

Programme Regulations

Programmes:

- Bachelor of Computer Generated Imagery (BCGI)
- Graduate Diploma in Computer Generated Imagery (GDCGI)

Qualifications:

- Bachelor of Computer Generated Imagery with majors in Animation, Visual Effects, Technical Development
NZQF No 3925
- Graduate Diploma in Computer Generated Imagery
NZQF No 3926

The Programme Regulations describe the formal rules for the completion of the Programme and its constituent courses, and is approved by the Academic Board and made available to students either prior to or within one week of commencement of the programme.

Programme Regulations are the legally binding contractual obligations of staff and enrolled students. They are used by academic staff to guide delivery of the Programme and its courses.

*These Programme Regulations should be read in conjunction with the following sections of the **NMIT Academic Statute**:*

Section 2 Definitions

Section 3 Academic Regulations

Section 7 Schedule of Course Result Keys

The NMIT Academic Statute applies to all NMIT programmes, whether delivered at NMIT, or in conjunction with another provider or by distance.

The Academic Statute is available from all Curriculum Area Offices, the Library Learning Centre and on the NMIT website.

The website address is: www.nmit.ac.nz

All NMIT policies listed in this document are also available on the NMIT website.

TABLE OF CONTENTS

1.	QUALIFICATIONS AND AWARDS.....	8
1.1	Qualifications.....	8
1.2	Study Pathways – Ngā Huarahi.....	8
2.	TITLE, AIMS, LEARNING OUTCOMES AND COHERENCE.....	13
2.1	Programme Titles.....	13
2.2	Programme Aims – Ngā Whāinga Paetae.....	13
2.3	Target Learner Groups.....	13
2.4	Graduate Profiles.....	14
	Bachelor of Computer Generated Imagery:.....	14
	Graduate Diploma in Computer Generated Imagery.....	15
2.5	Programme Design.....	15
	Professional Practice.....	16
	3D Modelling.....	16
	Rigging and Animation.....	17
	Dynamic Effects.....	17
	CGI Lighting, Post-production, Real Time Shading.....	17
	CGI Technical Development.....	18
	CGI Project.....	18
2.6	Summary of Programme Structures - Anga.....	19
2.7	Schedule of Courses – Ngā Kōnae Ako.....	21
2.8	Core Transferable Skills.....	24
3.	DELIVERY.....	26
3.1	Mode of Delivery.....	28
3.2	Learning and Teaching Approaches.....	28
	Project Briefs.....	30
3.3	Student Research.....	30
3.4	OffSite Practical and Workplace Learning.....	31
3.5	Evaluation of Workplace Learning.....	32
3.6	Health and Safety Risk Management.....	32
4.	REGULATIONS.....	33
4.1	Entry Requirements.....	33

Entry into the Bachelor of Computer Generated Imagery.....	33
Entry into the Graduate Diploma in Computer Generated IMagery	35
Information Session.....	36
Portfolio Requirement* for Degree entry.....	36
Portfolio Requirement* for Graduate Diploma entry.....	37
Computer Literacy Requirement**	37
4.2 Selection	37
4.3 Recognition of Academic Credit	38
4.4 Transition Arrangements.....	38
4.5 Completion Requirements: Bachelor of Computer Generated Imagery (Animation)	39
4.6 Completion Requirements: Bachelor of Computer Generated Imagery (Visual Effects)	40
4.7 Completion Requirements: Bachelor of Computer Generated Imagery (Technical Development)	41
4.8 Completion Requirements – Graduate Diploma in Computer generated Imagery	43
4.9 Academic Regalia.....	44
5. ASSESSMENT AND RESULTS	45
5.1 Assessment Rationale.....	45
5.2 Basis of Assessment.....	45
5.3 Formative and Summative Assessment	45
5.4 Methods of Assessment	46
Professionalism*	47
5.5 Authenticity of Student Work	47
5.6 Assessment Results	48
5.7 Course Results	48
5.8 Attendance Requirements	50
5.9 Special Assessment Circumstances	51
5.10 Moderation.....	54
5.11 Internal Moderation	54
5.12 External Moderation	55
6. OTHER REQUIREMENTS.....	55
7. EXTERNAL REGULATIONS	56
8. NMIT ACADEMIC REGULATIONS	56
9. APPENDIX 1: BCGI GRADUATE OUTCOMES AND ASSESSMENT MAP	59

10. APPENDIX 1: GDCGI GRADUATE OUTCOMES AND ASSESSMENT MAP75

VERSION CONTROL

Academic Board approved 28th June 2018

Version	Approval date	Effective from	Brief description
18/1	28 June 2018		
18/1/01	01 November 2018	1 January 2019	<p>Update Regulations from version 18/1/00 to 18/1/01 following outcome of NZQA Approval and Accreditation October 2018</p> <p>Removal of references to Fully Online Delivery mode in the following sections:</p> <ul style="list-style-type: none">• 2.7 Schedule of Courses• 3 Delivery• 3.1 Mode of Delivery• 3.2 Learning and Teaching Approaches• 4.1 Entry Requirements• 5.1 Assessment Rationale• 5.8 Attendance Requirements• 6.1 Other Requirements for Fully Online Study <p>4.3 Recognition of Academic Credit – removal of Level 5 90 credit RAC limit</p> <ul style="list-style-type: none">• Removal of CGI507 Project 1 (30 credits) from the list of courses for which RAC is not available.

Refer to

NMIT Academic Statute s.2 Definitions

SPECIALIST DEFINITIONS:

AR	Augmented reality
CGI	Computer generated imagery - use of computer graphics in movies, printed, and electronic media
Displacement mapping	Computer graphics technique used to cause the geometric position of points over a textured surface to be displaced.
HDR	High dynamic range imagery
Image resolution	The amount of detail that a digital image holds - often considered equivalent to pixel count in digital imaging.
Key frame	The start or end point of a transition in a timeline.
Match moving	Inserting 3D models into live-action footage with correct position, scale, and motion.
N-gons	Polygons are classified according to the number of sides they have. A polygon with n sides is called an n-gon
Normal mapping	In 3D computer graphics, normal mapping is used for faking the lighting of bumps and dents to add details without using more polygons.
NURBS	Non-Uniform Rational B-Splines, are mathematical representations of 3D geometry used for organic shapes.
PBR	Physically Based Rendering - a conceptual framework for creating realistic materials by using shading and lighting conditions based on reality.
Pipeline	Production workflow that enables a team to execute a project.
Polygon	Object consisting of vertices (points/corners) edges (lines) and faces.
Polygon modelling	A method for representing 3D geometry.
Rendering	Process of building output files from computer animations when the software builds the final viewable result ready for export.
Rigging	In its simplest form, 3D rigging is the process of creating a skeleton for a 3D model so it can move.
Rotoscoping	Animation technique of adding or removing images to film frame by frame.
Topology	Surface characteristics of a 3D model. Can be quads-based (four sided faces) or triangle-based (three sided faces).
UDIM	Stands for U-Dimension. UDIM is a way of creating a single linear number that identifies each integer block in UV space.
UV mapping	UV mapping projects a texture map onto a 3D object. The letters 'U' and 'V' denote the axes of the 2D texture.
VFX	Visual effects (special visual effects)
VR	Virtual reality
VRAY	CGI rendering software application
Wireframe	Minimal visual presentation of a 3D object without texture or shading.

Refer to [NMIT Academic Statute s.2 Definitions](#)

1. QUALIFICATIONS AND AWARDS

1.1 QUALIFICATIONS

Qualification Reference	Qualification Title	Level	Credits	EFTS Value	Assessment Standards	Awarding Organisation
3925	Bachelor of Computer Generated Imagery with majors in Animation, Visual Effects, and Technical Development (BCGI)	7	360	1.0	n/a	NMIT
3926	Graduate Diploma in Computer Generated Imagery (GDCGI)	7	120	1.0	n/a	NMIT

1.2 STUDY PATHWAYS – NGĀ HUARAHĪ

The **Bachelor of Computer Generated Imagery** provides an education pathway from:

- Certificate or Diploma in Arts and Design or related field at Level 3, 4 or 5
- Certificate or Diploma in Information Technology or related field at Level 3, 4, or 5
- National Certificate of Educational Achievement (NCEA) (Level 3) [Ref: 1039]
- New Zealand Certificate in Digital Media and Design (Level 3) [Ref: 2628]
- New Zealand Certificate in Digital Media and Design (Level 4) [Ref: 2629]
- New Zealand Certificate in Arts and Design (Level 3) [Ref: 2626]
- New Zealand Certificate in Arts and Design (Level 4) [Ref: 2627]
- New Zealand Certificate in Creativity (Level 4) [Ref: 2869]
- New Zealand Diploma in Animation (Level 5) [Ref: 2634]
- New Zealand Diploma in Animation (Level 6) [Ref: 2635]

The **Graduate Diploma in Computer Generated Imagery** provides an education pathway from:

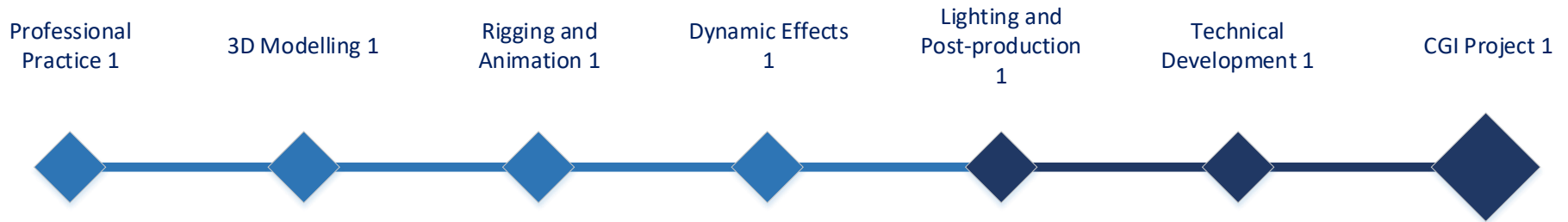
- Undergraduate degree in Arts and Media, IT, Digital Media, Film Production or related field

