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 Diploma 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 Diploma 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 Diploma consists of the equivalent of one year’s full-time study. The program consists of eight coursework units, each with a weighting of 12.5%. The Diploma can be completed in two to four 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>KXG361 Games Project A</td>
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<tr>
<td>KXG564 Games Physics</td>
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<tr>
<td>KXG362 Games Project B</td>
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<tr>
<td>KXG261 Games Design &amp; Production</td>
</tr>
<tr>
<td>KXG363 Advanced Games Programming</td>
</tr>
<tr>
<td>KXG262 Computer Graphics &amp; Animation</td>
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<tr>
<td>Advanced Elective</td>
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</tbody>
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Advanced elective units are selected from the following:

- Multi-core Architecture and Programming
- Mobile & Ubiquitous Computing
- Artificial Intelligence

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.
Course objectives

The Graduate Diploma 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;
• to produce computing professionals with a high level of relevance to a range of industries such as electronic entertainment, scientific simulation and modelling;
• to produce computing professionals who can communicate and cooperate with others and work within and contribute to a team environment.

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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