

Bachelor of Information Technology (Games and Graphics Programming)

2019

Undergraduate

Learn to write code or use game-development engines to create computer or video games in a studio environment that mirrors the latest games industry practice.

This program is multidisciplinary, industry-focused and the only one of its kind in Australia.

You will work with artists and producers to create or modify the game to enhance its capabilities, incorporating digital graphics, animation, sound, video, photographs and images.

This unique program mirrors the games design industry, giving you the chance to work with digital art teams in a studio environment to develop computer games and graphics software.

Delivered in the context of an IT and design framework, you will learn specialised skills in games and graphics programming.

You will learn to read and write computer code (using both game-development engines and lower-level programming libraries) to create video games. You will create or modify games to enhance your capabilities, incorporating digital graphics, animation, sound, video, photographs and images.

Studies are set in the context of a broader computer science and software engineering framework. This means graduates will be qualified to work in the games industry as well as the IT industry more generally.

Career outlook

Graduates typically work in the games and computer graphics industries or the general IT industry.

On completion of the degree, you will have acquired aesthetic and technical abilities in art, design and programming.

This provides entry into industry as animators, 3D visualisers and modellers, games programmers, graphics programmers, interface designers and digital artists.

The types of careers this qualification leads to may include:

- games programming
- special FX, graphics, virtual reality programming
- robotics and simulation
- web programming

International opportunities

RMIT partners with over 150 organisations around the world to provide you with global work and study opportunities. You could spend a semester studying abroad, take part in a study tour or complete an international internship.

Industry connections

The core courses Interactive Digital Media Project A and B simulate realistic work situations where you will have the opportunity to learn, apply and demonstrate professional software engineering and computing practice. Starting in 2018, our ongoing industry collaboration with Village Roadshow is providing a pathway for professional work in a real-world game development setting. Existing industry collaboration with major industry partner Microsoft will provide opportunities to explore work-Integrated learning projects in real-world settings, in thriving areas such as Virtual and Augmented Reality.

Program snapshot

Program code: BP215

Duration

Full-time: 3 years

Location

City campus

Selection mode

ATAR (2018: 76.50)

How to apply

Semester 1: VTAC
vtac.edu.au

Semester 2: Direct to RMIT
rmit.edu.au/programs/apply/direct

Fees

For local fee information:
rmit.edu.au/programs/fees

Contact

Info Corner
330 Swanston Street
(cnr La Trobe Street)
Melbourne VIC 3000
Tel. +61 3 9925 2260

rmit.edu.au/programs/bp215

Program structure

The degree consists of eight core and elective courses per year, selected from a wide range of programming and design electives.

Studies are set in the context of a broader computer science and software engineering framework, applicable to the IT industry in general.

You will undertake projects in Games Studio in the first year and Interactive Digital Media in the third year, where classes are delivered largely in studio mode. In the second and third years you will specialise in your area of interest.

A key result of your study will be a professionally produced game to industry standards. Through the process of producing this game, you learn about the games industry first hand, as the games studio environment replicates industry conditions.

This process will hone your specialist skills in graphics, programming, design and web development, which you will learn in the core and elective elements of the program.

Program elective examples:

- Art After Videogames
- Artificial Intelligence
- Game Studies
- Independent Videogames
- Scripting Language Programming
- The Play Society
- Writing for Videogames
- Programming Internet of Things
- Rapid Application Development

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| Year 1 | Games Studio 1 | Web3D and Graphics Technologies | Programming Techniques | Discrete Structures in Computing |
| | Advanced Programming Techniques | Further Programming | Mathematics for Advanced Computing | Program elective |
| Year 2 | Interactive 3D Graphics and Animation | Introduction to Computer Systems | Software Engineering Fundamentals | Program elective |
| | Real-time Rendering and 3D Games Programming | Games Studio 2 | Algorithms & Analysis | Program elective |
| Year 3 | Interactive Digital Media Project A | Games and AI Techniques | Program elective | University elective |
| | Interactive Digital Media Project B | Mixed Reality | Program elective | University elective |

Compulsory courses
 Program electives
 University electives

Please note: This is an example of the program structure. Courses may change and may not be available each semester.