The **Bachelor of Computer Generated Imagery and Graduate Diploma in Computer Generated Imagery** provide education pathways to:

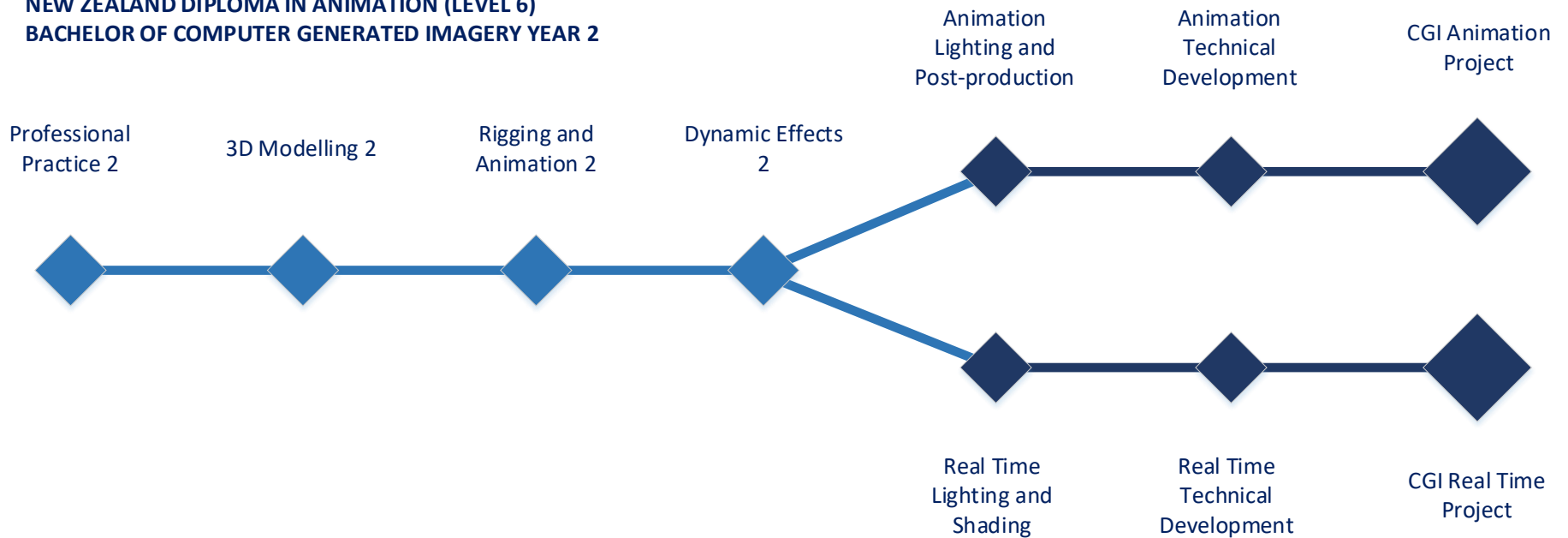
- Further tertiary study at postgraduate level in the fields of Animation, Computer Generated Imagery, or related fields

The following diagrams show pathways between the New Zealand Diploma in Animation (Level 5), the New Zealand Diploma in Animation (Level 6), the Bachelor of Computer Generated Imagery, and the Graduate Diploma in Computer Generated Imagery.

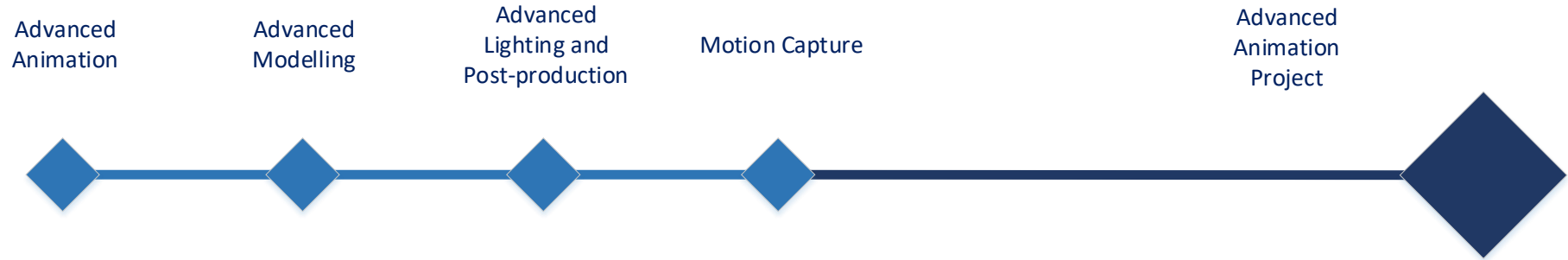
**NEW ZEALAND DIPLOMA IN ANIMATION (LEVEL 5)
BACHELOR OF COMPUTER GENERATED IMAGERY YEAR 1**



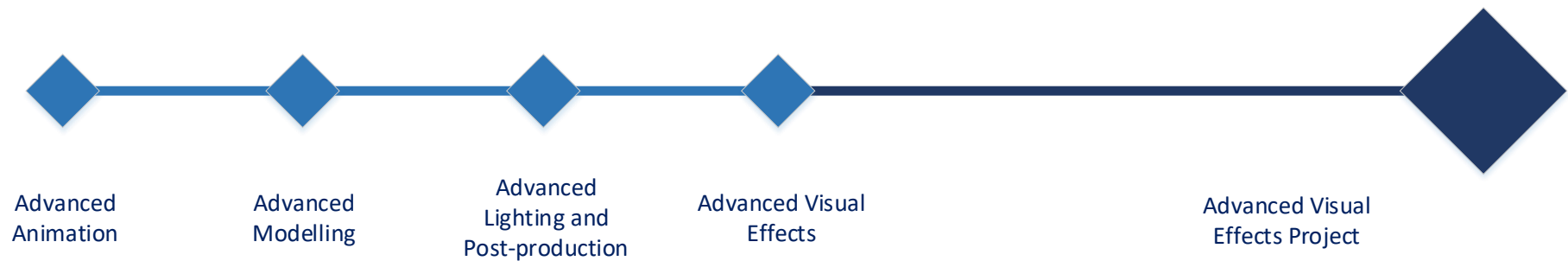
**NEW ZEALAND DIPLOMA IN ANIMATION (LEVEL 6)
BACHELOR OF COMPUTER GENERATED IMAGERY YEAR 2**



