

# Articulation Structure

AIE Institute provides pathways to higher education from accredited vocational education and training courses in accordance with the *Credit and RPL Policy and Procedure*. Articulation arrangements are a formal mechanism that provide students with agreed and consistent credit outcomes for recognition of prior learning from another accredited qualification.

Students who have successfully completed AIE's Advanced Diploma of Professional Game Development from 2024 onwards will be eligible for entry into AIE Institute's Bachelor of Game Development degree and receive advanced standing relevant to their applicable major.

## **Mapping of units**

1. AIE Institute has conducted a formal mapping exercise with vocational Advanced Diplomas at AIE to determine equivalence of learning for students to articulate Bachelor courses offered at AIE Institute. The outcomes of the mapping are located at Appendices A to C. Appendix D contains pre-requisite information.
2. The outcome of the mapping exercise is for students who completed an:
  - a. Advanced Diploma of Professional Game Development (Game Programming)
  - b. Advanced Diploma of Professional Game Development (Game Design and Production)
  - c. Advanced Diploma of Professional Game Development (Game Art and Animation)

Students at AIE will receive advanced standing for their study at AIE as equivalent to three semesters of full-time study (120CP) at AIE Institute towards completion of the Bachelor of Game Development. As per the *Credit and RPL Policy and Procedure*, credit is granted for qualifications, where prior learning has been demonstrated to meet the relevant degree course or unit learning outcomes.

## **Mapping of course learning outcomes**

The course structure for articulating students focuses on demonstration of theoretical knowledge, critical analysis and evaluation, including development of academic writing skills, which are under-represented in AIE's advanced diploma qualifications. AIE Institute course structure also includes units to delve deeper into the discipline knowledge, in addition to two electives from any major to obtain broader interdisciplinary knowledge and establish a common language in game development. Broader knowledge, critical analysis and evaluation of the social and cultural factors in game design and development including ethics, diversity and gender issues in games are addressed with the articulation programs. AIE's Advanced Diploma of Professional Game Development includes group projects that develop foundational team skills in a simulated work environment, supporting entry into the third-year project units and enabling students to develop and apply theory, knowledge, creative, cognitive and technical skills in practice.

The customised combination of units for each major ensures that articulating students will achieve the course learning outcomes required for AIE Institute's Bachelor of Game Development degree.

Articulating students will not be eligible to complete the unit 300I Internship as part of the articulation program however they have the option to complete it as an additional paid Semester.

## **Course structures**

1. The following tables outline the course structure for students commencing study at AIE Institute who have received advanced standing via articulation for completion of the relevant Advanced Diploma at AIE from 2024.

2. Students who have completed an AIE Advanced Diploma prior to 2024 will need to apply to have their course evaluated as per the *Credit and RPL Policy and Procedure*.
3. Students may choose to complete the Bachelor of Game Development at a slower pace however the following schedule is recommended for those wishing to complete the Degree in the shortest timeframe possible.
4. Elective options are limited to availability in the semester they are offered for the full course timetable however students have the option to extend studies and choose electives offered in other semesters.

#### **Terms and conditions**

1. This articulation arrangement is solely for the purpose of assessing credit for AIE students entering AIE Institute's Bachelor course.
2. AIE Institute reserves the right to assess and admit students according to its policies and procedures, and in no way obliges AIE Institute to enrol students from AIE if they do not meet the entry requirements.
3. AIE Institute reserves the right to assess a student's suitability for each unit and may customise study plans to ensure a student addresses all learning outcomes.

## **1 Bachelor course structure – articulation from AIE Advanced Diploma of Professional Game Development (Programming)**

Commencing Semester	Name of Unit	CP
<b>First year of study</b>		
S1	GDC101 Introduction to game art	10
S1	GDC102 Introduction to game design	10
S1	GDC201 Human-computer interaction and user experience design	10
S1	GDC300A Major game production 1	10
S2	GDP204 Network programming for connected games	10
S2	Elective - GDP305 Advanced graphics architecture	10
S2	GDC300B Major game production 2	20
<b>Second year of study</b>		
S1	GDP201 Advanced programming techniques for games	10
S1	GDP301 Systems programming and cross-platform development	10
S1	GDC301 Game studies for wellbeing	10
S1	Elective - GDD301 Critical game studies	10

