







2 Degree overview

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There is a growing demand from industry for



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Entry to the BProdDesign is open to all students with entry to the University. However, it is strongly recommended that you have at least 14 credits in NCEA Level 2 science and mathematics. Those intending to take the Chemical Formulation Design major should ideally have 14 credits in NCEA Level 3 chemistry (or the IB/CIE equivalent of these).

Secondary school studies in related subjects such as digital technologies, technology, or design and visual communication would be an advantage.

For more details on recommended preparation, including an outline for different qualification frameworks, go to www.canterbury.ac.nz/ engineering/product-design

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The BProdDesign is a three-year 360 points qualification with a combination of coursework and design projects:

- 135 points of Product Design courses
- 165 points of Science and Engineering courses
- 60 points of Business or Management courses.
- The first year includes four compulsory courses: PROD101 Product Design 1, MGMT100 Fundamentals of Management, PROD110 Design Principles, or ENGR101 Foundations, and MATH101 Methods of Mathematics, or EMTH100 Engineering Mathematics.
- The remaining three 100-level courses vary depending on which major you choose to study.

Majors

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It is possible to combine the study of a BProdDesign with other degrees, such as a BSc or BCom. Conjoint programmes leading to a BProdDesign/BCom or a BProdDesign/BSc can be completed in just four years page 17. Students considering a double or conjoint degree should seek advice from a Future Student Advisor.

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Students may go onto postgraduate studies with the Postgraduate Certificate in Product Design, the Master of Product Design, and the Doctor of Philosophy (PhD) in Product Design. The Postgraduate Certificate in Product Innovation and Master of Product Innovation is also open to students of any study background. For the most up to date information please visit www.canterbury.ac.nz/engineering/schools/ school-of-product-design/

UC has a range of scholarships on offer to students. Find out more at www.canterbury.ac.nz/get-started/scholarships/



Video games have become the most popular and profitable form of entertainment. With revenues in the hundreds of billions of dollars worldwide, the games industry now eclipses the film, music, and television industries!

Applied Immersive Game Design is a great study option if you like to design and make things, are interested in art and technology, and want to work in an innovative, exciting, and fast-growing industry. If you want to make the next big entertainment game, learn about the latest immersive technologies, or finding out how games can be used to support people doing tasks that might otherwise be dangerous, boring, or difficult, then Applied Immersive Game Design has something for you! In the Applied Immersive Game Design major, you will experience the entire game design process, from conceptualisation to development to playtesting to marketing. You'll learn the tools, processes and skills required to design and develop modern digital games from scratch. In addition to entertainment games, you will also learn how to develop applied games, which use the technologies and motivations of games to help solve real world problems, as-well-as how to build immersive experiences using technologies such as Augmented and Virtual Reality. I e eeed aeaa ee beedeee aead beed e

Daniel Felga e

Conjoint Bachelor of Product Design in Applied Immersive Game Design and Bachelor of Science in Computer Science

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In your first year, you'll learn the fundamentals of the game development process. You will learn the essentials of game design, including the process of game development, and create your first playable game prototype.

- Create games
- Learn how to use essential game development programs and technologies, including Unity and Unreal Engine
- Access to fully equipped gaming facilities, with the latest generation gaming consoles, high-end PCs, industry quality motion capture, and cutting-edge AR/VR equipment
- Business courses will prepare you to join the game development industry or start your own studio
- Work with industry partners in your second and third-year projects to design and develop games for entertainment, or to solve real world needs.

Chemical Formulation Design is the only degree in Aotearoa New Zealand where students can obtain industry-relevant, in-demand expertise in designing and formulating pharmaceutical, agrochemical, nutritional, household, and beauty products.

This three-year programme seamlessly blends hands-on practical skills in design, science, engineering, business and marketing to develop expert graduates who are in high demand across a range of industries both globally and in Aotearoa New Zealand. Chemical Formulation Design is an innovationdriven degree that will prepare you for a modern and creative career path across a range of industries including cosmetics, personal care, healthcare, food innovation, agritech, and pharmaceuticals. You will learn to use an array of state-of-the-art equipment in the formulation, food, fragrance, and research labs in the School of Product Design. You will take your idea from a concept through to a professional quality finished product - several of which been commercialised by our students after completing their degree.