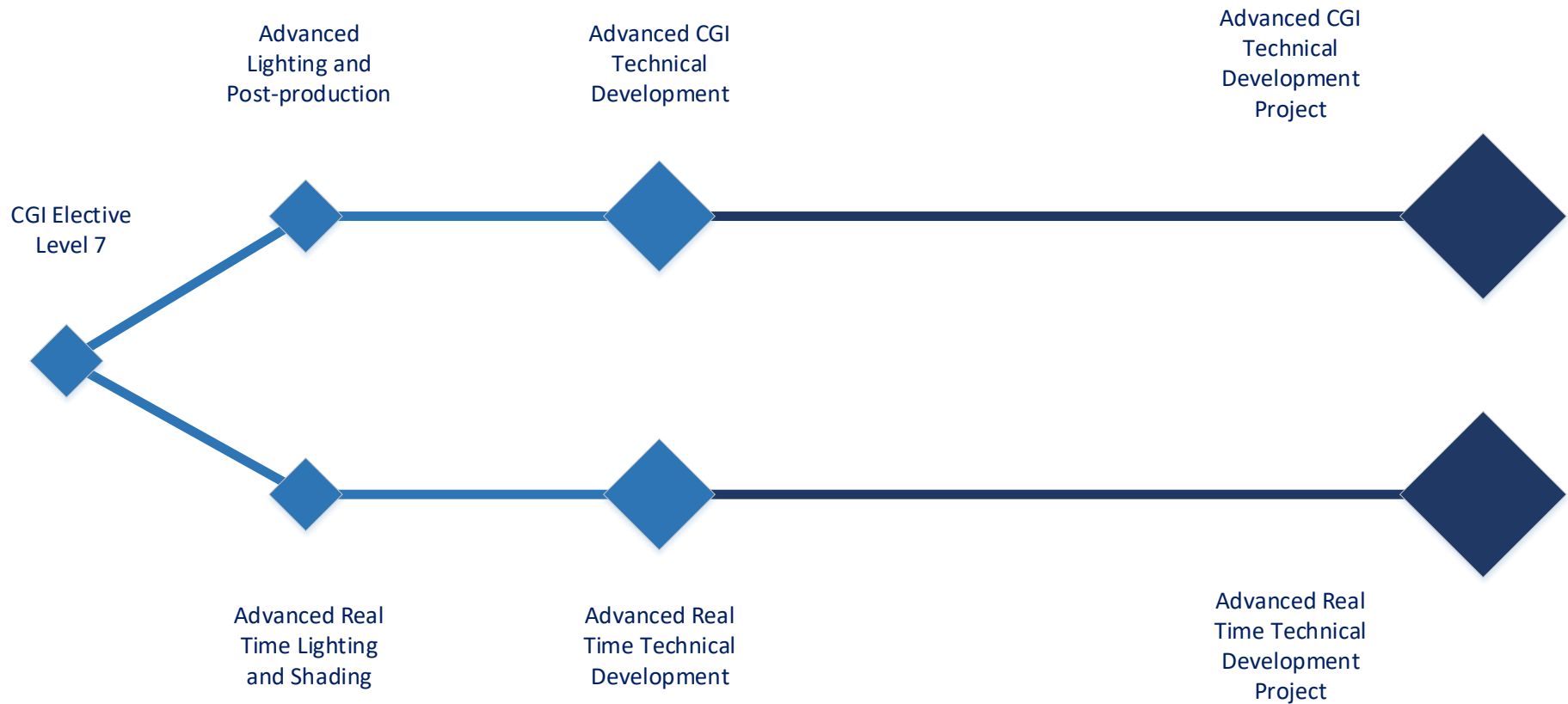
**BACHELOR OF COMPUTER GENERATED IMAGERY YEAR 3
ANIMATION MAJOR**



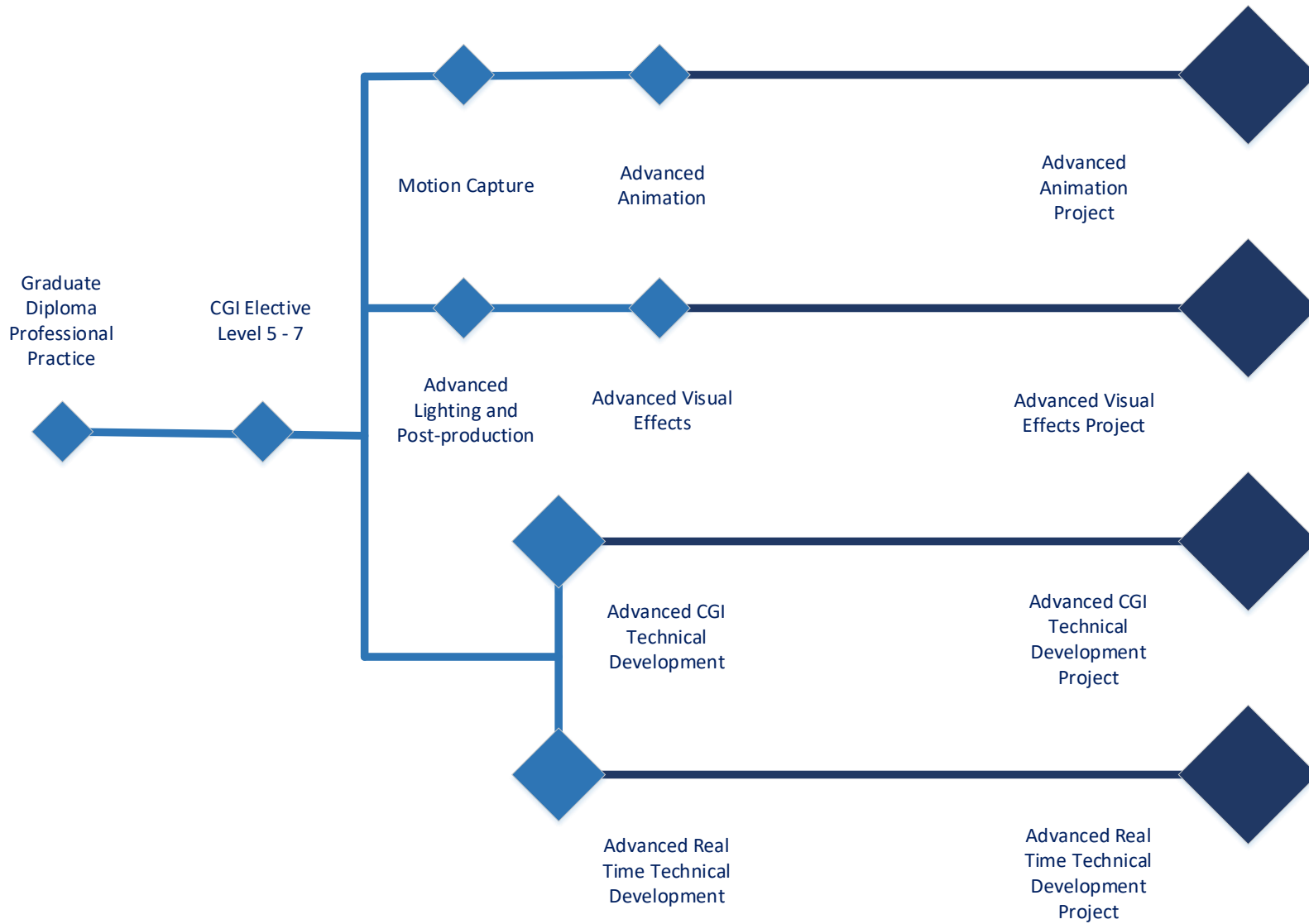
**BACHELOR OF COMPUTER GENERATED IMAGERY YEAR 3
VISUAL EFFECTS MAJOR**



**BACHELOR OF COMPUTER GENERATED IMAGERY YEAR 3
TECHNICAL DEVELOPMENT MAJOR**



GRADUATE DIPLOMA IN COMPUTER GENERATED IMAGERY



2. TITLE, AIMS, LEARNING OUTCOMES AND COHERENCE

2.1 PROGRAMME TITLES

- Bachelor of Computer Generated Imagery (BCGI)
- Graduate Diploma in Computer Generated Imagery (GDCGI)

2.2 PROGRAMME AIMS – NGĀ WHĀINGA PAETAE

The programmes aim to enable students to develop a wide range of skills and knowledge related to animation and computer generated imagery (CGI) to an advanced level, to build their experience of industry-standard animation and CGI production work, and to prepare them to progress to more advanced study in the fields of animation and/or computer generated imagery.

The Bachelor of Computer Generated Imagery (BCGI) programme aims to prepare students for work as professional CGI practitioners in New Zealand or internationally, specialising in either Animation, Visual Effects or Technical Development, and/or to prepare for further study at postgraduate level in computer generated imagery or a related field. It aims to produce graduates who are capable of using industry standard CGI production processes, tools and techniques to generate effective and innovative design, technical, pipeline and workflow solutions.

The Graduate Diploma in Computer Generated Imagery (GDCGI) programme aims to enable students who have a base of knowledge and skills related to CGI to further develop their specialist CGI capability to a more advanced level and/or to prepare for further study at postgraduate level in computer generated imagery or a related field. It aims to produce graduates who are capable of using industry standard CGI production processes, specialist tools and techniques to generate effective and innovative design, technical, pipeline and workflow solutions.

2.3 TARGET LEARNER GROUPS

The two programmes of study are designed for domestic and international students who wish to develop their specialist CGI skills and knowledge to an advanced level to prepare for further study related to CGI, and/or for employment in the CGI industry and/or the creative or cultural sectors, or in other sectors where CGI is used. The programmes will cater for school leavers as well as mature students.

Bachelor of Computer Generated Imagery

This qualification is designed primarily for people who wish to build a broad base of CGI skills, knowledge and experience, leading to specialisation in an aspect of CGI: Animation or Visual Effects or Technical Development. They may be aiming to progress to work as a professional CGI practitioner in industry in New Zealand or internationally, or to prepare for further study at postgraduate level in computer generated imagery or a related field.

Graduate Diploma in Computer Generated Imagery

This qualification is designed primarily for people who have already completed an undergraduate degree and who have significant experience in a field related to CGI. They wish to further develop the specialist CGI skills and knowledge required to work as a specialist CGI practitioner in a studio environment or in a freelance capacity, and/or to prepare for further study at postgraduate level in their specialist area. Elective choices enable students to undertake a study programme that meets their specialist needs and interests.

2.4 GRADUATE PROFILES

BACHELOR OF COMPUTER GENERATED IMAGERY:

Graduates of the Bachelor of Computer Generated Imagery qualification will be able to:

1. Apply problem solving skills to complex design, technical and workflow challenges to generate effective solutions for the CGI production pipeline.
2. Utilise reflection, critical analysis and personal enquiry, applying experience and researched knowledge effectively to CGI professional practice.
3. Apply and create CGI processes, procedures, tools and techniques to meet best practice industry requirements.
4. Contribute effectively to CGI project pipeline planning and management, and delivery of a range of CGI products to meet client requirements.
5. Perform both independently and collaboratively, and demonstrate effective communication and leadership skills within CGI production teams.

In addition, graduates with the **Animation major** will be able to:

6. Combine creativity and the understanding of motion, behaviours and expressions with knowledge and technical skills in animation in the production of successful animation projects.
7. Produce, present and evaluate innovative professional standard animation projects for a range of target markets or audiences.

In addition, graduates with the **Visual Effects major** will be able to:

8. Combine creativity and an understanding of natural dynamic changes with knowledge and technical skills in visual effects in the production of successful visual effects projects.
9. Produce, present and evaluate innovative visual effects and post-production projects of a professional standard for target markets or audiences.

In addition, graduates with the **Technical Development major** will be able to:

10. Create and evaluate innovative custom scripts and specialist tools to meet a range of different CGI production needs.
11. Create and evaluate efficient professional production pipeline for animation and/or film and/or game development.

Graduates of this qualification will be able to:

1. Apply problem solving skills to specialist design, technical and workflow challenges to generate effective solutions for the CGI production pipeline.
2. Utilise reflection, critical analysis and personal enquiry, applying experience and researched knowledge effectively to CGI professional practice.
3. Apply and create CGI processes, procedures, tools and specialist techniques to meet best practice industry requirements.
4. Contribute effectively to successful delivery of a range of specialist CGI products to meet client requirements.
5. Perform both independently and collaboratively, and demonstrate effective communication and leadership skills within a specialist CGI production team.

In addition the graduate with an **Animation focus** will be able to:

6. Combine creativity and the understanding of motion, behaviours and expressions with knowledge and technical skills in animation in the production of successful animation projects.
7. Produce, present and evaluate innovative professional standard animation projects to meet a range of target markets or audiences.

In addition the graduate with a **Visual Effects focus** will be able to:

8. Combine creativity and an understanding of natural dynamic changes with knowledge and technical skills in visual effects in the production of successful visual effects projects.
9. Produce, present and evaluate innovative visual effects projects of a professional standard for target markets or audiences.

In addition the graduate with a **Technical Development focus** will be able to:

10. Create and evaluate innovative custom scripts and specialist tools to meet a range of different CGI production needs.
11. Create and evaluate efficient professional production pipeline for animation and/or film and/or game development.