#### **Alternate electives for S1 are:**

- a. GDD201 Interactive narrative design
- b. GDA201 Principles of animation
- c. GDA202 Modelling and texturing for game environments
- d. GDC302 Virtual and augmented reality technologies

#### **Alternate electives for S2 are:**

- a. GDC303 Entrepreneurship and commercialisation in games
- b. GDC305 Technical Art for Games

## 2 Bachelor course structure – articulation from AIE Advanced Diploma of Professional Game Development (Design)

Commencing Semester	Name of Unit	CP
<b>First year of study</b>		
S1	GDC101 Introduction to game art	10
S1	GDD202 System design principles	10
S1	GDC201 Human-computer interaction and user experience design	10
S1	GDC300A Major game production 1	10
S2	GDX201 Graphical user interface design	10
S2	GDD203 Modular level design for game environments	10
S2	GDC300B Major game production 2	20
<b>Second year of study</b>		
S1	GDD301 Critical game studies	10
S1	GDC302 Virtual and augmented reality technologies	10
S1	Elective - GDD201 Interactive narrative design	10
S1	Elective - GDC301 Game studies for wellbeing	10

**Alternate electives for S1 are:**

- a. GDA201 Principles of animation
- b. GDA202 Modelling and texturing for game environments

## 3 Bachelor course structure – articulation from AIE Advanced Diploma of Professional Game Development (Game Art)

Commencing Semester	Name of Unit	CP
<b>First year of study</b>		
S1	GDC102 Introduction to game design	10
S1	GDC103 Introduction to game programming	10
S1	GDC201 Human-computer interaction and user experience design	10
S1	GDC300A Major game production 1	10
S2	GDX101 Level design theory	10
S2	GDX103 Art optimisation techniques	10
S2	GDC300B Major game production 2	20
<b>Second year of study</b>		
S1	GDC301 Game studies for wellbeing	10
S1	GDC302 Virtual and augmented reality technologies	10
S1	Elective - GDD202 System design principles	10
S1	Elective - GDD301 Critical game studies	10

**Alternate electives for S1 are:**

- a. GDD201 Interactive narrative design
- b. GDA301 Character animation

# Appendix A – Game Programming Major

AIE Advanced Diploma of Professional Game Development (Programming) mapped as equivalent to the AIE Institute Bachelor of Game Development (Game Programming)

Year / semester	Core, major, elective unit	AIE	AIE Institute	Credit Points
<b>Year 1</b>				
Sem 1	Core	<i>No equivalent unit</i>	GDC101 Introduction to game art	10
	Core	<i>No equivalent unit</i>	GDC102 Introduction to game design	10
	Core	Game Engine Scripting	GDC103 Introduction to game programming	10
	Core	Production Planning	GDC100A Game development project 1	10
Sem 2	Major	Introduction to C++	GDP101 Introduction to OO programming and C++	10
	Major	Maths for Games	GDP102 Maths for games	10
	Major	Computer Graphics	GDP103 Introduction to computer graphics	10
	Core	Production	GDC100B Game development project 2	10
<b>Year 2</b>				
Sem 1	Major	<i>No equivalent unit</i>	GDP201 Advanced programming techniques for games	10
	Core	<i>No equivalent unit</i>	GDC201 Human-computer interaction and user experience design	10
	Major	Code Design and Data Structures	GDP202 Algorithms and data structures	10
	Core	Proof of Concept	GDC200A Game development project 3	10
Sem 2	Major	Complex Game Systems	GDP203 Software engineering	10
	Major	<i>No equivalent unit</i>	GDP204 Network programming for connected games	10
	Major	Computer Graphics	GDP205 Computer graphics using shaders	10
	Core	Major Production	GDC200B Game development project 4	10
<b>Year 3</b>				
Sem 1	Major	<i>No equivalent unit</i>	GDP301 Systems programming and cross-platform development	10
	Core	<i>No equivalent unit</i>	GDC301 Game studies for wellbeing	10
	Core	Virtual and Extended Realities	GDC302 Virtual and augmented reality technologies	10
	Core	<i>No equivalent unit</i>	GDC300A Major game production 1	10
Sem 2	Core	<i>No equivalent unit</i>	GDC300B Major game production 2	20
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below.	10
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below.	10
	Core	Proof of concept and Major Production	GDC300I Internship	40
<b>RECOMMENDED ELECTIVES</b>		<b>AIE</b>	<b>AIE Institute</b>	
Choose two electives, 10 cp each		<i>No equivalent unit</i>	GDP303 Advanced Graphics Architecture	
		<i>No equivalent unit</i>	GDC303 Entrepreneurship and commercialisation in games	
		<i>No equivalent unit</i>	GDC305 Technical art for games	

