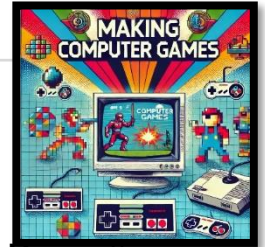


DGT215124 Making Computer Games (Digital Technologies)

15 TCE Points



You will work through the following units as part of Making Computer Games

Unit 1: Game Design Basics

Learn the fundamentals of game mechanics, design principles, and block coding using Microsoft Makecode Arcade. Create a simple, playable game.

Unit 2: Coding for Games

Develop coding skills with variables, loops, and conditions. Use pseudocode and flowcharts to plan, then build interactive multi-level games.

Unit 3: Advanced Design

Collaborate to create a themed game. Explore storytelling, advanced coding techniques, and user-focused design for accessibility.

Unit 4: Game Data & Analytics

Collect, analyse, and visualise data from games. Use insights to refine designs while exploring ethical data use and privacy.

Unit 5: Future of Gaming

Dive into emerging trends like AI and VR. Design a game concept that addresses real-world issues and reflects on gaming's societal impact.

How you'll be assessed:

Common types of internal assessments are:

- **Game Prototypes:** Students create and present working game projects with documented development processes.
- **Design Folios:** Include sketches, pseudocode, flowcharts, and reflections on game design.
- **Short Responses:** Answer questions on coding concepts, data usage, and game mechanics.
- **Infographics and Presentations:** Use data from games to create visual reports or pitch ideas.
- **Collaborative Projects:** Group work on themed games with shared responsibilities and peer evaluations.

What Students Need to Be Successful

- Basic coding literacy and willingness to learn new programming tools.
- Creativity and problem-solving skills for designing engaging and innovative games.
- Strong time management and organisation to meet project deadlines.
- Collaboration and communication skills to work effectively in teams and incorporate feedback.

COMPLETION OF WORK

Assessment due dates are provided in the Program of Learning and on Canvas. Work must be submitted by the due date unless an approved extension has been granted. Unapproved late submissions will incur penalties as outlined in the *Completion of Work Policy*. Students needing extensions should contact their subject teacher before the due date with valid reasons, such as illness or unforeseen circumstances.

For more details refer to the Launceston College: [Completion of Work Policy](#).

ACADEMIC INTEGRITY

All senior secondary students in Tasmania are expected to uphold academic integrity, meaning they complete their work honestly and fairly. This includes properly referencing any ideas, images, or information borrowed from others, allowing teachers to distinguish between original and sourced content.

Assignments will be submitted through Canvas, email, hard copy as directed in the task sheet.

For more details, refer to the Launceston College: [Academic Integrity Policy](#).

REFERENCING

The Harvard referencing system is recommended for subject name. The standards for Criterion 4 state that a student must:

- Selects and uses appropriate referencing and citation methods to identify sources correctly.

COURSE DOCUMENT

The TASC website provides considerable information about the course. [Digital Technologies - TASC](#)

OTHER COURSE REQUIREMENTS

- Access to Technology: Students need access to computers capable of running game development tools such as Microsoft Makecode Arcade, microStudio, and Game Maker.
- Software and Tools: Familiarity with or willingness to learn tools like Excel, Google Sheets, and graphic design software for data analysis and visualisation.
- Independent Learning: Students are expected to explore coding and game-making concepts independently outside of class hours.
- Team Participation: Active involvement in collaborative projects and group discussions is essential for success.
- Portfolio Submission: Students must maintain a design portfolio documenting their progress, which will be used for assessment and reflection.

