manutaki for their advice.
HEC2024-42	Exploring Agribusiness Partnership Complexity: The case of the Māori kiwifruit growers (PhD)	Hiraina Tangiora	26-Jul-24	9-Aug-24	Deferred	Approved		No	I am a descendant of the Ngāti Kahungunu (ki Heretaunga) and Rongomaiwahine tribes of Aotearoa. I have worked with Māori in the food and fibre sector over the last eight years, including five years at Zespri. As such, I have a host of existing relationships in the kiwifruit industry. My associate supervisor, Prof. Hirini Matunga, is a descendant of Ngāi Tahu and has over 30 years' experience as a Māori researcher. Between the two of us, our connections with Māori, and our own knowledge of Te Ao Māori (the Māori worldview), we have a solid understanding of appropriate consultation processes with Māori. So far, I have had monthly meetings with the General Manager of MKGI throughout the development of my research proposal.
HEC2024-43	The uniqueness of the Leisure Marching Nationals	Dr Trudie Walters	30-Jul-24	13-Aug-24	Deferred	Approved		No	

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-44	Exploring an Integrative Design Methodology to Make the Invisible Visible in Whakaraupō Lyttleton Harbour	Gillian Lawson	31-Jul-24	14-Aug-24	Deferred	Approved		No	We are meeting on a regular basis with Paul Dahl and John Kottier from Ngāti Wheke at Rāpaki (28 March, 10 July, 23 July, 09 August 2024) to co-organise the collaborative workshop at the Rāpaki marae on 05-06 September 2024.
HEC2024-45	Activating Māori Elements in Wine Label Design – Perceptions from Wine Producers	Hiraina Tangiora	6-Aug-24	21-Aug-24	Deferred	Approved		No	
HEC2024-46	Economic Assessments of Production Systems, Farmer Groups, and Biosecurity Practices: Insights from Native Chicken Production in Thailand	Nachapol Kalpravidh	14-Aug-24	27-Aug-24	Deferred	Approved		No	
HEC2024-47	From Screen Time to Green Time——Overcoming potential nature deficit disorder in young adults using technology in Aotearoa NZ	Zhexi Zhang	19-Aug-24	2-Sep-24	Deferred	Approved with conditions		No	
HEC2024-48	Mahere Atamai: New crops for a climate-resilient, diverse, and vibrant Māori economy.	Meike Guenther	20-Aug-24	3-Sep-24	Approved	Approved	4-Mar-25	No	
HEC2024-49	Impact of agricultural cooperative membership on Cambodian rice farm outcomes	Roeun Narith	26-Aug-24	9-Sep-24	Deferred	Approved	4-Mar-25	No	
HEC2024-50	Key success factors for survival and resilience in small rural farm-support agribusiness	Dan Smith	6-Sep-24	20-Sep-24	Deferred	Approved		No	
HEC2024-51	Demand for hyper-transparency: Exploring consumer's attitudes towards the validation of credence attributes along the food supply chain.	Bryan Le (ANH PHUC LE)	13-Sep-24	27-Sep-24	Deferred	Approved		No	
HEC2024-52	Te mauri-ora o te wai and a healthy future for Te Whakatōhea - Ngā Kanohi Kitea Community Advancement Fund	Richard Morris, Shannon Davis & Pablo Gregorini	22-Sep-24	7-Oct-24	Deferred	Awaiting resubmission to address concerns		No	

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-53	Apparel waste is the 2nd largest polluter in the world. Evaluating the impact of recycling used wool garment products on sustainable fashion practices in New Zealand.	Thilina Weerawardana	23-Sep-24	7-Oct-24	Deferred	Approved			
HEC2024-54	Food Product Innovation (FOOD604)	Dr Mirja Ahmmed	23-Sep-24	8-Oct-24	Approved	Approved			
HEC2024-55	Social media and food influencers	Meike Rombach & David Dean	27-Sep-24	14-Oct-24	Deferred	Approved			
HEC2024-56	Flower buying and gift giving	Meike Rombach & David Dean	2-Oct-24	16-Oct-24	Deferred	Approved			
HEC2024-57	The factors behind discontinuing six sigma deployment in the New Zealand manufacturing industry.	Jana Gunawardana	7-Oct-24	21-Oct-24	Deferred	Approved			
HEC2024-58	Weathering the Storm: New Zealand Farmer resilience to Climate- related Disasters	Nic Lees & Sharon Lucock	7-Oct-24	21-Oct-24	Deferred	Approved			
HEC2024-59	Migrant leisure and identity	Trudie Walters	14-Oct-24	28-Oct-24	Deferred	Approved			
HEC2024-60	Evaluating student and working professional's attitudes and learning at a soil judging event	Carol Smith	15-Oct-24	25-Oct-24		Approved with condition			
HEC2024-61	Understanding the sensory profile of New Zealand walnut kernels	Shaoyang Wang	14-Oct-24	29-Oct-24	Deferred	Approved	4-Mar-25		
HEC2024-62	Exploring the effect of marketing advertising appeals and priming techniques on influencing prosocial behaviour.	Maryam Khalil, Meike Rombach & Paula Arbouw	17-Oct-24	1-Nov-24	Deferred	Approved			
HEC2024-63	University's Initiative in Establishing a Foundation for the Development of Online Learning Environment: An Examination of Online Learning Designers and Developers' Experiences	Karna Rana, David Dannenberg & Terry Meechang	23-Oct-24	7-Nov-24	Deferred	Withdrawn by applicant 14/02/25	N/A		