# Appendix B – Game Design Major

AIE Advanced Diploma of Professional Game Development (Design) mapped as equivalent to the AIE Institute Bachelor of Game Development (Game Design)

Year /semester	Core, major, elective	AIE	AIE Institute	Credit Points
<b>Year 1</b>				
Sem 1	Core	<i>No equivalent unit</i>	GDC101 Introduction to game art	10
	Core	Introduction to Game Design	GDC102 Introduction to game design	10
	Core	Design Prototyping Fundamentals	GDC103 Introduction to game programming	10
	Core	Production Planning	GDC100A Game development project 1	10
Sem 2	Major	Level Design Fundamentals	GDD101 Level design theory	10
	Major	Designing the User Experience	GDX102 Graphic design principles	10
	Major	Level Design Fundamentals	GDX103 Art optimisation techniques	10
	Core	Production	GDC100B Game development project 2	10
<b>Year 2</b>				
Sem 1	Major	Narrative Design	GDD201 Interactive narrative design	10
	Major	<i>No equivalent unit</i>	GDC201 Human-computer interaction and user experience design	10
	Major	<i>No equivalent unit</i>	GDD202 System design principles	10
	Core	Proof of Concept	GDC200A Game development project 3	10
Sem 2	Major	<i>No equivalent unit</i>	GDD203 Modular level design for game environments	10
	Major	Testing and Quality Assurance	GDD204 Quality assurance and gameplay testing	10
	Major	<i>No equivalent unit</i>	GDX201 Graphical user interface design	10
	Core	Major Production	GDC200B Game development project 4	10
<b>Year 3</b>				
Sem 1	Major	<i>No equivalent unit</i>	GDD301 Critical game studies	10
	Core	Psychology and Economies	GDC301 Game studies for wellbeing	10
	Core	<i>No equivalent unit</i>	GDC302 Virtual and augmented reality technologies	10
	Core	<i>No equivalent unit</i>	GDC300A Major game production 1	10
Sem 2	Core	<i>No equivalent unit</i>	GDC300B Major game production 2	20
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below.	10
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below.	10
	Core	Proof of concept and Major Production	GDC300I Internship	40
<b>RECOMMENDED ELECTIVES</b>		<b>AIE</b>	<b>AIE Institute</b>	
<b>Choose two electives, 10 cp each</b>		<i>No equivalent unit</i>	GDC303 Entrepreneurship and commercialisation in games	
		<i>No equivalent unit</i>	GDC305 Technical art for games	

# Appendix C – Game Art Major

AIE Advanced Diploma of Professional Game Development (Game Art) mapped as equivalent to the AIE Institute Bachelor of Game Development (Game Art)

