



GYROMAG by Gunsloth Games (2016)

## Bachelor of Software Engineering (Game Programming)

Ready to become a games industry rock star?

When becoming a Game Programmer, you'll learn best while doing. You'll code, you'll craft and, in the end, you'll graduate with a portfolio like no other.

A game programmer is a specialist software engineer who develops solutions and computer programs to activate computer game interaction. In essence, programming is the math and logic that makes the game happen. This may include Artificial Intelligence programming, engine programming, tools programming, mathematics and physics programming, and network programming or graphics programming.

Thanks to the partnership with Sony Computer Entertainment Europe (SCEE), you will develop games for PlayStation® platform through the PlayStation® First Academic Development Program. You will learn C++ and other coding languages and work with Unity and Unreal – the two main engines for game development. By the time you are ready to graduate, you will have collaborated with fellow programmers and game artists to create a commercially viable game.

The Bachelor of Software Engineering (Game Programming) blends academic theory, research, and practice with advanced programming skills as applied in the game development industry. Throughout the course the integration of theory and hands-on practice through to industry-standard productions will complement the development of investigative skills, and analytical, creative and critical approaches to problem solving. In addition to practical skills, knowledge and design capability, the Bachelor of Software Engineering (Game Programming) also has a holistic approach to developing your individual attributes and abilities in 'soft skills' such as communication, commercial acumen, and understanding of business realities.

### CRICOS CODE:

093341J

### INTAKE PERIODS:

February, June, September

### DURATION:

Full-time: 3 years

Full-time accelerated: 2 years

Part-time: 6 years maximum

### FEE:

\$67,500

### STUDY TYPE:

Full-time on campus

## Core Subjects

Maths 1

Introduction to Software Engineering

Algorithms and Data Structures

Computer Architecture and Operating Systems

Introduction to Computer Graphics

Networking and Database Systems

Work Integrated Learning

Social Enterprise

## Specialisation subjects

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Game Design Principles

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Maths 2

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2D Game Programming

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Artificial Intelligence and Physics for Games

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3D Graphics Programming

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Rapid Game Prototype

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Pre-production Capstone 1

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Production Capstone 2

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To be awarded the Bachelor of Software Engineering (Game Programming), students must complete 240 credit points over 23 subjects. Each subject has a value of 10 credit points, with one subject having a value of 20 credit points (PRO302 Production Capstone).

## Career possibilities:

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Gameplay Programmer

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Game Programmer

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Generalist C++ Programmer

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Software Engineer

## Entry requirements

- Year 12 equivalent with ATAR 60.

### Additional Entry Requirements (All Students):

- Completion of Mathematics subject as part of Year 12 studies (SACE Mathematical Methods or Mathematical Studies or equivalent), OR
- Above average score in the Torrens University Math test, OR
- For international applications IELTS 6.0 with no skills band less than 5.5

### Special Entry Requirements:

Demonstrated ability to undertake study at this level:

- Work experience, and/or other formal, informal or non-formal study attempted and/or completed, OR
- Programming portfolio (5 pieces of original work).

## At Torrens University Australia, you can:



Enjoy an international study experience as part of your program.



Enjoy hands-on, real world experience with industry placements.



Experience small class sizes of up to 25 students.



Take advantage of a fast-tracked program to complete your qualifications in as little as two years.



Be a part of a global network and community of ideas with Laureate International Universities.



Apply direct to Torrens and find out if you've been accepted.

## More Information

Contact a Course and Careers Advisor on **1300 851 245** for more information on any Torrens program.

Torrens University Australia, ABN 99 154 937 005, CRICOS provider number: 03389E. Torrens University Australia is registered as a self-accrediting Australian university by the Tertiary Education Quality and Standards Agency (TEQSA).

The information published in this document is correct at the time of print. However, all programs are subject to review by the Academic Council of Torrens University Australia and the University reserves the right to change its program offerings and courses without notice.

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