What can I do with a degree in Applied Immersive Game Design?

Applied Immersive Game Design.

Career planning: what do I need to know?
Knowledge of yourself is important for career decision making. Start by looking at your personal goals, abilities, values and interests to explore study and career options that are relevant to you. Some of these may change over time, so it is important to self-reflect and evaluate your career on an ongoing basis.

What do employers look for?
Many employers look for generic skills such as communication, customer-focus, cultural awareness, and teamwork. With technology and globalisation changing the nature of society, skills such as resilience, problem solving and adaptability are valuable at work as well as in life.

How can I develop these skills?
- Some skills are developed through your degree
- Extra-curricular activities can help, for example getting involved in clubs, mentoring, cultural groups, part-time work, or volunteering
- Be open to professional and personal development opportunities. Whether it is undertaking an internship, overseas exchange, skills seminar, or joining an industry group — these activities will enhance your employability.

What else should I know?
The career options in this brochure are examples only and the list is not exhaustive. Some careers may require further study beyond a first degree or additional work experience. Some pathways and degrees have a recommended school background. Find more subject details at www.canterbury.ac.nz/engineering/product-design
If this brochure does not answer your questions, talking to an expert such as a career consultant can help you to identify the next steps in your career decision making journey.

What is Applied Immersive Game Design?
Product Design combines creative design, science, engineering and business studies. Product designers plan and develop items for use in homes, businesses and industry. Graduates will be able to develop creative ideas based on their knowledge of related sciences and engineering disciplines, as well as gain the practical business skills needed to commercialise new product ideas. This degree will prepare you for a modern career path in many areas of Aotearoa New Zealand’s innovative economy.

Immersive game design covers both virtual and augmented reality where the software and hardware are at the beginning of massive growth. These items can be developed for entertainment games, applied immersive games for training and education, or carrying out remote activities.
What skills will UC graduates gain?

Graduates will gain the skills needed for the design of games for various applications and the commercialisation of their ideas. These include:

- Creativity
- Ability to design games that meet end-user needs eg, for entertainment, education, rehabilitation and industrial applications
- Understanding of idea generation, game structure and interface design
- Practical experience in game prototyping for a range of platforms
- Ability to use industry-relevant animation software and game engines, with an emphasis on virtual, augmented and mixed reality
- Critical thinking and application of logic to proposed design solutions.

Opportunities to apply your learning are available in this major through team-based projects, entrepreneurship courses, and the use of dedicated hands-on product innovation spaces.

Where might graduates be employed?

- Many graduates in this rapidly expanding area are self-employed and working on the design and commercialisation of their own product ideas.
- Existing game development companies are looking for well-qualified graduates with advanced technical skills.
- Typically, small start-up companies benefit from ‘all-rounders’ who can work on a wide range of activities, from technical aspects through to marketing and customer support.
- As the applications of virtual, augmented and mixed reality grow, we expect many companies will look for graduates with broad skills and a user-centred approach to game design. Growth areas are expected in the areas of: entertainment, industrial, retail, tourism, education, medical and rehabilitation, behavioural intervention, and robotics.

For more examples of employers who recruit UC students and graduates go to [www.canterbury.ac.nz/recruitingemployers](http://www.canterbury.ac.nz/recruitingemployers)

AT A GLANCE

5.2% growth expected in the occupation of software developers by 2020*

120 game development companies are based in Aotearoa New Zealand

developer programmers needed in Aotearoa New Zealand**
What jobs and activities could graduates do?

Applied Immersive Game Design graduates will have a broad range of skills that can be applied in a variety of roles. Graduates will be prepared to take novel gaming ideas to commercial implementation.

Note: Some of the jobs listed may require postgraduate study. See the 'Further study' section.

Examples:

Applied immersive game designer / consultant
• Researches a client’s brief, an organisational or social need, or a gap in the market
• Designs, produces and tests a prototype
• Investigates patents and commercialises the product
• Creates new and improved version releases

User interface (UI) designer
• Creates web and mobile application interfaces that are user-friendly
• Communicates requirements to other developers, designers and writers
• Improves usability and desirability to showcase all the product features
• Develops interface concepts, prototypes, user flows and final design
• Solves problems and ensures correct implementation

Product manager
• Manages a specific product or line of products that are already in the market
• Coordinates the production of a finished prototype
• Oversees operations and logistics
• Handles product enquiries, complaints, orders

Marketing or sales manager
• Conducts market research into product usage and audience preferences
• Analyses performance of existing products or identifies new requirements
• Communicates intelligence to designers and managers to inform product changes
• Markets the products, develops new business opportunities and increases sales

Product design manager / senior designer
• Manages technical design staff
• Leads the product design function
• Leads business initiatives on new products
• Manages budgets, staff and processes

Entrepreneur and CEO
• Develops an idea, product or service to form their own business
• Gets involved in a start-up
• Offers their skills or services as a freelancer or consultant

Why do further study and what are my options?