Week	Date	Program of Learning 2025	Notes / Assessments
1	6 Feb	Course introduction and expectations. Exploring basic game mechanics and design principles. Introduction to Microsoft Makecode Arcade.	<i>Yr 11s and 12's return February 8 (Thursday)</i> Students create their first single-level game using block coding.
2	10 Feb	Course introduction and expectations. Exploring basic game mechanics and design principles. Introduction to Microsoft Makecode Arcade.	
3	17 Feb	Deconstructing existing games to understand their mechanics. Designing characters and levels.	Submit a game storyboard and character sketches.
4	24 Feb	Deconstructing existing games to understand their mechanics. Designing characters and levels.	<i>Wed 26 Feb – Launceston Cup</i>
5	3 Mar	Coding basics: Variables, loops, and conditionals. Building and testing multi-level games in Makecode Arcade.	Peer review and debugging of game projects.
6	10 Mar	Coding basics: Variables, loops, and conditionals. Building and testing multi-level games in Makecode Arcade.	<i>Mon 10 Mar – Public Holiday</i>
7	17 Mar	Coding basics: Variables, loops, and conditionals. Building and testing multi-level games in Makecode Arcade.	
8	24 Mar	Refining games with scoring systems and interactive features. Introduction to pseudocode and flowcharts for planning.	Submit a refined multi-level game and a flowchart of the design process.
9	31 Mar	Refining games with scoring systems and interactive features. Introduction to pseudocode and flowcharts for planning.	
10	7 Apr	Refining games with scoring systems and interactive features. Introduction to pseudocode and flowcharts for planning.	
Term 1 break – Saturday 12 April – Sunday 27 April			
1	28 Apr	Introduction to microStudio for 2D game design. Transitioning from block coding to text-based coding.	Create a basic game in microStudio with at least one interactive element.
2	5 May	Introduction to microStudio for 2D game design. Transitioning from block coding to text-based coding.	
3	12 May	Advanced coding concepts: Functions, arrays, and debugging. Adding story elements to games for engagement.	Submit a narrative-based game project.
4	19 May	Advanced coding concepts: Functions, arrays, and debugging. Adding story elements to games for engagement.	
5	26 May	Advanced coding concepts: Functions, arrays, and debugging. Adding story elements to games for engagement.	
6	2 June	Collaborative game development project. Introduction to Game Maker for advanced game mechanics.	Group project proposal and development.
7	9 June	Collaborative game development project. Introduction to Game Maker for advanced game mechanics.	<i>Mon 9 June – Public Holiday</i>
8	16 June	Collaborative game development project. Introduction to Game Maker for advanced game mechanics.	
9	23 June	Completing and presenting group projects. Mid-year review and reflection.	Mid-Year Assessments Level 3 & 4 <i>Start Thursday 26th June – Thursday 3rd July</i>
10	30 June	Completing and presenting group projects. Mid-year review and reflection.	Mid-Year Assessments Level 3 & 4 <i>Start Thursday 26th June – Thursday 3rd July</i>
Term 2 break – Saturday 5 July – Sunday 20 July			
1	21 July	Introduction to game analytics and data collection. Using spreadsheets to track player stats and scores.	Analyse and visualise game data in a chart or graph.
2	28 July	Introduction to game analytics and data collection. Using spreadsheets to track player stats and scores.	
3	4 Aug	Privacy and security in game development. Ethical considerations and user privacy.	Create an infographic on ethical game design.
4	11 Aug	Privacy and security in game development. Ethical considerations and user privacy.	
5	18 Aug	Investigating emerging technologies like AI and VR in gaming. Designing innovative game concepts.	Pitch an innovative game idea incorporating future trends.
6	25 Aug	Finalising individual projects for portfolios. Preparing for end-of-year assessments.	
7	1 Sep	Develop major game project	
8	8 Sep	Develop major game project	
9	15 Sep	Develop major game project	
10	22 Sep	Develop major game project	
Term 3 break – Saturday 27 September – Sunday 12 October			
1	13 Oct	Final adjustments to portfolios and project evaluations. Exam preparation: Reviewing key coding and design concepts.	
2	20 Oct	Final adjustments to portfolios and project evaluations. Exam preparation: Reviewing key coding and design concepts.	
3	27 Oct	Presentations of final projects	
4	3 Nov	Presentations of final projects	<i>Mon 3 Nov – Public Holiday</i>
Exams begin (Monday 10th November) - Exams end (Thursday 20th November)			

ASSESSMENT

Criterion-based assessment helps students see how well they're meeting course outcomes at the end of their study. While there is continuous feedback to guide learning, final assessments focus on showing what students have achieved by the end. Ratings are given as 'A', 'B', or 'C', based on course standards. A 't' indicates partial achievement below a 'C', and a 'z' means no evidence provided.

Schools follow TASC's quality assurance to keep standards consistent. More details are on the [TASC website](#). Final awards are based on both internal and TASC-supervised external assessments.

Criteria

The assessment for Digital Technologies Level 2 will be based on the degree to which the learner can:

1. describe and use common computer software and hardware
2. collect, analyse and model data for a defined purpose
3. design, create and assess digital solutions to meet an identified need
4. communicate knowledge and information about digital technologies
5. use digital tools to create content, plan, collaborate and manage projects
6. describe how privacy and security issues are mitigated in digital systems
7. apply basic programming skills to create a digital solution
8. design and create digital solutions that consider user experience.

Award Requirements

The final award will be determined by the Office of TASC from 8 ratings.

The minimum requirements for an award in this course are as follows:

EXCEPTIONAL ACHIEVEMENT (EA)

6 'A' ratings, 2 'B' ratings

HIGH ACHIEVEMENT (HA)

3 'A' ratings, 4 'B' ratings, 1 'C' rating

COMMENDABLE ACHIEVEMENT (CA)

4 'B' ratings, 3 'C' ratings

SATISFACTORY ACHIEVEMENT (SA)

6 'C' ratings

PRELIMINARY ACHIEVEMENT (PA)

4 'C' ratings

A learner who otherwise achieves the ratings for an SA (Satisfactory Achievement) award but who fails to show any evidence of achievement in one or more criteria ('z' notation) will be issued with a PA (Preliminary Achievement) award.