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-64	What are people's sentiments and expectations about the cost of living in New Zealand?	Puneet Vatsa	24-Oct-24	7-Nov-24	Deferred	Approved			Recognizing that some economic challenges may uniquely affect Māori communities, I aim to incorporate this understanding sensitively in the survey questions. I contacted TeArohanui Edwards and Sheree Jahnke-Waitoa to seek guidance on the survey. TeArohanui indicated that her office is not responsible for providing advice or approval on your survey design or methodology and strongly suggested that I go back to my department for guidance. Then, I contacted Hiraina Tangiora, who promptly provided feedback on the survey. She stated, "As far as I can reasonably ascertain, this survey doesn't appear to cause offence to Māori". She provided other comments, all of which were addressed.
HEC2024-65	Outdoor fitness equipment use in NZ	Tom Kavanagh	24-Oct-24	6-Nov-24	Deferred	Approved			
HEC2024-66	Transitioning from Conventional Farming to Regenerative Agriculture in New Zealand: 28/02/2025 Challenges, Impacts, and Opportunities	Wei Zhang	24-Oct-24	8-Nov-24	Deferred	Approved			
HEC2024-67	Tourists' Preparedness Behaviours in Natural Hazards Context: A Case Study of Chinese visitors in Aoraki/Mount Cook National Park	Yanan Fan	25-Oct-24	12-Nov-24	Deferred	Approved with conditions			
HEC2024-68	Understanding the sensory profile of Money Maker tomatoes under biotic and abiotic stresses.	Romy Moukarzel	28-Oct-24	12-Nov-24	Deferred	Withdrawn by applicant 28/02/25	N/A		
HEC2024-69	Different Types of Sustainable Food Labels and Willingness to Pay: A Study of Consumer Demographic Factors	Dongxiang Zheng	29-Oct-24	14-Nov-24	Deferred	Approved			
HEC2024-70	What's in it for me? Perceptions of recent graduates and employers of two tertiary agribusiness programmes in New Zealand	Sharon Lucock & Nic Lees	30-Oct-24	14-Nov-24	Deferred	Approved			

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Reference no.	Protocol title	Name of principal investigator	Date Received	Date of first review	Outcome of first review	Status at time of report	Date of final outcome	Indicate if HRC funded	Describe any consultation undertaken with relevant communities.
HEC2024-71	GNSS usage on kea: Avian GNSS telemetry questionnaire	Jodanne Aitken & Maximilian Hanschmann	30-Oct-24	18-Nov-24	Deferred	Approved			
HEC2024-72	Sacrifice and prestige – student athletes and 1st XV rugby in New Zealand secondary schools	Thomas Kavanagh	31-Oct-24	19-Nov-24	Deferred	Approved			
HEC2024-73	Climate Change and Adaptation in Mountain Tourism: A case study of the mountaineering community in Sagarmatha National Park, Nepal.	Fenchoke Sherpa	31-Oct-24	19-Nov-24	Deferred	Approved			
HEC2024-74	Evaluating the operating system for urban parks: A Canterbury case study	Josie McNee	30-Oct-24	18-Nov-24	Deferred	Approved			
HEC2024-75	Enhancing tea smallholder sector in Sri Lanka: Improving production efficiency and resilience to climate change	Prabodha Rathnayaka	5-Nov-24	22-Nov-24	Deferred	Approved			
HEC2024-76	Non-market Valuation and Pro-environmental Behaviour of Local People in Inle Lake Wetland, Myanmar	Nang Ei Monn The	6-Nov-24	22-Nov-24	Deferred	Approved			
HEC2024-77	Exploring Students' Preferences for Optimal Education	Ani Kartikasari	18-Nov-24	2-Dec-24	Deferred	Approved			
HEC2024-78	Single Botanical Distillation to Optimise the Flavour and Aroma of Gin	Keiyu Shibata	19-Nov-24	4-Dec-24	Deferred	Approved			
HEC2024-79	Texture-Modified Foods with Hydrocolloids for Dysphagia: Optimizing Sensory Properties and 3D Printability	Dhaval Patel	20-Nov-24	4-Dec-24	Deferred	Approved			
HEC2024-80	Level and rate of adopting new mitigations	Richard McDowell	29-Nov-24	13-Dec-24	Deferred	Approved			
PS2024-01	Pro-environmental behaviour and non market valuation of local people in INLE Lake Wetland, Myanmar	Nang Ei Mon The	14/3/2024	18/3/2024	Approved	Approved			

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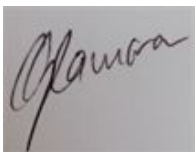| SECTION 10:
DECLARATION |
|:---:|

Declaration by EC Chairperson

Name of EC: Lincoln University Human Ethics Committee (LUHEC)

I declare for the above-named EC that:
- the information supplied on this report and in any attachment(s) is true and correct; and
- for the period to which this report relates, the EC has operated in accordance with relevant Guidelines and Legislation.

Name: Caitriona Cameron

Signature:

Date: 06/05/25

Declaration by Head of Organisation with Primary Responsibility for the EC

Name of EC: Lincoln University Human Ethics Committee (LUHEC)

Name of Organisation: Lincoln University

On behalf of the above-named organisation, and in relation to the above-named EC, I declare that:

- I am duly authorised to sign this declaration;
- the information supplied on this form and any attachment(s) is true and correct;
- the EC is adequately resourced and maintained;
- for the period to which this form relates, the organisation ensured that the EC's Terms of Reference included information on the:
  - scope of its responsibilities,
  - relationship to non-affiliated researchers,
  - accountability,
  - mechanisms of reporting, and
  - remuneration (if any) for members;
- the organisation accepts legal responsibility for decisions and advice received from the EC; and
- EC members are indemnified.

