As reported in the Games Developers Association of Australia Industry Profile Report\(^1\), the games industry in Australia employs over 1400 people and consists of around 45 distinct businesses. In the period from September 2006 to July 2007 approximately 300 new jobs were created. Total income for the industry was over 100M in the 2006/07 financial year. Over 80% of this income is export oriented, indicating the globalization of the industry. The number one key challenge facing the industry is attracting skilled staff.

The Graduate Certificate of Games Technology degree is fun and interesting but also has some units that allow students to challenge themselves at the higher levels to develop some in-depth technical gaming skills. The Graduate Certificate will be attractive to students who have already completed a Bachelor of Computing (or equivalent) and who want to retrain to enter the booming game industry.


**Course structure**

The Graduate Certificate consists of the equivalent of one semester of full-time study. The program consists of four coursework units, each with a weighting of 12.5%. The Certificate can be completed in one or two years of part-time study.

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>KXG563 Games Fundamentals</td>
</tr>
<tr>
<td>KXG64 Games Physics</td>
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<tr>
<td>KXG261 Games Design &amp; Production</td>
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<tr>
<td>Elective</td>
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</tbody>
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**Elective units are selected from the following:**

- Multi-core Architecture and Programming
- Computer Graphics and Animation
- Advanced Games Programming

**Course objectives**

The Graduate Certificate of Games Technology is a comprehensive course that encompasses software engineering with a games orientation. The specific course objectives are as follows:

- to provide a thorough understanding of the theory, design and programming techniques required for producing computer games and simulation;
- to produce computing professionals with the ability to apply new and emerging computing technologies to create computer games.
Career outcomes

Graduates will find employment in games production companies of all sizes. Games and simulations are closely related, and graduates of the degree would be equally employable in either industry. Graduates of the course can expect to work in a wide range of games specific areas including game designer, game developer, game programmer, component integrator, and simulation developer.

School facilities and resources

Students will gain experience in state-of-the-art laboratories using Apple Macintosh, Microsoft Windows and Linux. All systems in the School of Computing & Information Systems access AARNet (the Australian Academic and Research Network), which connects most Universities and research organisations in Australia to the Internet. Wireless networking is provided for student-owned laptops.

School facilities and resources are available to students twenty four hours per day, seven days per week. In addition to the academic program, the School holds dinners, barbecues and social events throughout the year, and there are support and interest groups such as the Tasmanian University Computer Society (TUCS), a Mentor scheme for beginning students, and an International Affairs Coordinator to assist overseas Computing students.

University resources

On campus there are libraries, sports centres, gymnasiums, tennis courts, squash courts, sports fields, banks, travel agents, shops, bars, cafes, cultural and sporting clubs and societies, and student Health, Housing, Careers and Employment services.

The University issues students with ID cards that, for full-time students, provide discounts on movie tickets, transport, travel and more. In addition there are computers available in the libraries, faculties, student union and IT Services laboratories across campus. All students have free e-mail and Internet accounts.

Start dates

There are two semesters each year at the University of Tasmania and each semester has thirteen teaching weeks. First semester starts late February and continues until June and second semester starts early July and continues until November. You can begin your program in first or second semester.

Admission requirements

Candidates should possess a Bachelor of Computing degree (or equivalent) from a recognized University. Alternatively, candidates should possess any Bachelor degree (or equivalent) from a recognized University that resulted in at least a pass in the following four units (or equivalents), e.g. A Bachelor of Science with Major or Minor in Computing. Alternatively, candidates can possess any Bachelor degree (or equivalent) from a recognized University and enrolment in an Associate Degree of Computing that has resulted in at least a pass in the following four units (or equivalents):

- KXT101 Programming and Problem Solving
- KXT102 Programming with Data Structures
- KXX231 ICT Project Management
- KXT201 Algorithms

Contacts

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