2.5 PROGRAMME DESIGN

These programmes of study are designed to reflect and foster the use of industry standard processes, tools and techniques for computer generated imagery (CGI) production for animated film and real time game development.

The design and development of these programmes is informed by input from key stakeholders and industry experts.

The programmes are structured to facilitate the introduction, development and extension of critical technical, conceptual and industry skills and knowledge required for successful professional practice in these fields.

Programme design reflects NMIT's use of the constructive alignment approach. This is an outcomes-focused approach to defining, promoting and assessing students' learning, using learning outcomes that are

measurable and achievable. It also promotes the idea that tutors create a system to support students' learning in which students and tutors are active participants in the learning process.

There are consistent coherent and logical interconnections between the graduate profiles for these programmes, the learning outcomes, teaching/learning activities and assessment activities.

Every Course Descriptor clarifies the credit value, course aim, indicative content, learning outcomes and assessment methods which are appropriate to the course level.

Within each individual course, learning and assessment activities, resources and learning support mechanisms are designed to maximise students' chances of achieving the course Learning Outcomes.

NMIT's learning design principles acknowledge the learner is at the core of programme, course, and assessment design. The learner's experience and existing knowledge is recognised and utilised within the learning process.

Level 5 and 6 courses in these programmes are shared with the New Zealand Diploma in Animation (Level 5) and the New Zealand Diploma in Animation (Level 6) respectively, and contribute to the achievement of the graduate outcomes of those diploma qualifications.

Level 5, 6 and 7 courses may be used as electives to contribute to the achievement of the Graduate Diploma in Computer Generated Imagery.

PROFESSIONAL PRACTICE

The Professional Practice courses prepare the student for work in professional and commercial CGI studios, and as an independent contractor. Content includes business acumen appropriate for freelance work, legal considerations, statutory regulations and tax obligations. A vital element for a CGI professional is the understanding of the CGI production workflow and pipeline and the ability to work collaboratively in a team-based professional environment.

At Level 5 and 6 students will build and develop their knowledge of professional and commercial CGI production practices and environments, the contexts in which they operate, industry roles, safe work practices, functional relationships between studio departments, and how workflow affects (and is affected by) the broader production pipeline. They will develop their own professional portfolios for careers in the CGI industries.

Graduate Diploma Professional Practice enables students to develop their existing knowledge of contemporary CGI production environments, industry roles, processes, expectations and issues.

3D MODELLING

Modelling is a fundamental skill in CGI. The products of modelling are 3D geometric assets, which can resemble anything from creatures, characters, environments, props and abstract forms. There are two types of general approaches to modelling: soft-body and rigid-body. Soft-body modelling is for organic forms, such as creatures, characters, vegetation and other natural forms. Rigid-body modelling is used for hard structures that are not usually prone to deformation, such as man-made objects like buildings, vehicles, furniture and mechanical structures.

At Level 5 and 6 students build and expand their knowledge and skills in 3D modelling methods used for animation and game production, apply fundamental and progressively more complex tools and techniques,

and experience the process of creating models for a variety of media industries such as animation and visual effects (VFX).

At Level 7 students will be utilising advanced knowledge and skills in 3D modelling methods used for animation and real time engines, applying industry-standard tools and techniques, developing effective workflows and experiencing the process of how to create well-developed models for a variety of industries.

RIGGING AND ANIMATION

Rigging is the process of preparing 3D geometric assets for animation. For example, a creature would consist of a soft-body 3D modelled asset, which would then be rigged with a 'skeleton' or 'armature'.

Animation is the process of manipulating rigs inside of 3D modelled geometric assets to create movement.

At Level 5 and 6 students will start with basic character animations and move on to progressively more complex animations, and will use contemporary industry techniques to produce photo-realistic and stylised animated characters and interactions between characters, objects, and environments.

At Level 7 students will develop and utilise advanced skills and knowledge in producing animation, VFX projects and real time animatics from the planning stages, through the production methods to final delivery and distribution.

DYNAMIC EFFECTS

Dynamics is the process of animating complex systems of movement that would be too tedious to animate using traditional manual key-frame methods.. Examples include fire, smoke, fluid, explosions, physics-based simulation and crowd-based swarming and simulation of creatures and characters.

At Level 5 and 6 students will build their knowledge of dynamic effects (FX) and how they are used in a variety of scenarios, and will develop the practical skills for creating initially basic visual effects and progressing to complex and photorealistic effects for use in animation and game projects.

At Level 7 students will develop and utilise advanced skills using various selected tools and custom scripts, planning, producing and managing complex visual effects sequences from the planning stages, through production methods and to final delivery and distribution.

CGI LIGHTING, POST-PRODUCTION, REAL TIME SHADING

CGI lighting, post-production and real time shading include the processes of producing photorealistic lighting, shading and rendering the 3D assets to composite them with any other elements such as live-action films and real time game engines. The product is the final cinematic scene as seen by the audience.

At Level 5 students will build understanding of the ways that lighting, rendering and compositing are used in animation, and the ways that real time lighting and shader design are used in game design, and will develop the practical and technical skills to carry out these processes to industry requirements.

At Level 6 students will choose to either work with Animation Lighting and Post-production or with Real Time Lighting and Shading, to develop the specialist skills and knowledge for these different CGI industry sectors.

At Level 7 students will use advanced practical and technical skills to carry out these processes to meet different CGI industry sector requirements.

CGI TECHNICAL DEVELOPMENT

CGI Technical Development is a technical avenue of problem solving CGI design challenges. Often it is necessary for CGI practitioners to develop their own tools to make up for a lack of commercial off-the-shelf solutions to unique challenges. Most tools for professional CGI feature a coding interface to accommodate the development of customised functionality; the BCGI development courses enable the student to take advantage of these features.

At Level 5 students will develop basic skills and knowledge of programming for animated film and real time game animation and learn about the different programming languages and their uses, and how to develop custom tools and functions for a successful production pipeline.

At Level 6 students will choose whether to focus either on technical development for animated film or for real time game animation, and will develop the production relevant skills and knowledge that are used in their chosen focus area.

At Level 7 students who chose the Technical Development pathway will develop professional skills and knowledge in scripting and coding for their chosen focus area, and will take their projects from the planning stages, through production methods and to final delivery and distribution.

CGI PROJECT

The CGI project courses enable the learner to work on a substantial CGI project. Students will benefit from working in a collaborative environment, negotiating consensus and producing deliverables to milestones and deadlines. Projects will be tailored to the students' chosen major/specialisation/area of interest.

At Level 5 students will work as a member of a production team to plan, carry out and present an animated film or real time game animation project, utilising a range of industry-standard strategies, processes, tools and production techniques.

At Level 6 students will work on a project based on a client's brief, to develop their professional skills and knowledge in producing industry standard work for either animated film or real time game animation.

At Level 7 students will further develop their professional skills and knowledge by working on substantial projects in their specialty areas of interest, taking their projects from the planning stages, through production methods and to final delivery and distribution.

2.6 SUMMARY OF PROGRAMME STRUCTURES - ANGA

Levels	Levels 5, 6, 7	
Types and sizes of qualifications	<ul style="list-style-type: none"> • Bachelor of Computer Generated Imagery – Level 7 (360 credits) • Graduate Diploma in Computer Generated Imagery – Level 7 (120 credits) 	
Majors	Bachelor of Computer Generated Imagery with majors in Animation, Visual Effects, and Technical Development	
Level 5 courses	<ul style="list-style-type: none"> • CGI501 Professional Practice 1 (15 credits) • CGI502 3D Modelling 1 (15 credits) • CGI503 Rigging and Animation 1 (15 credits) • CGI504 Dynamic Effects 1 (15 credits) • CGI505 Lighting and Post-production 1 (15 credits) • CGI506 Technical Development 1 (15 credits) • CGI507 CGI Project 1 (30 credits) 	
Level 6 courses	<ul style="list-style-type: none"> • CGI601 Professional Practice 2 (15 credits) • CGI602 3D Modelling 2 (15 credits) • CGI603 Rigging and Animation 2 (15 credits) • CGI604 Dynamic Effects 2 (15 credits) 	
	Either: <ul style="list-style-type: none"> • CGI605 Animation Lighting and Post-production (15 credits) • CGI607 Animation Technical Development (15 credits) • GCI609 CGI Animation Project (30 credits) 	Or: <ul style="list-style-type: none"> • CGI606 Real Time Lighting and Shading (15 credits) • CGI608 Real Time Technical Development (15 credits) • GCI610 CGI Real Time Project (30 credits)
	<ul style="list-style-type: none"> • CGI611 Graduate Diploma CGI Professional Practice 	
Level 7 courses Animation major	<ul style="list-style-type: none"> • CGI701 Motion Capture (15 credits) • CGI702 Advanced Modelling (15 credits) • CGI703 Advanced Animation (15 credits) • CGI705 Advanced Lighting and Post-production (15 credits) • GCI709 Advanced Animation Project (60 credits) 	
Level 7 courses Visual Effects major	<ul style="list-style-type: none"> • CGI703 Advanced Animation (15 credits) • CGI704 Advanced Visual Effects (15 credits) • CGI702 Advanced Modelling (15 credits) • CGI705 Advanced Lighting and Post-production (15 credits) • CGI710 Advanced Visual Effects Project (60 credits) 	

Level 7 courses Technical Development major	<i>Either:</i> <ul style="list-style-type: none"> • CGI705 Advanced Lighting and Post-production (15 credits) • CGI707 Advanced CGI Technical Development (30 credits) • CGI711 Advanced CGI Technical Development Project (60 credits) 	<i>Or:</i> <ul style="list-style-type: none"> • CGI706 Advanced Real Time Lighting and Shading (15 credits) • CGI708 Advanced Real Time Technical Development (30 credits) • CGI712 Advanced Real Time Technical Development Project (60 credits)
	<i>One of the following Level 7 courses:</i> <ul style="list-style-type: none"> • CGI701 Motion Capture (15 credits) • CGI702 Advanced Modelling (15 credits) • CGI703 Advanced Animation (15 credits) • CGI704 Advanced Visual Effects (15 credits) 	
Entry points	<ul style="list-style-type: none"> • BCGI year 1 – Level 5 • Graduate Diploma in CGI 	
Exit points	On completion of either of the qualifications	