Name:

	Title	First Name	Last Name

Position:

E-mail:

Signature: **Date:**

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Thanks for completing the annual report.

Vice-Chancellor's Office

Human Ethics Committee, membership

Author/s: Fiona Hewitt

Date: 7th May 2025

SLT Authoriser: Vice Chancellor/Provost

Following the appointment of 5 new members at the April meeting and notification that Derrick Moot's term on the HEC as Council representative has come to an end the list below is the full membership of the LUHEC as at 7th May 2025.

#	Name of member		Membership Category (L/NL)	Short biography of expertise and experience	Appointment details
1	**Dr Trudie Walters**	**Non-Lay co-chair**	**NL**	**Senior lecturer Department of Tourism, Sport & Society – Specialises in events and leisure: Contributions of, practice of and teaching and research of leisure events.**	**28/04/25 – 28/04/28**
2	**Paula Morrison**	**General member** **(interim deputy co-chair)** **(Acting co-Chair**	**NL**	**Academic Quality and Policy Manager**	**14/06/19 – 21/05/27** **04/10/24 – 03/04/25 (renewed to 03/10/25)** **15/01/25 - 28/04/25**
3	**Dr Paula Arbouw**	**General member** **(interim deputy co-chair)** **(Acting co-Chair**	**NL**	**Senior Lecturer Department of Agribusiness and Markets – background in sustainable and ethical issues affecting marketing at a consumer and organisational level.**	**24/08/22 – 24/08/25** **04/10/24 – 15/01/25** **15/01/25 - 3/04/25**
4	**Ben Sutton**	**General Member**	**L**	**External lawyer**	**24/07/18 – 24/07/27**
5	**Oluwafemi Olajide**	**General Member**	**NL**	**Senior Lecturer – Department of Environment Management. Experience in the multidisciplinary areas of planning, and environmental management.**	**15/01/24 – 15/01/27**
6	**Harley Ogier**	**General Member**	**NL**	**Lecturer – School of Landscape Architecture. Computer science, writer, and researcher in the emerging field of machine behaviour.**	**15/01/24 – 15/01/27**
7	**Hanley Chen**	**Student rep**	**NL**	**Lecturer – School of Landscape Architecture. Specialises in Landscape Performance**	**10/07/23 – 01/10/24**

		General Member		**Evaluation and Evidence-Based Design, focusing on better understanding the actual performance of built environments.**	**01/10/24 – 01/10/27**
8	**Hoani Smith**	**General Member – Māori representative**	**NL**	**Lecturer – Department of Tourism, Sport & Society. Specialises in exercise physiology and load management.**	**01/09/24 – 01/09/27**
9	**Merata Kawharu**	**General member – early career mentor for Hoani Smith (12-months)**	**NL**	**Deputy Vice Chancellor – Māori. Māori Social Science researcher and academic.**	**15/01/25 – 15/01/26**
10	**Pru Steinerts**	**Student representative**	**NL**	**Current PhD candidate (FESD) with an extensive career in government, universities and industry. Experience in managing ethical behaviour and processes including conflicts of interest and managing risks.**	**15/01/25 – 15/01/28**
11	**Himali Wijesinghe**	**Student representative**	**NL**	**Current PhD candidate (FAGCM), Quality specialist with experience in collaborating with diverse backgrounds, ethical behaviour and cultural respect.**	**15/01/25 – 15/01/28**
12	**Dr Claire Beattie**	**General Member**	**NL**	**Senior Lecturer: Experienced qualitative researcher – Management accounting, agribusiness and financial literacy.**	**07/05/25 – 06/05/28**
13	**Nazmun Ratna**	**General Member**	**NL**	**Assoc.Prof: Development economist – social diversity, institutions, gender, agri-food economics and sustainable development.**	**07/05/25 – 06/05/28**
14	**Dr Thomas Kavanagh**	**General Member**	**NL**	**Lecturer: Sport sociologist with an interest in issues of gender and sub-cultures within sporting environments. Experience in qualitive methodologies, using ethnography, autoethnography**	**07/05/25 – 06/05/28**
15	**Himasha Gunasekara**	**General Member**	**NL**	**Education Designer (LTL): Experience in tertiary teaching, research and educational technologies using both qualitative and quantitative research.**	**07/05/25 – 06/05/28**
16	**Dr Melanie Betts**	**Health Representative**	**NL**	**General practitioner – Student Health and Support Services**	**07/05/25 – 06/05/28**

LINCOLN UNIVERSITY
TE WHARE WĀNAKA O AORAKI

Vice-Chancellor's Office	Version: 1.0
Biocompliance report for Council	
Author/s: Biocompliance Manager	
SLT Authoriser: Executive Director, People, Culture and Wellbeing	Date: 21/05/2025

1. Purpose

This report provides an overview of the period 1 November 202 – 31 April 2025 in relation to Biocompliance:

- activities carried out in University Containment Facilities (MPI 1421)
- most recent MPI Audit report
- new EPA Approvals
- new Permissions under the Biosecurity Act
- new processes for managing human health risks for research activities

2. Content

1. **Appendix 1** – MPI Audit Report PBV/1421/2025/01

3. Recommendations

That Council:

1. remains aware of activities undertaken to eliminate the level of reputational and financial risk that would result from a breach of containment or other critical non-conformance in our Containment Facilities, along with additional compliance requirements for LU research activities.
2. **NOTES** the comments from the MPI auditor re the risks of the potential loss of a central delivery point for inwards goods to the campus, with reference to biosecurity risk items. In the interim a process for maintaining a central delivery point has been documented in the Property Services Change Proposal.