Year / semester	Core, major, elective unit	AIE	AIE Institute	Credit Points
<b>Year 1</b>				
Sem 1	Core	3D Art Pipeline	GDC101 Introduction to game art	10
	Core	<i>No equivalent unit</i>	GDC102 Introduction to game design	10
	Core	<i>No equivalent unit</i>	GDC103 Introduction to game programming	10
	Core	Production Planning	GDC100A Game development project 1	10
Sem 2	Major	<i>Covered in 2 units:</i> Game Environments and Modelling and Texturing	GDA101 Modelling and texturing for game environments	10
	Major	Graphical User Interface	GDX102 Graphic design principles	10
	Major	<i>No equivalent unit</i>	GDX103 Art optimisation techniques	10
	Core	Production	GDC100B Game development project 2	10
<b>Year 2</b>				
Sem 1	Major	Principles of Animation	GDA201 Principles of animation	10
	Major	<i>No equivalent unit</i>	GDC201 Human-computer interaction and user experience design	10
	Major	Character Pipeline	GDA202 Character pipeline	10
	Core	Proof of Concept	GDC200A Game development project 3	10
Sem 2	Major	<i>No equivalent unit</i>	GDD101 Level design theory	10
	Major	Digital Lighting and Compositing	GDA203 Digital lighting and visual effects	10
	Major	Graphical User Interface	GDX201 Graphical user interface design	10
	Core	Major Production	GDC200B Game development project 4	10
<b>Year 3</b>				
Sem 1	Major	Character Animation	GDA301 Character animation	10
	Core	<i>No equivalent unit</i>	GDC301 Game studies for wellbeing	10
	Core	<i>No equivalent unit</i>	GDC302 Virtual and augmented reality technologies	10
	Core	<i>No equivalent unit</i>	GDC300A Major game production 1	10
Sem 2	Core	<i>No equivalent unit</i>	GDC300B Major game production 2	20
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below	10
	Elective	<i>No equivalent unit</i>	Any 2nd or 3rd year unit from another major or as recommended below	10
	Core	Proof of concept and Major Production	GDC300I Internship	40
<b>RECOMMENDED ELECTIVES</b>		<b>AIE</b>	<b>AIE Institute</b>	
<b>Choose two electives, 10 cp each</b>		<i>No equivalent unit</i>	GDC303 Entrepreneurship and commercialisation in games	
		<i>No equivalent unit</i>	GDC305 Technical art for games	

# Appendix D - Prerequisites

Units	Prerequisite 1	Prerequisite 2
<b>GDC100A Game development project 1</b>		
<b>GDC101 Introduction to game art</b>		
<b>GDC102 Introduction to game design</b>		
<b>GDC103 Introduction to game programming</b>		
<b>GDC100B Game development project 2</b>	GDC100A	
<b>GDX101 Level design theory</b>	GDC102	GDC103
<b>GDP101 Introduction to OO programming and C++</b>	GDC103	
<b>GDX102 Graphic design principles</b>	GDC101	
<b>GDP102 Maths for games</b>	GDC103	
<b>GDX103 Art optimisation techniques</b>	GDC101	
<b>GDP103 Introduction to computer graphics</b>	GDC103	
<b>GDC200A Game development project 3</b>	GDC100B	
<b>GDA201 Principles of animation</b>	GDC101	
<b>GDD201 Interactive narrative design</b>	GDX101	
<b>GDP201 Advanced programming techniques for games</b>	GDP101	
<b>GDC201 Human-computer interaction and user experience design</b>	GDC102	GDC103
<b>GDA202 Modelling and texturing for game environments</b>	GDC101	
<b>GDD202 System design principles</b>	GDX101	GDC103
<b>GDP202 Algorithms and data structures</b>	GDP101	
<b>GDC200B Game development project 4</b>	GDC200A	GDC201
<b>GDA203 Digital lighting and visual effects</b>	GDX103	
<b>GDD203 Modular level design for game environments</b>	GDX101	GDC101
<b>GDP203 Software engineering</b>	GDP202	
<b>GDA204 Character pipeline</b>	GDA101	
<b>GDD204 Quality assurance and game play testing</b>	GDC201	GDX101
<b>GDP204 Network programming for connected games</b>	GDP201	
<b>GDX201 Graphical user interface design</b>	GDX102	GDC201
<b>GDP205 Computer graphics using shaders</b>	GDP103	GDP102
<b>GDC300A Major game production 1</b>	GDC200B	GDC201
<b>GDA301 Character animation</b>	GDA202	GDA201
<b>GDD301 Critical game studies</b>	GDC201	
<b>GDP301 Systems programming and cross-platform development</b>	GDP201	
<b>GDC301 Game studies for wellbeing</b>	GDC102	
<b>GDC302 Virtual and augmented reality technologies</b>	GDC201	
<b>GDC300I Internship</b>	GDC300A	
<b>GDC300B Major game production 2</b>	GDC300A	
<b>GDC303 Entrepreneurship and commercialisation in games</b>		
<b>GDC303 Sound design for games</b>	GDC102	
<b>GDC305 Technical art for games</b>	GDC101	
<b>GDP304 Artificial intelligence for games</b>	GDP201	
<b>GDP305 Advanced graphics architecture</b>	GDP202	GDP205