Year One

GAT110 Art and Design Foundation

Art and Design Foundation utilises traditional art theories and practices as a means of underpinning student research into the creation of art and graphic design artefacts. This understanding allows students to produce graphics that are effective in visual communication, understand form, and articulate their ideas.

At the end of this component the necessary skills and theoretical foundations of traditional art practices should be evident in the work generated by the student over the course of the year.

GAT120 2D Visual Asset Generation

This component utilises traditional art theories and design foundations and makes them relevant in the digital domain.

Students create digital artefacts for a variety of outcomes, including concept, pixel and vector art, sprite creation and other digital native formats utilised in the production of video game development. As part of this component, students learn to critique and to be critiqued by peers and lecturers alike in order to understand art and design from a variety of perspectives.

GAT130 Game Production Foundation

2D art assets and basic scripting are combined in this component, enabling students to recognize how art, design and code impact on the user experience. Utilising game development techniques and tools, students will create their own arcade style games, requiring a multifaceted approach including project management, art and design theory, user interaction, menu systems, audio integration, scripting, game design and release.

These trans-disciplinary artefacts scaffold the student’s knowledge for the second year of study, when they will interact with the Bachelor of Software Engineering students.

GAT140 3D Visual Asset Generation

Here students expand on knowledge gained in the GAT120 course and will utilise industry standard 3D modelling tools and techniques to communicate complex ideas and emotions.

Students will critique artefacts that utilise the concepts of form, function, and silhouette learned in previous components.

GAT160 Creative Technologies: Game Studies I

Game Studies I offers an introduction to the study of video games as texts situated within wider cultural and theoretical settings. Students will explore the history of video games as creative technologies and as cultural artefacts. These ideas will be framed through critical analysis of specific case studies, informed by a wider reading of contemporary games scholarship.
Fundamental scholarly skills will be introduced and developed through investigative projects where students will be encouraged to gather and present multiple sources of information in unique and interesting ways.

**GAT170 Technical Art I**

Technical Art I introduces techniques in content creation pipelines to deliver solutions involved in 3D game productions. The students will enhance their technical abilities by working with basic scripting, lighting, shaders, particles and various other pipeline elements utilised in interactive media.

**GDV110 Game Design Principles**

Here students are introduced to game design foundations, techniques and paradigms through a series of lecture-led and student-led activities. Game design principles are explored through the analysis of existing game artefacts, applying those findings to the development of their own games.

Students are introduced to a variety of analysis, development and presentation techniques encouraging discussion, creation and dissemination of their design choices through prototyping and documentation.
**Year Two**

**GAT240 Advanced 3D**
Building upon the knowledge gained in the 3D Visual Asset Generation component, GAT240 teaches advanced modelling and texturing techniques to enhance workflow. Students will learn to 3D model Utilising digital sculpting software.

Additional topics covered will include how to retopologise models and utilise various tools to enhance production speed and quality. Students will also learn how to optimise their models for a variety of applications.

**GAT270 Technical Art II**
Technical Art II teaches the process of how to create rigs and technical art for games. This will provide the student with the technical skills to solve or enhance art and design assets.

Topics also covered in the class will include integration into game engines and basic scripting. Students will learn key terminology of how to optimise their technical art skills for a variety of applications.

**GAT210 Real Time Animation**
Students will be taught the techniques used to create efficient animations for interactive media. In addition to animation theory, topics will also include prop, weapon, and environment animation, character and facial animation along with motion capture topics including cinematics and technical limitations.

**Creative Technologies Principles: GA2C01**
GA2C01 provides students with a venue to explore the impact of entertainment media on society. In addition, students develop their scholarly skills by engaging with and debating contemporary issues surrounding the production, dissemination, and consumption of game and or entertainment media. Students are asked to consider games from a variety of critical and theoretical perspectives.

**GAT260 Creative Technologies: Game Studies II**
Game Studies II provides students a venue to explore the impact of entertainment media on society with structured analysis and interpretation. This look into society develops scholarly skills by encouraging students to engage and debate contemporary issues surrounding the production, dissemination, and consumption of interactive media.

**GDV210 People and Games**
People and Games introduces students to non-technical, human aspects of game development and the games industry. Through a series of lecture and seminar-based talks, discussions, and play sessions, students are encouraged to explore and discuss the wider context of the game industry in relation to the economic, social, and cultural determinants surrounding the production and consumption of games and games technology.
**GDV220 Rapid Game Prototype**

This component provides students with an opportunity to work together on a series of projects, enhancing collaborative skills within a team of people across multiple disciplines. Additionally, the assignments in this component will challenge the student in finding creative solutions to project management and small-scale rapid game creation.

Students will be asked to create three 3D game prototypes over the course of 15 weeks and in the final week (week 16) present their work in front of the class and post their work online.

**GDV230 Professional Practice and Communication**

Professional Practice and Communication equips students with the necessary tools to create supporting documents needed in business and production methodologies.

On successful completion students will be able to plan and manage a project through to completion, understand the basics of starting up a company, effectively communicate using a variety of media, and utilise their knowledge in creating a plan or strategy for a business and/or production. Students will undertake the creation of a curriculum vitae and various collateral, which will be used as a basis for future information sent out to prospective employers.
**GAT360 Creative Technologies: Game Studies III**

Game Studies III uses the student’s ability to undertake scholarly research to further develop their knowledge of game development practices. This component allows the students to specify their own research topics; identify a critical position, with an aim of creating work that demonstrates evidence of research practice and methodology.

This is an opportunity for students to pursue research in any game related field they desire with the output being either purely theoretical or supplemented by creative practice. Whilst weekly classes facilitate communication with the lecturer and the review of one another’s drafts and progress, it is a self-directed component with students responsible for their own learning and time management.

**GAT320 World Design**

World Design provides a framework in which students can expand upon knowledge gained in previous components. The tools, practices, and technical knowledge provided in this component help students develop game environments that consider design, aesthetic, technical and social contexts to improve the believability of their artefacts.

Students use the research opportunity and support provided on historical and fictional architectural movements to better convey a story through their design artefacts.

**GAT330 Portfolio Presentation and Critique**

Portfolio Presentation and Critique focuses on individual investigation and discovery. Students present their work to peer groups and industry professionals as a demo reel and/or web-based portfolio using their own artefacts and with an emphasis on marketability, industry expectation, and presentation.

Process and progress will be documented and presented alongside the portfolio and it is key to demonstrate evidence of combining conceptual, critical and creative thinking, strong technical and communication skills in partnership with the imagination so crucial in developing a personal vision.

**GDV310 Game Project: Pre-Production**

Game Project: Pre-Production focuses on the skills and abilities required to formulate a group and manage the pre-production of a game development project. With creative thinking and project scope at the forefront, the team goal is to reach and agree upon an understanding of the team’s strengths and weakness before deciding on a game to develop.

The team needs to be able to communicate the project, idea and scope through presentation, documents and a playable prototype. These pre-production submissions are all designed to gear the students towards the start of future productions.
**GDV320 Game Project: Alpha**

Game Project: Alpha allows development of the team’s design from the previous component with students needing to work efficiently and adhere to a schedule to be successful in this component. The quality of the implementation, and the development processes undertaken both affect the final grade as students utilise the best practices learnt during the course.

**GDV320 Game Project: Gold**

Game Project: Gold develops the previous two components to completion. This portion of the project gives the students the ability to refine, bug fix, and promote their projects, both internally and externally.