4. Executive Summary

This report outlines the activities and progress being made to address and manage areas of risk related to teaching and research compliance under the Biosecurity Act 1993, HSNO Act 1996, and Health and Safety at Work (Hazardous Substances) Regulations 2017.

5. Resource Implications

Reinstating a Waterways Laboratory on campus will require it to be registered as a PC2 facility to accommodate the range of biosecurity risk goods the lab handles. This includes water and cyanobacteria imported under MPI permits from Antarctica that are also subject to HSNO Approvals, and future receipt of water from the Waikato River that is currently subject to a

Controlled Area notice under the Biosecurity Act and for which the university has sought and been granted a CTO Permission. The Biocompliance Manager is assisting the Waterways Director and the Property Group with the structural compliance requirements for fitting out a PC2 laboratory.

6. Strategic and Policy Framework Implications

Strategic alignment with priority objective areas in Lincoln University Strategy 2019-2028	Goal **1**	A distinctive Aotearoa New Zealand end-to-end student experience	☑
	Goal **2**	Improved assets and sustainable operating models	☑
	Goal **3**	A culture which stimulates and inspires staff and students	☑
	Goal **4**	A world-class research and teaching precinct	☑
	Goal **5**	An organisation focused on meaningful partnerships	☑
	Goal **6**	Facilitating Growth	☑

Strategic Alignment

(Guideline: explain how decision will support the goal identified above)

This report supports the new Lincoln University Strategy by highlighting risks for the goal of a world-class teaching and research precinct, and the steps being taken to manage those risks and support meaningful partnerships.

Policy Consistency

Consistent with the University's Plans and Policies (primarily the Biosafety and Biosecurity Policy, Farms Biosecurity Policy and Procedure, External Research Funding Policy).

7. Next Steps

- Complete updates of new processes and incorporate these into the Containment Manual, submit to MPI for approval.

- Develop Containment Facility induction training videos to accompany the six biosafety assessment modules on Akoraka/LEARN.

- Progress final draft of HSNO mega-Approval application internally for eventual submission to the EPA.

- Continue review of research activities under active existing HSNO Approvals and verify all genetic modifications are within the scope of those Approvals.

- Close out internal audit corrective actions.

- Work with RMO and Post-Graduate Director to ensure capture of any research activities involving avian subjects and complete biosafety/biosecurity documentation and processes as per MPI guidelines for our staff and students in preparation for arrival of H5N1 avian influenza to New Zealand.

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Lincoln University Containment Facilities

Lincoln University operates an MPI-registered Containment Facility (1421) to conduct research using various restricted biological products and organisms as defined by the Biosecurity and HSNO Acts. The facility allows research activities using low risk genetic modification, new organisms to New Zealand, unwanted organisms, Risk Group 2 pathogens, and restricted biological products to take place. The University is also a Controlled Area for Kiwifruit Plant Material under the Biosecurity Act.

The Containment Facility is a combination of specific, secure University labs housed in Waimarie, RFH, the Biotron, and JML. Lincoln Agritech also operates a PC2 lab in the NRE building as part of the University's registered facility.

Under section 39 of the Biosecurity Act 1993, Lincoln University is approved as a containment and transitional facility (ATF #1421) in accordance with the requirements of the relevant MPI and EPA standards. Under section 40 of the Biosecurity Act, the University (corporate entity) is approved as an Operator of the facility and, as such, is primarily responsible and accountable for the facility, compliance with the relevant approvals and all activities involving regulated organisms and risk goods undertaken in association with it. It is a legal requirement to have an approved Operator. The delegated Facility Operator (DFO) with day-to-day operational responsibilities for the facility is the Bio-compliance Officer. The Bio-compliance Manager reports to the Executive Director, People, Culture and Wellbeing**,** research issues and breaches are reported to the Provost, while ultimate responsibility for the Facility sits with the Vice Chancellor.

Audits

The Facility Operator conducts internal audits of all Containment Laboratories at six-monthly intervals to tie in with the six-monthly external audits by MPI, the regulator under the Biosecurity and HSNO Acts.

Internal audits cover structural requirements, signage, confirmation of user access authorization, checks that documented processes in the Quarantine and Containment Manual are being followed, track and trace of incoming risk items received in the previous 6 months, verification of autoclaves used to dispose of risk waste, and a review of activities under Approvals and Permissions. Corrective actions from internal audits are provided to the relevant Lab Manager to close out.

The MPI auditor meets with the Facility Operator and reviews the following:

- Assurance internal audits have been conducted, and corrective actions raised and closed.
- Internal records of any issues or incidents that may compromise containment.
- Current HSNO Approvals and CTO Permissions.
- Permits to Import held by the University, and adherence to any conditions listed on the permits.
- Records of incoming risk items under Permits to Import and Movement Authorities.
- Identification, Traceability and Management of risk items within our laboratories.
- Disposal processes for risk items and verification records for autoclaves.
- Training records for authorized users and Property Services personnel.

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MPI Audit

The 6-monthly MPI Audit took place on 26 March 2025, outcome is either Acceptable or Non-Acceptable. We received an Acceptable outcome with no non-compliances. The full verification report is appended (Appendix 1).