Postgraduate study can facilitate many career benefits such as specialist skills, entry into a specific occupation, higher starting salary, faster progression rate, and advanced research capability. It is important to determine which, if any, further study will help you in your future career.

UC offers a range of higher qualifications eg, in Business, Computer Science, Digital Humanities, Human Interface Technology, and Management. For listings visit www.canterbury.ac.nz/courses

What professional bodies and organisations can people link to?

As they progress in their studies and into a career, students and graduates often join professional bodies or organisations relevant to their area of interest. These organisations often provide regular communications and offer the opportunity to network with others within the same community.

• New Zealand Game Developers Association www.nzgda.com
• IT Professionals NZ www.itp.nz
• Ngā Aho Māori Design Professionals www.ngaaho.maori.nz

Social media networks such as LinkedIn, Facebook and Twitter can provide avenues to keep up-to-date with industry knowledge, networking opportunities, events and job vacancies.

Useful links

UC Careers, Internships & Employment www.canterbury.ac.nz/careers
UC School of Product Design www.canterbury.ac.nz/engineering/product-design
Careers New Zealand www.careers.govt.nz
UC Centre for Entrepreneurship www.uce.canterbury.ac.nz
New Zealand Skills Shortages www.skillshortages.immigration.govt.nz
Jonathan O’Duffy

Master of Human Interface Technology
Indie Video Game Developer, Temper Tantrum

What’s the atmosphere like at UC?
The environment and people are just amazing. It doesn’t feel so much a lab as it does family. Everyone is really nice and helps each other out. You have support all around plus everyone wants to work together and share what they’re doing.

Can you tell us about your thesis?
I developed a concept wherein a physiotherapist or health professional is able to ‘virtually’ inhabit the body of a remote patient to instruct and guide that patient’s rehabilitation exercises. From the patient’s perspective, the remote therapist is seen as a life-size ‘ghost’ that appears to originate from within the patient.

What real-world opportunities have you had?
It was really cool that the things we made were sent to real companies as a potential for publishing into research papers. For example, we had to make hardware add-ons for Google Glass, which my supervisor then took to Google Glass in the USA and showed them what we had been doing here at the lab. I don’t know many places which can offer that type of opportunity.
I also worked with people in Australia on creating a Parkinson application to help improve their health called ‘Active Arms’. It took the exercises the clinicians wanted the patients to do and turned it into a game, while recording data.

What projects do you do in your spare time?
I see life as a giant learning experience. I have created tutorials and I am currently looking into turning that material into a book for other people. I also have my own You Tube channel where I put up tutorials on how to make virtual and augmented reality applications.

How do you see your skills helping others?
My goal is to create multiple companies that help people. I am currently working on my own game company called Temper Tantrum that makes games that are fun to play, then takes those games and turns them into serious games to help people through health, education and training.

Read more online
Read Jonathan’s full story about his university experience on our profiles site. UC alumni like Jonathan make a difference in varied ways around the globe. For stories of graduates who are working in game design and related fields visit www.canterbury.ac.nz/profiles

The information in this brochure was correct at the time of print but is subject to change.

More information

UC students seeking study advice.
School of Product Design
Te Rāngai Pūkaha | College of Engineering
UC’s new School of Product Design brings together creative design, science, engineering and business. Students will undertake interdisciplinary learning, team projects and work in hands-on product innovation spaces.
T: +64 3 364 2987 ext 94271
E: engdegreeadvice@canterbury.ac.nz
» www.canterbury.ac.nz/engineering/product-design

Anyone seeking careers advice.
Careers, Internships & Employment
Te Rōpū Rapuara
CIE offers intending and current students and recent graduates a wide range of services, including individual career guidance, seminars, career resources and student and graduate employment opportunities.
T: +64 3 364 3310
E: careers@canterbury.ac.nz
» www.canterbury.ac.nz/careers
» UCCareersEmployment

Prospective students seeking study advice.
Student Liaison
Te Rōpū Takawaenga
Student Liaison provides intending students with information about the university system in general and the courses, qualifications, support and facilities available at UC.
Ōtāutahi | Christchurch
T: 0800 VARSITY (0800 827 748)
E: liaison@canterbury.ac.nz
» www.canterbury.ac.nz/liaison

Tāmaki-makaurau | Auckland
T: 0800 UCAUCK
E: auckland@canterbury.ac.nz

Te Whanganui-a-Tara | Wellington
T: 0800 VARSITY (0800 827 748) ext 93231
E: wellington@canterbury.ac.nz
» www.canterbury.ac.nz/liaison

* UC now offers a Bachelor of Product Design in Applied Immersive Game Design, in addition to Engineering and Computer Science degrees.