Bachelor of Information Technology (Games and Graphics Programming)

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’ll 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’ll learn to read and write computer code (using both game-development engines and lower-level programming libraries) to create video games. You’ll 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.

Industry connections
You’ll work on interactive media projects with students from the design programs. Working in a multidisciplinary environment creates a setting that closely follows the games development process in the industry.

Work placements with games companies are also encouraged to give you a real industry experience.

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 with global work and study opportunities. You could spend a semester studying abroad, take part in a study tour or complete an international internship.

Pathways
Graduates of the RMIT Associate Degree in Information Technology who achieve a grade point average (GPA) of at least 3.0 out of 4.0 may be eligible for credit of six courses (equivalent to 144 credit points), if successful in gaining a place.

Please note that the amount of time required to complete the program may exceed two years due to the availability and sequencing of some major electives and is also dependent on which semester you commence the program.
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’ll undertake projects in the 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.

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<tr>
<th>Year 1</th>
<th>Games Studio 1</th>
<th>Web3D and Graphics Technologies</th>
<th>Programming Techniques</th>
<th>Discrete Structures in Computing</th>
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<tbody>
<tr>
<td>Games Studio 2</td>
<td>Mathematics for Advanced Computing</td>
<td>Advanced Programming Techniques</td>
<td>Software Engineering Fundamentals</td>
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<th>Year 2</th>
<th>Data Communication and Net-Centric Computing</th>
<th>Network Programming</th>
<th>Interactive 3D Graphics and Animation</th>
<th>Algorithms and Analysis</th>
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<tr>
<td>Programming Using C++</td>
<td>Real-Time Rendering and 3D Games Programming</td>
<td>Program elective</td>
<td>Program elective</td>
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<tr>
<th>Year 3</th>
<th>Game Mechanics and Game Play Programming</th>
<th>Interactive Digital Media Project A</th>
<th>Interactive Digital Media Project B</th>
<th>University elective</th>
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<tbody>
<tr>
<td>Program elective</td>
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<td>Program elective</td>
<td>University elective</td>
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Entrance requirements
Successful completion of an Australian Year 12 senior secondary certificate of education or equivalent.

Prerequisites
Current Year 12 prerequisites units 3 and 4 – a study score of at least 25 in one of Mathematical Methods (CAS) or Specialist Mathematics; and a study score of at least 25 in any English (except EAL) or at least 30 in English (EAL).

Additional information
Non-Year 12 applicants may submit additional information if they would like it to be considered. For semester 1 intake, this can be completed through the VTAC Personal Statement online. For semester 2 intake, this can be completed through the personal statement in the Apply Direct application.

This information is designed for Australian and New Zealand citizens and permanent residents of Australia.

Disclaimer: Every effort has been made to ensure the information contained in this publication is accurate and current at the date of printing. For the most up-to-date information, please refer to the RMIT University website before lodging your application. Visit www.rmit.edu.au.