Definitions

Acceptable	Where the Animal Products Officer (or Biosecurity Inspector) is satisfied that the operator is substantially complying with requirements; and where there have been any departures from regulatory requirements, that the operator's corrective actions have been, or are being, applied appropriately and effectively.
✳	Departures from regulatory requirements, identified by the Animal Products Officer (or Biosecurity Inspector), are to be transferred to the operator's issue management system for resolution. (Key Topic / Non-compliance)
Unacceptable	Where the Animal Products Officer (or Biosecurity Inspector) has determined that the operator is not in substantial compliance with regulatory requirements; evidenced by inadequate operator controls. (Key Issue / Non-compliance)

During the entry meeting with the MPI auditor the standard general discussion was held regarding any changes to the facility structure or processes. The prospect of losing a central delivery location for inwards goods at the university and the implications for managing movement of risk items (GMOs, Unwanted Organisms, Risk Group 2 Microorganisms, Biological Products) were noted during this time. The auditor has documented their view of the risk on page 3 of the Audit Report.

The Property Services team has put forward a change proposal to get rid of the central store. This would mean couriers would not have a central location to drop parcels and may end up leaving them in a non-controlled location. This proposal, if implemented, would increase risk of accidental release of risk goods into a currently well managed system.

Approvals and CTO Permissions update

HSNO Approvals – New Organisms

GM work is currently conducted under several LU-specific and NZ organisational-wide HSNO Approvals. The preference is to move the University to a single institution-wide HSNO Approval as per the Universities of Otago and Auckland to reduce the level of complexity for both researchers, internal auditing purposes, and external verifiers.

Work on an institution-wide draft application to the EPA originally commenced in mid-2018. This application is progressing in draft form and ongoing discussion is underway with the EPA New Organisms Advisor on scope for our research requirements as to how to progress the application. In the interim two smaller standalone applications are being drafted by researchers to cover more immediate research needs linked to immediate funding milestones.

HSNO Approvals – Hazardous Substances (Manufacture in Containment)

Our application under section 31 of the Hazardous Substances and New Organisms Act 1996 (HSNO Act) to manufacture in containment six substances for field and glasshouse trials in order to evaluate the efficacy, crop safety, and residue of the substance was approved by the EPA in late November 2024 (HSC100492) for a duration of two years.

This approval will allow two AGLS research groups to conduct contained field trials using active compounds (primarily derived from the fungus Trichoderma) that have shown promise in small-scale laboratory trials to be formulated into substances to control a variety of plant pathogens

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across a range of crops and forestry species, and to control Varroa mite in beehives. This EPA Approval provides regulatory assurance for field activities funded by the Endeavour Fund grants and Potato Growers.

The first field trials in conjunction with Midlands to test in-hive applications to control Varroa mite took place in March, and notification was made to the EPA as per the requirements of the approval. Records of all field trials are required to be maintained via the Biocompliance Manager and are subject to auditing by the EPA. At this point in time there is no entry to the food chain from any field applications therefore ACVM Approval is not required.

CTO Permissions (MPI)

Chief Technical Officer (CTO) permission is required to communicate and propagate unwanted organisms under the Biosecurity Act.

The university has research deliverables in subcontracts to the MBIE Endeavour Research programme: "Safeguarding Te Mana o te Awa o Waikato from emerging climatic pressure". In May 2023 *Corbicula fluminea* (commonly known as 'gold clams' or 'freshwater gold clams') was found in the Bob's Landing area of the Waikato River near Lake Karāpiro. Since this discovery Biosecurity NZ and partners have been working to contain the spread. In late November 2024 a Controlled Area Notice (CAN) was placed on Lake Karāpiro and adjacent sections of the Waikato River. Any transport of an Unwanted Organism (i.e. any water and sediment containing larval or adult clams from the Waikato River controlled area) became a breach under the Biosecurity Act.

This required the university to apply to MPI for permission to collect water and sediment samples and transport them to research facilities on campus to undertake experiments and analytical testing for these subcontracts. The application had to address the following queries put to us by MPI:

1. Can you please explain why this work much happen in the South Island? Is there an alternative option that could be explored?

2. Are you able to test this proposal/consult with Waikato Regional Council and with ECan regarding this proposal please. We want to make sure there is a no surprise approach to this one.

3. Can you clarify with us the water disposal system at the lab? Any washing of hands, cleaning of beakers and equipment containing risk material will need to be disposed of in a system that will not have seepage into a waterbody, stormwater drain or wastewater main. Disposal of these items ideally needs to be undertaken in an on-site sewage system (i.e. septic system) or into an area that does not permeate into a waterway such as a gravel patch/grass area a considerable distance from drains or waterways.

MPI's queries were addressed as follows:

- The research at Lincoln University was planned and contracted prior to the CAN being put in place. One of the main research deliverables includes a substantive part of a PhD study involving construction of bespoke mesocosm systems designed and built by the university utilising Waikato River sediment and water in which the partial pressure of CO_2, light levels and temperature are precisely controlled to mimic future climatic states. The measurements taken require specialist expertise and the equipment that is needed for the profiles is very delicate and sensitive requiring a dedicated clean room.

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- The research could not be replicated without considerable cost and movement of delicate equipment, staff and the PhD student to the North Island, and would still have required an appropriate PC2+ facility, clean room, and analytical lab due to the CAN.

- The Biotron is a purpose-built PC2 facility for containing such high-risk biosecurity organisms and is fitted with an external sump that collects wastewater from the building. This water can be contained and treated should there be any internal breach of processes and any non-treated risk material is put down a sink within the building.

- The controlled temperature room housing the mesocosm experiment is card-access so we can further control access within the Biotron building (which itself is card access), and an in-room sink can be set up to directly contain handwashing water to avoid any risk to wastewater. Dedicated footwear and overalls will be worn by the researchers.