2.7 SCHEDULE OF COURSES – NGĀ KŌNAE AKO

LEVEL 5 COURSES Course Code and Title	BCGI compulsory C or elective E	GDCGI compulsory C or	Level	EFTS Value	DAS Credits	Credits	Teaching hours	Supervised and assessed workplace learning hours	Self-directed learning hours	Total learning hours	Course Delivery Mode (NMIT Code)	Co-requisite Courses or equivalent skills and knowledge	Pre-requisite Courses or equivalent skills and knowledge
CGI501 Professional Practice 1	C	E	5	0.125	/	15	40	0	110	150	4a	nil	nil
CGI502 3D Modelling 1	C	E	5	0.125	/	15	80	0	70	150	4a	nil	nil
CGI503 Rigging and Animation 1	C	E	5	0.125	/	15	80	0	70	150	4a	<i>Either</i> CGI502	<i>Or</i> CGI502
CGI504 Dynamic Effects 1	C	E	5	0.125	/	15	80	0	70	150	4a	<i>Either</i> CGI502 CGI503	<i>Or</i> CGI502 CGI503
CGI505 Lighting and Post-production 1	C	E	5	0.125	/	15	80	0	70	150	4a	nil	nil
CGI506 Technical Development 1	C	E	5	0.125	/	15	64	0	86	150	4a	<i>Either</i> CGI502 CGI503 CGI504 CGI505	<i>Or</i> CGI502 CGI503 CGI504 CGI505
CGI507 CGI Project 1	C	E	5	0.25	/	30	60	0	240	300	4a	<i>Either</i> CGI501 CGI502 CGI503 CGI504 CGI505 CGI506	<i>Or</i> CGI501 CGI502 CGI503 CGI504 CGI505 CGI506
Total Level 5 compulsory for BCGI				1.0	0	120	484	0	716	1200			
Hours per week average for full time BCGI student							14.23	0	21.05				

LEVEL 6 COURSES Course Code and Title	BCGI compulsory C or elective E	GDCGI compulsory C or elective E	Level	EFTS value	NZQF Unit Standard credits	Credits	Teaching hours	Supervised and assessed workplace learning hours	Self-directed learning hours	Total learning hours	Course delivery mode (NMIT Code)	Co-requisite courses or equivalent skills and knowledge	Pre-requisite courses or equivalent skills and knowledge
CGI601 Professional Practice 2	C	E	6	0.125	/	15	40	0	110	150	4a	nil	CGI501
CGI602 3D Modelling 2	C	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI502
CGI603 Rigging and Animation 2	C	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI503
CGI604 Dynamic Effects 2	C	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI504
CGI605 Animation Lighting and Post-production	E	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI505
CGI606 Real Time Lighting and Shading	E	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI505
CGI607 Animation Technical Development	E	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI506
CGI608 Real Time Technical Development	E	E	6	0.125	/	15	64	0	86	150	4a	nil	CGI506
CGI609 CGI Animation Project	E	E	6	0.25	/	30	40	0	260	300	4a	nil	CGI601,CGI602 CGI603,CGI604 CGI605,CGI607
CGI610 CGI Real Time Project	E	E	6	0.25	/	30	40	0	260	300	4a	nil	CGI601,CGI602 CGI603,CGI604 CGI606,CGI608
CGI611 Graduate Diploma CGI Professional Practice	/	C	6	0.125	/	15	40	0	110	150	4a	nil	nil
Level 6 compulsory for BCGI				0.5	0	60	232	0	368	600			
Level 6 electives required for BCGI				0.5	0	60	168	0	432	600			
Total level 6 required for full time BCGI student				1.0	0	120	400	0	800	1200			
Hours per week average for full time BCGI student							11.76	0	23.53				

LEVEL 7 COURSES Course Code and Title	BCGI compulsory C or elective E	GDCGI compulsory C or elective E	Level	EFTS value	NZQF Unit Standard credits	Credits	Teaching hours	Supervised and assessed workplace learning hours	Self-directed learning hours	Total learning hours	Course delivery mode (NIMIT Code)	Co-requisite courses or equivalent skills and knowledge	Pre-requisite courses or equivalent skills and knowledge
CGI701 Motion Capture	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI602 CGI603
CGI702 Advanced Modelling	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI602
CGI703 Advanced Animation	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI603
CGI704 Advanced Visual Effects	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI604
CGI705 Advanced Lighting and Post-production	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI605
CGI706 Advanced Real Time Lighting and Shading	E	E	7	0.125	/	15	40	0	110	150	4a	nil	CGI606
CGI707 Advanced CGI Technical Development	E	E	7	0.25	/	30	80	0	220	300	4a	nil	CGI607
CGI708 Advanced Real Time Technical Development	E	E	7	0.25	/	30	80	0	220	300	4a	nil	CGI608
CGI709 Advanced Animation Project	E	E	7	0.5	/	60	80	0	520	600	4a	nil	CGI701 CGI703
CGI710 Advanced Visual Effects Project	E	E	7	0.5	/	60	80	0	520	600	4a	nil	CGI704 CGI705
CGI711 Advanced CGI Technical Development Project	E	E	7	0.5	/	60	80	0	520	600	4a	nil	CGI707
CGI712 Advanced Real Time Technical Development Project	E	E	7	0.5	/	60	80	0	520	600	4a	nil	CGI708
Level 7 compulsory for BCGI				0	0	0	0	0	0	0			
Level 7 elective required for BCGI				1.0	0	120	240	0	960	1200			
Total Level 7 required for full time BCGI student				1.0	0	120	240	0	960	1200			
Hours per week average for full time BCGI student							7.05	0	28.23				

2.8 CORE TRANSFERABLE SKILLS

Graduates will have the language, literacy and numeracy skills required for study and the knowledge and skills to make well-informed choices of a career or academic path. All courses in the programmes contribute to the development of core transferable skills.

<p>Self/Others - Manaakitanga</p>	<ul style="list-style-type: none"> • Work independently to achieve personal and academic goals • Identify their chosen academic/career pathway and the steps required to achieve desired outcome/s • Demonstrate respect for self and others - manaaki • Show consideration and cultural sensitivity to colleagues • Effectively manage their time • Demonstrate cultural awareness and respectful/positive behaviour • Demonstrate presentation skills • Apply themselves in a collaborative work environment, showing respect and professionalism towards others • Contribute to project teams to produce original works or solve problems • Be self-reliant and able to work both supervised and unsupervised to complete tasks • Demonstrate responsibility for leadership within dynamic contexts • Use advanced and effective communication and collaborative skills appropriate to the professional context • Recognise the place of Te Tiriti in Aotearoa New Zealand • Practice appropriate negotiation and conflict resolution strategies to a professional standard
<p>Learning to Learn</p>	<ul style="list-style-type: none"> • Demonstrate self-management of learning and performance within dynamic contexts • Engage actively in learning tasks and explore methods and resources for learning • Demonstrate willingness to learn, accept advice and learn from feedback • Use feedback to reflect on and improve learning and performance • Set clear learning goals and identify steps required to achieve them • Identify areas of success • Demonstrate research skills relevant to the fields of animation and CGI • Problem-solve by drawing from prior knowledge and learning • Acknowledge personal limitations and show willingness to seek help when necessary • Demonstrate independent critical thinking and analysis • Demonstrate ability to think creatively and solve problems independently
<p>Specialist Skills</p>	<ul style="list-style-type: none"> • Demonstrate technical and/or theoretical knowledge of animation and CGI • Demonstrate the knowledge, attitude and skills in animation/CGI required to successfully progress to the next academic level or into the workplace. • Use excellent communication skills including oral, written and via media and multimodal assemblages • Have a sense of social responsibility with academic work and the production of animation/CGI work • Show technical competence in animation and/or computer generated imagery • Understand and apply relevant compliance legislation effectively in practice

<p>Literacy</p>	<ul style="list-style-type: none"> • Communicate clearly in both oral and written forms, appropriate to the context to a professional standard • Read, understand and analyse texts from a range of sources • Demonstrate advanced skills in acquiring, understanding and assessing information from a range of sources to progress relevant knowledge • Analyse complex written information to a professional standard • Demonstrate advanced and applied reading • Demonstrate advanced and applied writing • Realise ideas and develop them in written language to a professional standard • Record, develop, compare and critically analyse ideas in written language • Manage written projects
<p>Numeracy</p>	<ul style="list-style-type: none"> • Apply numeracy skills relevant to the role in the field of work or study • Use a range of numerical strategies to solve operational problems with numbers • Use numerical strategies to analyse, review and interpret data • Present numerical information in a variety of ways • Use numerical information effectively to evaluate and predict situations • Apply the information gained from numerical analysis to generate solutions to problems
<p>Digital Literacy</p>	<ul style="list-style-type: none"> • Use appropriate e-tools to locate, access, evaluate, utilise and cite diverse information sources that facilitate learning • Access, store, organise and retrieve information relevant to animation and/or CGI from multiple digital sources for practical application and integration into existing knowledge • Evaluate and select digital tools based on their appropriateness to specific tasks • Effectively create and publish content in multimedia formats through a range of channels • Demonstrate creative thinking, and develop innovative products and processes relating to animation and/or CGI • Use models and simulations to explore systems and issues relating to CGI • Use critical thinking skills to manage projects, solve problems and make informed decisions using appropriate digital tools and resources • Proficiently manage group interactions and engage in online communities and professional groups using multiple technologies • Contribute to project teams to produce original works or solve problems relating to animation and/or CGI • Analyse the capabilities and limitations of current and emerging technology resources and assess their potential • Confidently use digital technologies to reflect on, record and manage their learning • Communicate to a professional standard using electronic media