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Emil Bosma Bachelor of Product Design in Chemical Formulation Design

- Obtain hands-on experience formulating a variety of chemical products. From weedkillers to lipsticks, nutritional supplements to sunscreens and shampoos, many formulated products can be designed, manufactured, and tested here on campus
- Develop a comprehensive set of skills and expertise across science, design and business
- Access to a vast array of cutting-edge, industry-standard facilities and laboratories
- Develop direct connections to industry and Mātauranga Māori experts via field trips, guest lectures, and laboratories
- Take the opportunity to collaborate with the New Zealand chemical formulation industry through industry-sponsored project briefs throughout your degree
- Develop your communication and marketing expertise across a range of platforms.

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In your first year of study, you will be introduced to the basics of the Chemical Formulation Design process and learn practical techniques as well as core knowledge in chemistry, biology, and design concepts. You will learn practical skills and problem-solving methods while creating products with your peers to understand the overall design process. You will make and analyse a range of formulated products including pharmaceuticals, adhesives, paints, cosmetics and personal care products, detergents and cleaning products, and agricultural products.

\$2.3b is contributed to Aotearoa New Zealand's economy annually by the Natural Health Products industry^{*}

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Complete the compulsory courses for the Bachelor of Product Design, along with the following major courses:

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CHEM111 Chemical Principles and Processes

PROD131 Introduction to Formulation Science

One 100-level Engineering or Science course

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PROD231 Product Formulation 1

PROD232 Natural Products Properties and Production

PROD233 Chemical and Healthcare Product Formulation 1A

PROD234 Chemical and Healthcare Product Formulation 1B

PROD235 Formulation Chemistry

PROD230 Product Properties and Processing OR ENCH291 Mass and Energy Balances

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PROD331 Product Formulation 2

PROD333 Chemical and Healthcare Product Formulation 2A

PROD334 Chemical and Healthcare Product Formulation 2B

One 200-level Engineering or Science course

One 300-level Engineering or Science course

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A degree in Chemical Formulation Design could lead to a career in product formulation and manufacturing or more broadly, into any industry that employs graduates with a scientific background. Career opportunities could include:

- Formulation Chemist
- Product Development Scientist
- Quality Manager/Chemist
- Business Development Manager
- Principal Senior Formulation Scientist
- Product Innovation Manager
- Concept Developer

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From power-tools to parachutes, footwear to furniture, backpacks to bikes, or inhalers to interfaces, Industrial Product Designers harness the latest cutting edge tools and techniques, to create new products and solve the challenges of the future.

This innovation driven degree will equip you for a modern and creative career path both globally and in New Zealand's design-led economy. You will learn and develop technical skills such as sketching and computer aided design, as well as a practical understanding of the product design life cycle – from idea generation to prototyping and commercialisation. This is a three-year degree combining creative design, science, engineering, and business so that you are better prepared to start your own business or join an existing one when you graduate.

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Sam el Rober s Bachelor of Product Design in Industrial Product Design •

Combine two degrees and

Postgraduate studies in Product Design present an opportunity for students to prepare for the everchanging consumer market with advanced design, manufacturing, and business analysis skills.

Postgraduate qualifications at the School of Product Design include:

bachelor's degree study (or other qualifications of an equivalent standard) and a B Grade Point Average in your final-year courses.

The MProdDesign takes advantage of UC's research expertise in a range of commerce, IT, and engineering fields. The programme provides a mixture of practical work and theory with original supervised research. UC houses specialised on-campus facilities for students to research, create, test, and market their own products. Entry to the Master of Product Design requires an appropriate design-related degree with a B Grade Point Average in your 300-level courses, or other qualifications of an equivalent standard.

S Open to students of any study background, the MProdInnovation is a

perfect opportunity to access specialised facilities and industry experts at university while beginning to develop your own product or business ideas. Any previous bachelor's degree study (or other qualifications of an equivalent standard), and a B Grade Point Average in your final-year courses are open to enrol.

Te Whare W nanga o Wai aha . Uni ersi of Can erb r

T: +64 3 369 3999 Freephone in NZ: 0800 VARSITY (827 748) E: AskUC Chat is available between 8am-5.15pm Monday-Friday (except NZ public holidays). canterbury.ac.nz

Te R p Taka aenga - Liaison O ce canterbury.ac.nz/engage /school-resources/liaison

P hanga me e Hanga O inga . School of Prod c Design

canterbury.ac.nz/engineering/schools/school-of-product-design/

Usef I UC links

Enrol: canterbury.ac.nz/enrol Fees canterbury.ac.nz/get-started/fees Code of Practice: canterbury.ac.nz/support/code

Cl bs and Socie ies

canterbury.ac.nz/life/studentlife/clubs

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