- The university's Containment Facility has appropriate processes and user-training in place to manage the risks posed by the organism. This includes autoclaving all risk material at the conclusion of research activities.

- ECan and the Waikato Regional Council were contacted and supplied with a copy of our application document detailing why the work needed to be conducted in the South Island/at Lincoln, the PC2 facilities we would house the research in, and the mitigations we proposed to prevent any release. Both were comfortable with what was proposed.

The university was subsequently granted CTO Permission on 25 March for a duration of five years. It should be noted that **all** research activities with water and sediment collected from the Waikato River will be undertaken in PC2 labs at Lincoln (Biotron and Waimarie), and additional risk management process training for those handling the samples put in place due to the high biosecurity risk and proximity of the campus to major waterways of significance.

This brings the total number of active CTO Permissions to work with Unwanted Organisms to seven (Varroa; Phytophthora agathadicida; Pinus contorta; Heiracium; Tautmella citreae; Psa; water/sediment containing Corbicula fluminea). A further two Permissions are inactive.

Approval to work with human body fluids

Lincoln University laboratories and other facilities are not registered to a standard that permits research activities with un-screened human body samples. Due to the high risk of infectious diseases any activities with human body samples are not permitted without the express permission of the Vice-Chancellor and the Biocompliance Manager, notwithstanding any additional Human Ethics Approvals that are required (Biosafety and Biosecurity Policy)**.**

Two applications were received to conduct research with human body fluids – one involved collection of saliva for testing sensory perception of food, the second was collection of blood to monitor the effects of blood flow restriction training on reducing cardiovascular disease risk in older adults. Risks were discussed with the applicants and assessment documents were then submitted to the Biocompliance Manager for thorough review of the proposed mitigations. With mitigations and appropriate handling processes in place the level of risk was determined to be low, and the applications were presented to the Provost and VC for review and final approval on recommendation from the Biocompliance Manager.

While these two applicants have received signed biosafety approval from the VC and Biocompliance Manager, both broader research applications are still pending approval from the Human Ethics committee.

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Biocompliance Issues and Risks

Bio-compliance and Biosecurity Risks			
Risk element	Mitigations	Verification	Residual Risk
PC2 Containment Facilities – breach of containment	Containment manual Containment Lab managers Training & Assessment modules in LEARN Contingency plans Authorised access	Training records Internal audits (LU) External audits (MPI) Access control	Lowered from high to medium
Breach of HSNO Approval	In-person training for staff and students Training & Assessment modules in LEARN Application forms to use HSNO Approvals Protected Research protocols	Training records Facility processes Internal audits (LU) External audits (MPI)	No change
Breach of Biosecurity Act	CTO Permissions in place Application form to use CTO Permission Check boxes in RMO research forms	Records management Internal audits (LU) External audits (MPI)	No change
Research involving human body fluids	Check box added to Human Ethics application form to capture such activities Risk analysis, documentation of mitigations and approved research processes in place Formal review and signed approval from VC and Biocompliance Manager	VC signed approval sighted by Human Ethics committee Human Ethics committee review Application forms for temporary PC2 lab status sign-off by Biocompliance Manager	New

EPA / MPI Standards LU Containment Facilities are approved to:

Transitional 154.02.17; Microorganisms 154.03.02; Plants 155.04.09; Vertebrates 154.03.03

Relevant legislation and standards

Biosecurity Act 1993

Hazardous Substances and New Organisms (HSNO) Act 1998

CITES (The Convention on International Trade in Endangered Species)

Health & Safety at Work (Hazardous Substances) Regulations 2017

Medicines Act 1981

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Ministry for Primary Industries
Manatū Ahu Matua

Verification Report[1]

Report ID:	PBV/1421/2025/01
Outcome:	**Acceptable**

_____

Issued to:	Lincoln University- Lincoln
Operator ID(s):	1421
Issued by:	Nicki Sherratt
	Phone: 021915493
	Email: nicki.sherratt@mpi.govt.nz

_____

Verification Period:	2024-09-14 to 2025-03-31
Verification Date:	2025-03-26
Published:	2025-04-04 12:35
Next Due Date:	2025-09-30
Level/Step:	**6.2** (started on 6.2 , and ceiling is 6)
Report Type:	Scheduled

_____

Peer Reviewed By:	Crystal Lange

_____

Ministry for Primary Industries
Manatū Ahu Matua

1. Premises Profile

Lincoln University is, under section 39 of the Biosecurity Act 1993, approved as a transitional and containment facility in accordance with the requirements of the MPI/EPA standard(s) identified. Under section 40 of the Biosecurity Act, Lincoln University (corporate entity) is approved as an Operator of that facility and is primarily responsible for the facility, compliance with facility approvals and all activities involving risk goods. Delegated Operator Representative onsite is Tracey Nelson.

The standards that the facility is approved to specify the structural and operating requirements for containment and/or transitional facilities holding regulated organisms and risk goods that are, or may contain:

• Animal products
• Biologicals
• Microorganisms and cell cultures
• Miscellaneous
• Non-Risk goods
• Seed/Grain
• Plant products

Physical Address :
Ellesmere Junction Road, Lincoln, Christchurch

Glossary of terms :

TF	Transitional Facility
BACC	Biosecurity Authority Clearance Certificate
CAR	Corrective Action Request
CTO	Chief Technical Officer
EPA	Environmental Protection Authority
GMD	HSNO Act Approvals for Development of New Organisms
HSNO	Hazardous Substances and New Organisms
MPI	Ministry for Primary Industries
NC	Non-Compliance
PBV	Performance Based Verification
PC1	Physical Containment Level 1
PC2	Physical Containment Level 2
PPE	Personal Protective Equipment
QMS	Quality Management System
VS	Verification Services

2. Executive Summary

The outcome of this scheduled facility inspection was acceptable. There were no non-compliances raised. One minor non-compliance, raised at the previous inspection was able to be closed out after appropriate corrective actions were verified.