Refer to

NMIT Academic Statute s.3 Academic Regulations


3. DELIVERY

BACHELOR OF COMPUTER GENERATED IMAGERY and GRADUATE DIPLOMA IN COMPUTER GENERATED IMAGERY		
Delivery site(s)	Delivery within region	Yes
	Sites within region: NMIT Nelson Campus	Yes
	Delivery offshore	No
Length of the programme	Teaching weeks per year	34 weeks
	Study break weeks per year	6 weeks
	Total programme weeks per year	40 weeks
Delivery	Regular daytime classes	Yes
	Regular night classes	No
	Block classes	Yes
	Off-site components – workplace learning	No
	Online components	Yes
	Programme delivery is dependent on enrolments	
	Part time study is available	

SEMESTER A

Block	Indicative pattern of delivery per year Level 5	Indicative pattern of delivery per year Level 6	Indicative pattern of delivery per year Level 7 (FROM 2020)
1	<ul style="list-style-type: none"> CGI501 Professional Practice 1 (15 credits) CGI502 3D Modelling 1 (15 credits) 	<ul style="list-style-type: none"> CGI601 Professional Practice 2 (15 credits) CGI602 3D Modelling 2 (15 credits) CGI611 Graduate Diploma CGI Professional Practice (15 credits) FROM 2020 	<ul style="list-style-type: none"> CGI702 Advanced Modelling (15 credits) CGI703 Advanced Animation (15 credits)
2 weeks study break			
2	<ul style="list-style-type: none"> CGI503 Rigging and Animation 1 (15 credits) CGI504 Dynamic Effects 1 (15 credits) 	<ul style="list-style-type: none"> CGI603 Rigging and Animation 2 (15 credits) CGI604 Dynamic Effects 2 (15 credits) 	<ul style="list-style-type: none"> CGI705 Advanced Lighting and Post-production (15 credits) CGI706 Advanced Real Time Lighting and Shading (15 credits) CGI701 Motion Capture (15 credits) CGI704 Advanced Visual Effects (15 credits) CGI707 Advanced CGI Technical Development (30 credits) CGI708 Advanced Real Time Technical Development (15 credits)
2 weeks study break			

SEMESTER B

3	<ul style="list-style-type: none"> CGI505 Lighting, Rendering and Compositing 1 (15 credits) CGI506 Technical Development 1 (15 credits) 	<ul style="list-style-type: none"> CGI605 Animation Lighting and Post-production (15 credits) CGI606 Real Time Lighting and Shading (15 credits) CGI607 Animation Technical Development (15 credits) CGI608 Real Time Technical Development (15 credits) 	<ul style="list-style-type: none"> GCI709 Advanced Animation Project (60 credits) CGI710 Advanced Visual Effects Project (60 credits) CGI711 Advanced CGI Technical Development Project (60 credits) CGI712 Advanced Real Time Technical Development Project (60 credits)
2 weeks study break			
4	<ul style="list-style-type: none"> CGI507 Project 1 (30 credits) 	<ul style="list-style-type: none"> GCI609 Animation Project (30 credits) GCI610 Real Time Project (30 credits) 	<p style="text-align: center;"></p> <p>The above courses continue throughout semester B</p>

3.1 MODE OF DELIVERY

MoE Code	NMIT Code	Definition	Used in the following courses
4	4a Blended Learning	Courses with a carefully considered mix of online, technology supported and classroom learning activities and assessment tasks with compulsory components in each mode. Online or other technology supported activities extend or link class work and support significant independent student work on individual and/or group tasks. May also make use of significant non-web learning technologies to enrich learning and support independent student activity. Blended courses require management approval and a formally reviewed course design.	All courses

3.2 LEARNING AND TEACHING APPROACHES

The programmes value active and experiential learning approaches that integrate theory and practice. Students learn about techniques and tools by using and applying them in suitable contexts.

The content of the programmes is applied in focus and is targeted at job-ready skill acquisition. Using a balance of practical work, problem solving, project briefs, case studies, technical exercises, research, theory, critical evaluation and professional practices the courses enable students to develop effective communication and knowledge for innovative and effective workflow practices and professional conduct in team-based working environments. It is essential that the curriculum is informed by research and current industry practice.

NMIT is committed to honouring the Treaty of Waitangi, the principles that underpin that document, and New Zealand's bicultural heritage. NMIT's values of rangatiratanga, manaakitanga, passion, and ownership are encouraged and expressed in daily interactions between staff and students.

Courses will involve a range of culturally inclusive, student-centred learning and teaching approaches designed to assist students to achieve the desired learning outcomes. Within all courses there is an emphasis placed on building supportive relationships that are underpinned by shared goals of learning and success. Ways in which this will occur will include the development of a learning environment which, guided by tutors, will encourage engagement and connectedness through sharing experiences and learnings. Mutual support is also encouraged in variety of ways, such as the development of peer-support (tuakana-teina), the use of student support staff and wider networks, as well as developing on line communities of practice through discussion forums and activities. Staff will act as kaitiaki (guardians) and provide guidance and support to students as they progress through the programme.

Integral to the animation and CGI professions are communication skills, problem solving and professional practice. These essential skills are scaffolded and modelled throughout the courses so students embed them continuously and in context.

Teaching hours include scheduled time when teacher support is available (such as face-to face class time), and/or guided online time. This includes assessment and assessment feedback time, time scheduled for re-sits, directed time in the library and on projects with teacher support available, workshops, laboratories, supervised field trips, other directed study. Guided hours include online activities, completion of projects and

directed learning activities online where teacher support is available asynchronously via email or at specified times.

The ratio of teaching hours to total student learning hours reduces as students progress to higher levels of study, for example at Level 5 students studying full time have an average of 14.23 taught hours per week during term time, reducing to an average of 11.76 hours per week during term time at Level 6. At Level 7 teaching hours reduce to an average of 7.05 hours per week during term time. Conversely, the ratio of self-directed study hours to total student learning hours increases as students progress to higher levels. These ratios reflect the principle that as students progress they are encouraged and expected to become more independent learners.

The role of the academic staff member(s) teaching the course is to facilitate the learning process. They support learning through one-on-one or group coaching (face to face or online), skills workshops, mini-lectures and/or tutorials on topics relevant for completing the tasks.

At the beginning of each semester induction sessions will be held to introduce students to the learning management system, course materials and resources, software, equipment and expectations.

Projects will be assigned and worked on in class and finished outside of class time. Lessons will cover new theories and techniques, working alongside a production pipeline. The assignments are designed to develop conceptual as well as technical skills of the artist.

Exercises provide students with opportunities to consolidate their understanding of concepts and practice key technical/practical and communication/teamwork skills. Exercises scaffold from simple tasks designed to gain skills and confidence, to tasks extending and challenging students' capabilities. Formative assessments are carried out as tasks are completed.

Learning and assessment activities enable students to develop and demonstrate the requirements of the graduate profile whilst implementing best industry practice in animation and computer generated imagery.

The teaching and learning is designed to enable graduates to progress to higher level qualifications and/or to transition to industry/employment.

The programmes will use a blended delivery model.

The following learning and teaching resources may be used:

- Specialised CGI equipment, studio spaces and workshops
- Academic teaching staff
- Tutorial assistants
- Classrooms equipped with computer(s) and data projector
- NMIT Moodle
- Specialist guest speakers
- Computer labs
- Library including online resources
- Recommended texts
- Recommended websites
- Studio time

In addition to the wide range of hardware and software available to students, in these programmes specialist industry-standard hardware and specialist software for animation and a range of CGI production processes are used.

Students are expected to spend time in self-directed learning activities to complete course requirements and achieve the learning outcomes for each course. Self-directed activities may include the following but are not limited to:

- Completion of course work, set assignments/projects
- Drawing and ideation
- Project planning
- Reading
- Study group work
- Preparation for classes
- Research (e.g. exploration, location and selection of relevant information, review/evaluation/analysis of information, recording information)
- Discussions with colleagues/subject matter experts
- Identifying and practicing relevant practical and technical skills/methods/techniques
- Self-evaluation of course work
- Gathering relevant contextual information/issues/ideas to build knowledge of the subject

PROJECT BRIEFS

Briefs are designed to:

- Require students to think logically and imaginatively, to research and experiment practically, to discriminate, evaluate, make decisions and to plan
- Facilitate the development of the practical and intellectual skills needed for working professionally in CGI production roles
- Set problems at a degree of difficulty that challenges and extends practical hands-on skills and understanding
- Facilitate independent learning
- Enable students to learn to work creatively within specified guidelines
- Prepare students to respond effectively to customer/client/business requirements and communicate effectively with clients and colleagues
- Enable students to develop and implement effective design processes
- Build critical awareness
- Enable students to develop strategies for effective time management

Refer to *s.2.5 Programme Design*
 s.2.3 Target Learner Group
 NMIT Learning Design Framework
 Course Descriptors

3.3 STUDENT RESEARCH

Throughout the programmes students are introduced to academic research strategies such as locating, accessing, selecting, analysing and presenting relevant information.

The focus will be applied research that informs professional practice and generates useful knowledge exchange with industry.

Research will allow students to reflect on, develop and apply knowledge and skills gained from the courses within the programme.

Students undertaking research activities will be provided with guidelines and supervised by their allocated tutor.

It is not anticipated that students will be involved in research projects requiring ethical approval, unless identified as part of a specific project, in which case ethical approval will be sought through the approved process.

Where collaborative research projects are undertaken with staff or industry partners research may be co-badged.

Refer to *NMIT Approval and Publication of Research Policy*
NMIT Code of Ethical Conduct for Research
NMIT Research Policy

3.4 OFFSITE PRACTICAL AND WORKPLACE LEARNING

The programmes do not include work placement hours, however students are provided with access to industry-based scenarios and live project briefs, and are expected to implement solutions based on specific requirements relevant to real-world animation and CGI industry environments.

