

Applied Immersive Game Design.



What is Applied Immersive Game Design?

Applied immersive game design encompasses both virtual and augmented reality, as well as tabletop games. It involves creating and designing games that focus on providing immersive experiences in real-world applications. Applied immersive game design includes the design of entertainment games, as well as applied immersive games for training and education, or carrying out remote activities.

Applied immersive game design professionals can use principles of game design, interactive storytelling, and immersive technologies to create experiences that serve educational, training, therapeutic, or other practical purposes.







Learn more

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

- Career opportunities, work environments and salary information
- Education and training requirements.

Examples of professional bodies

- New Zealand Game Developers Association https://nzgda.com
- International Game Developers Association https://igda.org
- Women in Games 💻 www.womeningames.org
- Ngā Aho Māori Design Professionals www.ngaaho.maori.nz
- The Designers Institute of New Zealand www.designersinstitute.nz

Career and study information

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

Gather helpful information from:

- Subject-specific content at
 www.canterbury.ac.nz/study/academicstudy/subjects/applied-immersive-gamedesign
- Job profiles on career websites like
 www.careers.govt.nz
- Job adverts/vacancy descriptions
- Industry professional bodies.

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





What skills can graduates gain?

Graduates gain the skills needed for the design of games for various applications and the commercialisation of game ideas. Developed skills can include:

- Product design able to apply the product design process to ideate, design and implement product solutions
- Game design able to apply game design principles, including game structure to design applied immersive games
- Immersive technology including augmented virtual reality competencies
- Gaming related technology skills in related technology such as game engines, 3D technologies, AI, and computer-aided design.

This degree promotes interdisciplinary innovation where projects occur across more than one discipline area. For example, Applied Immersive Game Design with electives from physics or electrical engineering creates an intersection between mechanical and electronic product design.

What do employers look for?

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

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

Skills that are likely to grow in importance include analytical and creative thinking, systems thinking and technological literacy.* *World Economic Forum: www.weforum.org/ agenda/2023/05/future-of-jobs-2023-skills

How can these skills be developed?

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

Where have graduates been employed?

Applied Immersive Game Design graduates can pursue opportunities in:

- Self-employment work on the design and commercialisation of your own product ideas
- Game development companies who are looking for qualified graduates with advanced technical skills
- Small start-up companies who can seek 'allrounders' that 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.

Graduates may also find work with:

- Multimedia development firms
- Web design companies
- Design / creative agencies.

What jobs and activities might graduates do?

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

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

Applied immersive game designer

- Research a client's brief, an organisational or social need, or a gap in the market
- Design, produce and test a prototype
- Investigate patents and commercialise the product
- Create new and improved version releases

Game designer

- Design captivating games across platforms, engaging the imagination of users through the look, feel and story of a game
- Develop, collaborate, and iterate game concepts
- Specialise in user experience, level, or gameplay design

Game developer

- Design, develop, and deliver quality code, collaborating in a team
- Improve existing code and conduct thorough testing
- Collaborate with designers and artists to create a polished game on time

Programmer

- Make non-player characters appear they are responding intelligently to the game world, player actions, and various in-game situations
- Specialise in AI, engines, gameplay, network, physics, tools or VR

Games producer, production manager

- Drive game development, from funding to talent and project management
- Shape game concepts, audience, and testing strategies
- Manage finances, secure publishers, and handle post-release media relations

Community manager, customer relations manager, social media coordinator

 Cultivate gamer communities, oversee events, social media, and feedback to enhance games and boost sales

Product design manager / senior designer

- Lead business initiatives on new products, and manage budgets
- Manage technical design staff
- Lead the product design process

Product manager, product owner

- Manage a specific product or line of products that are already in the market
- Coordinate the production of a finished prototype
- Oversee operations and logistics
- Handle product enquiries, complaints, orders

Marketing or sales manager

- Conduct market research into product usage and audience preferences
- Analyse performance of existing products or identify new requirements
- Communicate intelligence to designers and managers to inform product changes
- Market the products, develop new business opportunities and increase sales

Game tester

- Play test games to identify and report bugs, glitches, and issues
- Provide feedback to enhance gameplay, graphics, and user interface
- Contribute to improving the overall quality of the game

Examples of other job titles and careers include:

- Programmer (generalist)
- Software engineer
- Applications developer
- Software engineer / tester
- Games publisher
- Interactive media developer.

Further study options

UC offers a range of higher qualifications through the School of Product Design.

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

It is important to determine which, if any, further study options align with future career aspirations.

For further UC study options visit:

How can I gain a sense of career direction?

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

Career planning checklist

Discover and reflect on:

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

□ Engage in a variety of experiences to learn about:

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

Learn more and gather career and study information

(refer to page one of this resource)

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

□ Identify your next steps

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



What have other students and graduates done?

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

Visit: www.canterbury.ac.nz/about-uc/ why-uc/our-students/student-stories



Luisa

Co-Managing Director, Tiny Kiwi Games

Bachelor of Product Design, major in Applied Immersive Game Design

Experience gained while at UC:

- Wellness VR Game Designer Internship
- Game Engine and AI Teaching Assistant
- Eng Me! Tutor

Career guidance

Career services are available for future and current students, and recent graduates. To learn more, contact:

Te Rōpū Rapuara | Careers

T: +64 3 369 0303

- E: careers@canterbury.ac.nz
- www.canterbury.ac.nz/life/jobs-and-careers

Helpful career insights

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

What motivated you to study game design/ development?

I was looking for a career that allowed me to be creative, wasn't the same every day and didn't feel boring. Game design and development had the perfect blend of technical knowledge and creativity to keep things fresh and new every day.

What did you most enjoy about your studies?

I enjoyed building projects with people, and I developed lifelong relationships from the time I was at Uni. Finding people you share interests with and doing something you are all proud of is fantastic. Moreover, as every course allowed me to work on different projects, I learned more about myself and my skills. As a result, I worked on passion projects that were very cool and I couldn't have done it without going on this journey.

How did your internship help prepare you for your career?

My internship helped me to get better at technical skills as I was using standalone VR technology. Later I went on to join a company making training interactive simulations using standalone VR tech, so it really helped that I had some experience in it.

What do you do as a Co-Managing Director for Tiny Kiwi Games?

In my role, I lead our team in designing engaging games and set the company's direction. I craft grant proposals, network with industry peers, and explore funding opportunities with publishers. Additionally, I contribute as a producer, programmer, and marketer to ensure our projects stay on track and reach their full potential.

What advice would you give to students?

The most important thing is building a portfolio you can be proud of by the end of your degree. A polished portfolio is important when looking for a job.

The second most important thing is participating in game jams. These will polish your skills and teach you a lot about yourself and working in teams.

Study advice

Student Advisors at UC help with questions focused on starting, planning and changing studies. To connect with Student Advisors, visit:

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

Future students – contact:

The Future Students team T: 0800 VARSITY (0800 827 748) E: futurestudents@canterbury.ac.nz

First year students - contact:

Kaitoko | First Year Student Advisors T: +64 3 369 0409 E: firstyearadvice@canterbury.ac.nz

Continuing students – contact:

School of Product Design T: +64 3 369 0299 E: productdesign@canterbury.ac.nz www.canterbury.ac.nz/study/academic-study/ engineering



Te Rōpū Rapuara Careers

Career profiles and the information in this brochure were correct at the time of creation but are subject to change.