Ministry for Primary Industries
Manatū Ahu Matua

The objective of this verification was to ensure that Lincoln University 1421 complies with the standard identified in the "Biosecurity" section of this report, associated Import Health Standards, its own operating manual, as well as other relevant requirements of the Facility and Operator approvals as held under the Biosecurity Act 1993 and HSNO Act 1996.

Overall the facility continued to demonstrate appropriate operator control. As a result, the facility and operator approvals can be continued.

3. Operator Summary

An entry meeting was held with Lincoln University's Tracey Nelson. MPI VS verifier Nicki Sherratt presented her identification of appointment under the Biosecurity Act 1993 and HSNO Act 1996.

The scope of this inspection was a review of the facility manual, records and reality against facility standards and associated regulatory requirements.

There had been no changes to the facility structure or processes during the period. Tracey confirmed that her role is now Biocompliance only, with the Health and Safety aspects of the role removed. Operating procedures were in the process of being reviewed at the time of the inspection.

During the inspection, CTO Permission P0134 for Corbicula fluminea (Asian golden clam) was sent through. This was applied for after a Waikato River project had to be stalled after a Controlled Area Notice was applied.

Tracey explained that two sequential culture collections, transported by UPS, had been delayed for long periods while transiting the USA. One such collection, ordered prior to Christmas, remained stuck in Louisville USA as of the inspection date. As a result they will try and get things sent without going through the USA.

There had been no new HSNO approvals used.

The Property Services team has put forward a change proposal to get rid of the central store. This would mean couriers would not have a central location to drop parcels, and may end up leaving them in a non-controlled location. This proposal, if implemented, would increase risk of accidental release of risk goods, into a currently well managed system.

An exit meeting was held at the end of the inspection with Tracey to summarise the findings.

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4. Verification Completed (this period)

Biosecurity

The facility was verified against the Facilities for Microorganisms and Cell Cultures: 2007a standard, and was found to be operating in substantial compliance with its requirements.

The following elements were verified in this PBV period:

Biosecurity:Facilities for Microorganisms and Cell Cultures: 2007a	Acceptable

Quality Assurance

The manual is currently under review. Updates include expanding the section on human pathogen risk group 2 work as well as instructions for phone use in laboratories.

Work during the inspection period had continued under the following CTOs permissions: P-0116 for Tatumella citrea, Phytophthora agathidicida, Pseudomonas syringae pv. actinidiae and Hieracium. The approval for Tatumella citrea was verified and conditions were confirmed to be being met. During the inspection, a CTO permission was emailed through for Corbicula fluminea P-0134.

There had been no issues of significance in the inspection period. Training includes what to do if something goes wrong in the laboratory.

Internal audits have continued to schedule. A very comprehensive check sheet is used for each area, which includes structural requirements, traceability as well as approvals and permissions used. Audits were completed during March 2025. Identified non-compliances had not yet been closed out, however corrective actions from September 2024 had all been actioned.

Training material and records were verified. Training modules 1 (basic training for PC laboratory access) and 4 (working with new organisms) were looked at in detail. Training appeared to be comprehensive and suitable for the people being trained in each module. Tracey commented that she feels the training has improved, and that personnel are understanding the requirements better.

The following elements were verified in this PBV period:

Quality Assurance:Biosecurity Contingency Plans	Acceptable
Quality Assurance:Chief Technical Officer (CTO) Permissions and Decisions	Acceptable
Quality Assurance:Notifications to MPI/EPA	Acceptable
Quality Assurance:Operating Procedures	Acceptable
Quality Assurance:Operator Control	Acceptable

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The following elements were verified in this PBV period:

Quality Assurance:Operator Internal Verification	Acceptable
Quality Assurance:Organizational Structure and Management	Acceptable
Quality Assurance:Training and Competency of Personnel	Acceptable

Documentation and Certification

Three BACCs were selected from a list of imports, and verified to confirm the operator's understanding and compliance to the directions.

There had been no changes to the site plan, and there were no intended changes at this time.

The following elements were verified in this PBV period:

Documentation and Certification:Biosecurity Authority Clearance Certificates (BACCs)	Acceptable
Documentation and Certification:Documentation and Record Keeping	Acceptable
Documentation and Certification:Site Plans, Specification and Modifications	Acceptable

Identification, Traceability & Management

Two movement authorities from the inspection period were verified. These were CKM1031 and JBiC1074. Tracey had signed both these, as an authorised signatory. Karl Gately is the alternative signatory for the site.

C2024/1497353, C2025/8000395, C2025/8000669, CKM1031 and JBiC1074 were traced to their incoming checks and to their current locations in the Waimarie and RFH buildings. All were successfully found, acceptably labelled for identification.

Tracey described the procedures for reception. All items are delivered to a central store. They will then be taken directly to the researcher or laboratory in question. Items are opened in an appropriate laboratory, and inward checks are completed. This process has proven effective.

-80 freezers in RFH were outside of a PC2 laboratory. In all cases they held signs to indicate their contents.