Students will be regularly exposed to aspects of animation and CGI processes, products, software and equipment in on-campus presentations and workshops led by invited specialist guest speakers.

Group work and team work are used in some courses to introduce students to typical creative industry practices and to ensure students learn important interpersonal and professional communication skills.

All courses include practical components, and the application of theory to practice is essential to build and consolidate students' knowledge and technical skills.

During the programmes, students may be involved in field trips. Travel will be by minivan or bus unless otherwise advised. Staff will accompany students at all times. Programme staff will advise students of full details relating to the trips.

Refer to *NMIT Academic Statute s.3 Academic Regulations*
NMIT Safety, Health and Wellbeing Policy
NMIT Health and Safety Manual
NMIT Risk Analysis and Management Form
NMIT Offsite and Workplace Learning Policy

3.5 EVALUATION OF WORKPLACE LEARNING

N/a

3.6 HEALTH AND SAFETY RISK MANAGEMENT

For blended course deliveries standard guidelines for managing general safety and risk issues must be followed.

Certain studio activities may pose some risk. Students are made aware of these (and the guidelines concerning them) at the beginning of the appropriate courses. During a course, students are competency-registered for the use of any processes, materials or machinery that they may employ. Learning outcomes within these courses deal specifically with risk and safety aspects.

The programmes comply with the relevant NMIT Safety, Health and Wellbeing Policies, and follows the procedures described in the NMIT Health and Safety Manual.

Staff and students are inducted into NMIT emergency evacuation and accident procedures.

All staff have responsibility for ensuring that NMIT's Safety, Health and Wellbeing policies, procedures and initiatives are followed and that a safe working environment is maintained in the Department.

All students are advised at the beginning of their programme of general safety procedures. This is the responsibility of all the tutorial staff.

All equipment that has risk associated with it is identified and monitored by the relevant curriculum area staff, and health and safety audits are carried out by the NMIT Health and Safety Manager and the Health and Safety Administrator.

Risk assessments will be undertaken prior to permission being granted by the Curriculum Manager or delegate for a trip off campus. Students will be accompanied by staff at all times during off-site trips and will not be exposed to any significant risk.

*Refer to NMIT Academic Statute s.3 Academic Regulations
NMIT Safety, Health and Wellbeing Policy
NMIT Health and Safety Manual
Intentions Form
NMIT Risk Analysis and Management Form*

4. REGULATIONS

4.1 ENTRY REQUIREMENTS

ENTRY INTO THE BACHELOR OF COMPUTER GENERATED IMAGERY

Academic requirements	<p>Applicants under 20 years of age:</p> <p>Achievement of NCEA Level 3 (60 credits at Level 3 or higher and 20 credits at Level 2 or higher) including:</p> <ul style="list-style-type: none">• A minimum of 14 credits at Level 3 or higher in each of three subjects from the list of approved subjects• A minimum of 10 credits at Level 2 or higher in English or Te Reo Māori made up of<ul style="list-style-type: none">➢ 5 credits in reading➢ 5 credits in writing <p>Refer to: http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/literacy</p> <p>AND</p> <p>A minimum of 10 credits at Level 1 or above in Numeracy, made up of:</p> <ul style="list-style-type: none">• achievement standards – specified achievement standards available through a range of subjects, or• unit standards - package of three numeracy unit standards (26623, 26626, 26627- all three required) <p><i>For the list of Level 1, Level 2 and Level 3 standards that contribute to University Entrance requirements, please visit the NZQA website www.nzqa.govt.nz/ncea</i></p> <p>OR</p> <ul style="list-style-type: none">• Any qualification (New Zealand or overseas) recognised by NZQA as being equivalent to achievement of NCEA Level 3 <p>Applicants aged 20 years or above no academic qualifications are required.</p>
English language requirements	<p>All applicants must have a level of English sufficient to be able to study at this level. Those students whose first language is not English should have an international English Language Testing System (IELTS) overall academic score of at least 6.0 (with at least 5.5 in each band) issued within the last two years, or</p> <p>A qualification considered to be equivalent to the above.</p> <p>Refer to The NZQA Table of Internationally Recognised English Proficiency Outcomes for International Students http://www.nzqa.govt.nz/about-us/our-role/legislation/nzqa-rules/nzqf-related-rules/the-table/</p>

<p>Other requirements</p>	<p>PORTFOLIO*</p> <p>All applicants must submit a portfolio of work showing evidence of their interest and/or ability in an area related to an aspect of computer generated imagery production.</p> <p><u>Refer to Portfolio Requirement for degree entry</u></p> <p>COMPUTER LITERACY**</p> <p>A sufficient level of computer literacy* is required. An applicant must provide evidence to the Curriculum Manager or delegate that they have a level of competency in the use of IT which will allow them to successfully operate at the required level of study.</p> <p><u>Refer to Computer Literacy Requirement</u></p> <p>SUPPORTING EVIDENCE</p> <p>Evidence to support an applicant’s motivation and ability to successfully undertake the programme with a reasonable likelihood of success may be requested.</p>
<p>Other requirements for international students</p>	<p>In addition to meeting the programme entry requirements, international students must:</p> <ul style="list-style-type: none"> • Have evidence of receipt of an appropriate visa • Be over 18 years of age (applicants between the ages of 14 and 18 years will only be accepted after an assessment of the student’s support systems has been made).
<p>Special Entry</p>	<p>In exceptional circumstances an applicant who does not meet the full entry requirements may be granted admission to the programme on the approval of the Curriculum Manager or delegate if he/she is confident of the applicant’s ability to successfully undertake the BCGI with a reasonable likelihood of success.</p> <p>Qualifications other than those listed in the Entry Requirements above will need to be assessed for equivalence, and applicants holding these qualifications will need to seek Special Entry permission from the Curriculum Manager.</p>

ENTRY INTO THE GRADUATE DIPLOMA IN COMPUTER GENERATED IMAGERY

<p>Academic requirements</p>	<p>To gain entry to the Graduate Diploma in Computer Generated Imagery an applicant must have:</p> <p>An undergraduate degree in a discipline related to animation and/or computer generated imagery</p>
<p>English language requirements</p>	<p>All applicants must have a level of English sufficient to be able to study at this level. Those students whose first language is not English should have an international English Language Testing System (IELTS) overall academic score of at least 6.0 (with at least 5.5 in each band) issued within the last two years, or</p> <p>A qualification considered to be equivalent to the above.</p> <p><i>Refer to The NZQA Table of Internationally Recognised English Proficiency Outcomes for International Students http://www.nzqa.govt.nz/about-us/our-role/legislation/nzqa-rules/nzqf-related-rules/the-table/</i></p>
<p>Other requirements</p>	<p>PORTFOLIO*</p> <p>All applicants must submit a portfolio of work showing evidence of their experience and ability in computer generated imagery and/or animation.</p> <p><u>Refer to Portfolio Requirement for Graduate Diploma entry</u></p> <p>COMPUTER LITERACY**</p> <p>A sufficient level of computer literacy* is required. An applicant must provide evidence to the Curriculum Manager or delegate that they have a level of competency in the use of IT which will allow them to successfully operate at the required level of study.</p> <p><u>Refer to Computer Literacy Requirement</u></p> <p>SUPPORTING EVIDENCE</p> <p>Evidence to support an applicant’s motivation and ability to successfully undertake the programme with a reasonable likelihood of success may be requested.</p>

<p>Other requirements for international students</p>	<p>In addition to meeting the programme entry requirements, international students must:</p> <ul style="list-style-type: none"> • Have evidence of receipt of an appropriate visa • Be over 18 years of age (applicants between the ages of 14 and 18 years will only be accepted after an assessment of the student's support systems has been made).
<p>Special Entry</p>	<p>In exceptional circumstances an applicant who does not meet the full entry requirements may be granted admission to the programme on the approval of the Curriculum Manager or delegate if he/she is confident of the applicant's ability to successfully undertake the Graduate Diploma with a reasonable likelihood of success.</p> <p>Qualifications other than those listed in the Entry Requirements above will need to be assessed for equivalence, and applicants holding these qualifications will need to seek Special Entry permission from the Curriculum Manager.</p>

INFORMATION SESSION

An initial discussion with the Curriculum Manager or delegate is recommended to inform the applicant about the programme and assess suitability of the programme for the applicant.

PORTFOLIO REQUIREMENT* FOR DEGREE ENTRY

Portfolios should be a personal portfolio showing evidence of an applicant's interests and/or abilities in an area related to an aspect of computer generated imagery production.

Related areas:

- Fine arts
- Drawing
- Photography
- Technology
- Information technology
- Design
- Graphics
- Computer programming
- Creative writing

For example the portfolio could include a selection of the following:

- Sketchbooks or workbooks showing the development of ideas
- Both process works and finished works
- Photographs or recordings relevant to the programme
- Photographic or digital records of any of the above

Portfolios will be examined for evidence of the applicant's potential to further develop the following attributes:

- Technical skills
- Design processes and/or concept development

PORTFOLIO REQUIREMENT* FOR GRADUATE DIPLOMA ENTRY

Portfolios should be a personal portfolio showing evidence of the applicant's ability in either of the following:

- animation
- computer generated imagery

The portfolio should include a selection of the following:

- Sketchbooks or workbooks showing the development of ideas
- Animation/CGI works, including both process works and finished works
- Photographs or recordings relevant to the programme
- Photographic or digital records of any of the above

Portfolios will be examined for evidence of the applicant's potential to further develop the following attributes:

- Technical skills
- Design processes and/or concept development

COMPUTER LITERACY REQUIREMENT**

The programmes involve producing work in electronic forms. Therefore, applicants applying to enter either of these programmes without sufficient computer literacy for study at the relevant level will be expected to make use of computer facilities and/or training to develop their computer skills to a competent standard to succeed in their studies.