The following elements were verified in this PBV period:

Identification, Traceability & Management:Authorised Signatories	Acceptable

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The following elements were verified in this PBV period:

Identification, Traceability & Management:Inventory Control and Accuracy	Acceptable
Identification, Traceability & Management:Product and Organism Identification	Acceptable
Identification, Traceability & Management:Reception of Consignments	Acceptable
Identification, Traceability & Management:Segregation	Acceptable
Identification, Traceability & Management:Transfer of Goods and Organisms	Acceptable

Hygiene & Sanitation

Ethanol, bleach and Virkon are used in laboratories for disinfection. Disinfectants were verified in the Waimarie building PC2. 70% ethanol was labelled. It was noted that the bleach had no expiry date. Efficacy of bleach long term was discussed, and it was proposed they could put an receival date on bleach with no expiry. There was no Virkon present at this time, as it was due to expire at the end of March 2025, and a replacement had been ordered.

Laboratory coats were available upon entry to all laboratories. Coats are either bleached or autoclaved for disinfection. Validation for autoclaving of laboratory coats was seen. Validations using ibuttons were seen for the Waimarie autoclave and the Agritech autoclave were verified. The Biotron autoclave over cooks ibuttons and steristrips, so Tracey is proposing alternative methods of validation.

The following elements were verified in this PBV period:

Hygiene & Sanitation:Cleaning and Disinfection	Acceptable
Hygiene & Sanitation:Personnel Hygiene and Personal Protective Equipment (PPE)	Acceptable
Hygiene & Sanitation:Pest, Vermin and Weed Control	Acceptable
Hygiene & Sanitation:Waste Management	Acceptable

Design and Construction

A selection of PC2 laboratories in Waimarie and RFH were verified. Access was by proximity card, signage was present on doors, and laboratories maintained the physical containment requirements of PC2 laboratories.

The following elements were verified in this PBV period:

Design and Construction:Laboratories	Acceptable

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The following elements were verified in this PBV period:

Design and Construction:Physical Containment Level 2 (PC2)	Acceptable
Design and Construction:Signage	Acceptable

Hazardous Substances and New Organisms (HSNO) Act

There were no new HSNO approvals used in the inspection period. Tracey has a long running plan to make a mega approval request, like the University of Otago has done. The EPA has indicated they'd want to allow a year to have it approved, and in the meantime, new bodies of work are being planned which may require other approvals.

Items traced in the inspection, linked to appropriate HSNO approval numbers.

Mandatory Tasks

5.   Definitions

Acceptable   Where the Animal Products Officer (or Biosecurity Inspector) is satisfied that the operator is substantially complying with requirements; and where there have been any departures from regulatory requirements, that the operator's corrective actions have been, or are being, applied appropriately and effectively.

✳   Departures from regulatory requirements, identified by the Animal Products Officer (or Biosecurity Inspector), are to be transferred to the operator's issue management system for resolution. (Key Topic / Non-compliance)

Unacceptable   Where the Animal Products Officer (or Biosecurity Inspector) has determined that the operator is not in substantial compliance with regulatory requirements; evidenced by inadequate operator controls. (Key Issue / Non-compliance)

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Motion by the Chancellor for Resolution to Exclude the Public pursuant to s48 of the Local Government Official Information and Meetings Act 1987:

I move that the public be excluded from the following parts of the proceedings of this meeting, namely:

General Subject Matter	Reason for passing this resolution in relation to each matter	Grounds under section
Lincoln Agritech Limited 1. *Statement of Corporate Intent* 2. *Q1 Dashboard Report*	To avoid prejudice or disadvantage to the commercial activities of the University	7(2)(h)
Reports to Council		
Executive Committee 1. Report – appoint member to Council Appeals Committee	To protect the privacy of natural persons	7(2)(a)
Audit, Risk, & Assurance Committee Report to Council 1. Report – business of Committee 2. Minutes from meeting on 20 May 2025 3. 2026 Draft Investment Plan 4. 3+9 P&L Reforecast 5. PBRF Audit 6. Audit NZ Report to Council 7. Audit Assurance Information 8. Admission & Enrolment Program 9. 3+9 Capex Reforecast New Catered Hall Funding Update and Method to Market Approval 10. Ivey West | Memorial Hall Close Out Report 11. Lincoln Connected Close Out Report	To avoid prejudice or disadvantage to the commercial activities of the University To prevent the disclosure or use of official information for improper gain or improper advantage To maintain legal professional privilege	7(2)(h) 7(2)(j) 7(2)(g)
Council Appeals Committee	To protect the privacy of natural persons	7(2)(a)
Recruitment Report	To avoid prejudice or disadvantage to the commercial activities of the University	7(2)(h)
Finance Report	To avoid prejudice or disadvantage to the commercial activities of the University To prevent the disclosure or use of official information for improper gain or improper advantage	7(2)(h) 7(2)(j)

I move also that: Prof Chad Hewitt (Provost), Mr S Hunter (Health, Safety & Wellbeing Manager), Prof Merata Kawharu (Deputy Vice Chancellor, Māori and Pasifika), Mr Travis Glare (Lincoln Agritech CEO), Mr Alistair Pearson (Property Director), Mr Justin Greenhalgh (Project Manager), Mrs E Rooney (Finance Director), Mrs S Roulston (Chief Operating Officer), Mr D Lodge (Deputy Vice-Chancellor, Student Life), Tumuaki-Takirua Te Awhioraki, and Mr Nathaniel Heslop (Council Secretary), be permitted to remain at this meeting after the public has been excluded, because of their knowledge of the various matters being discussed. This knowledge, which will be of assistance in relation to the matters to be discussed, is relevant to those matters because of their involvement in the development of reports to Council on these matters.