Evidence of computer literacy is expected to be apparent in the range of digital works presented in the portfolio submission demonstrating a range of creative design processes using digital tools.

4.2 SELECTION

All applicants who fulfil the Entry Requirements will be accepted onto the programme until maximum student numbers are reached.

Refer to NMIT Academic Statute s.3 Academic Regulations

4.3 RECOGNITION OF ACADEMIC CREDIT

Type of credit recognition (RAC):	Maximum RAC (limit) Level 5 BCGI	Maximum RAC (limit) Level 6 BCGI	Maximum RAC (limit) Level 7 BCGI
Recognition of Prior Learning (RPL)*	No limit	Total of 90 credits*	Total of 60 credits*
Cross Credit (similar outcome)*			
Credit Transfer (identical outcome)	No limit	No limit	No limit

Note*: The following courses are not available for Cross Credit or RPL:

- CGI609 Animation Project (30 credits)
- CGI610 CGI Real Time Project (30 credits)
- GCI709 Advanced Animation Project (60 credits)
- CGI710 Advanced Visual Effects Project (60 credits)
- CGI711 Advanced CGI Technical Development Project (60 credits)
- CGI712 Advanced Real Time Technical Development Project (60 credits)

For definitions of the different forms of Recognition of Academic Credit, please refer to the NMIT Academic Statute or the NMIT Recognition of Academic Credit Policy.

Refer to [NMIT Academic Statute s.3 Academic Regulations](#)
[NMIT Recognition of Academic Credit Policy](#)

4.4 TRANSITION ARRANGEMENTS

No transition arrangements apply to these programmes.

Refer to [NMIT Academic Statute s.3 Academic Regulations](#)
[NMIT Recognition of Academic Credit Policy](#)

4.5 COMPLETION REQUIREMENTS: BACHELOR OF COMPUTER GENERATED IMAGERY (ANIMATION)

To complete the Bachelor of Computer Generated Imagery with a major in Animation a student must successfully complete the courses in the following table:

Courses	Level	Credits
CGI501 Professional Practice 1	5	15 credits
CGI502 3D Modelling 1	5	15 credits
CGI503 Rigging and Animation 1	5	15 credits
CGI504 Dynamic Effects 1	5	15 credits
CGI505 Lighting and Post-production 1	5	15 credits
CGI506 Technical Development 1	5	15 credits
CGI507 CGI Project 1	5	30 credits
CGI601 Professional Practice 2	6	15 credits
CGI602 3D Modelling 2	6	15 credits
CGI603 Rigging and Animation 2	6	15 credits
CGI604 Dynamic Effects 2	6	15 credits
CGI605 Animation Lighting and Post-production	6	15 credits
CGI606 Animation Technical Development	6	15 credits
CGI608 CGI Animation Project	6	30 credits
CGI701 Motion Capture	7	15 credits
CGI702 Advanced Modelling	7	15 credits
CGI703 Advanced Animation	7	15 credits
CGI705 Advanced Lighting and Post-production	7	15 credits
CGI709 Advanced Animation Project	7	60 credits
Total credits		360 credits

Maximum completion time:

The BCGI qualification must be completed within six years of first enrolment in the programme. In cases where there are genuine reasons for this period to be extended, approval is required from the Curriculum Manager and the Academic Committee that covers this programme.

Requirements for Distinction and/or Merit for the Qualification:

Availability of Distinction	Not available
Availability of Merit	Not available

4.6 COMPLETION REQUIREMENTS: BACHELOR OF COMPUTER GENERATED IMAGERY (VISUAL EFFECTS)

To complete the Bachelor of Computer Generated Imagery with a major in Visual Effects a student must successfully complete the courses in the following table:

Courses	Level	Credits
CGI501 Professional Practice 1	5	15 credits
CGI502 3D Modelling 1	5	15 credits
CGI503 Rigging and Animation 1	5	15 credits
CGI504 Dynamic Effects 1	5	15 credits
CGI505 Lighting and Post-production 1	5	15 credits
CGI506 Technical Development 1	5	15 credits
CGI507 CGI Project 1	5	30 credits
CGI601 Professional Practice 2	6	15 credits
CGI602 3D Modelling 2	6	15 credits
CGI603 Rigging and Animation 2	6	15 credits
CGI604 Dynamic Effects 2	6	15 credits
<i>Either</i> CGI605 Animation Lighting and Post-production <i>Or</i> CGI606 Real Time Lighting and Shading	6	15 credits
<i>Either</i> CGI607 Animation Technical Development <i>Or</i> CGI608 Real Time Technical Development	6	15 credits
<i>Either</i> CGI609 CGI Animation Project <i>Or</i> CGI610 CGI Real Time Project	6	30 credits
CGI702 Advanced Modelling	7	15 credits
CGI703 Advanced Animation	7	15 credits
CGI704 Advanced Visual Effects	7	15 credits
CGI705 Advanced Lighting and Post-production	7	15 credits
CGI710 Advanced Visual Effects Project	7	60 credits
Total credits		360 credits

Maximum completion time:

The BCGI qualification must be completed within six years of first enrolment in the programme. In cases where there are genuine reasons for this period to be extended, approval is required from the Curriculum Manager and the Academic Committee that covers this programme.

Requirements for Distinction and/or Merit for the Qualification:

Availability of Distinction	Not available
Availability of Merit	Not available

4.7 COMPLETION REQUIREMENTS: BACHELOR OF COMPUTER GENERATED IMAGERY (TECHNICAL DEVELOPMENT)

To complete the Bachelor of Computer Generated Imagery with a major in Technical Development a student must successfully complete the courses in the following table:

Courses	Level	Credits
CGI501 Professional Practice 1	5	15 credits
CGI502 3D Modelling 1	5	15 credits
CGI503 Rigging and Animation 1	5	15 credits
CGI504 Dynamic Effects 1	5	15 credits
CGI505 Lighting and Post-production 1	5	15 credits
CGI506 Technical Development 1	5	15 credits
CGI507 CGI Project 1	5	30 credits
CGI601 Professional Practice 2	6	15 credits
CGI602 3D Modelling 2	6	15 credits
CGI603 Rigging and Animation 2	6	15 credits
CGI604 Dynamic Effects 2	6	15 credits
		180

Plus one of the following sets of specialist courses: Either Set A or Set B

Specialist courses – Set A	Level	Credits
CGI605 Animation Lighting and Post-production	6	15 credits
CGI607 Animation Technical Development	6	15 credits
CGI609 CGI Animation Project	6	30 credits
CGI705 Advanced Lighting and Post-production	7	15 credits
CGI707 Advanced CGI Technical Development	7	30 credits
CGI711 Advanced CGI Technical Development Project	7	60 credits
Specialist course credits Set A		165

Or

Specialist courses – Set B	Level	Credits
CGI606 Real Time Lighting and Shading	6	15 credits
CGI608 Real Time Technical Development	6	15 credits
CGI610 CGI Real Time Project	6	30 credits
CGI706 Advanced Real Time Lighting and Shading	7	15 credits
CGI708 Advanced Real Time Technical Development	7	30 credits
CGI712 Advanced Real Time Technical Development Project	7	60 credits
Specialist course credits Set B		165

Plus one elective course at Level 7 from the list below:

Elective courses - choose one	Level	Credits
CGI701 Motion Capture	7	15 credits
CGI702 Advanced Modelling	7	15 credits
CGI703 Advanced Animation	7	15 credits
CGI704 Advanced Visual Effects	7	15 credits
Elective credits minimum		15
Totals	Level	Credits

Compulsory credits	5 - 6	180
Specialist course credits	6 - 7	165
Elective course credits	7	15
Total credits		360

Maximum completion time:

The BCGI qualification must be completed within six years of first enrolment in the programme. In cases where there are genuine reasons for this period to be extended, approval is required from the Curriculum Manager and the Academic Committee that covers this programme.

Requirements for Distinction and/or Merit for the Qualification:

Availability of Distinction	Not available
Availability of Merit	Not available

4.8 COMPLETION REQUIREMENTS – GRADUATE DIPLOMA IN COMPUTER GENERATED IMAGERY

To complete the Graduate Diploma in Computer Generated Imagery a student must successfully complete the courses listed below:

Compulsory course	Level	Credits
CGI611 Graduate Diploma CGI Professional Practice	6	15
Compulsory course credits		15

Plus one of the following sets of specialist courses: Either Set A or Set B or Set C or Set D

Specialist courses – Set A	Level	Credits
CGI701 Motion Capture	7	15 credits
CGI703 Advanced Animation	7	15 credits
CGI709 Advanced Animation Project	7	60 credits
Specialist course credits Set A		90

OR

Specialist courses – Set B	Level	Credits
CGI704 Advanced Visual Effects	7	15 credits
CGI705 Advanced Lighting and Post-production	7	15 credits
CGI710 Advanced Visual Effects Project	7	60 credits
Specialist course credits Set B		90

OR

Specialist courses – Set C	Level	Credits
CGI707 Advanced CGI Technical Development	7	30 credits
CGI711 Advanced CGI Technical Development Project	7	60 credits
Specialist course credits Set C		90

OR

Specialist courses – Set D	Level	Credits
CGI708 Advanced Real Time Technical Development	7	30 credits
CGI712 Advanced Real Time Technical Development Project	7	60 credits
Specialist course credits Set D		90

Plus at least one additional elective course at Level 5 – 7 from the list below:

Elective courses - choose one	Level	Credits
CGI502 3D Modelling 1	5	15 credits
CGI503 Rigging and Animation 1	5	15 credits
CGI504 Dynamic Effects 1	5	15 credits
CGI505 Lighting and Post-production 1	5	15 credits
CGI506 Technical Development 1	5	15 credits
CGI602 3D Modelling 2	6	15 credits
CGI603 Rigging and Animation 2	6	15 credits
CGI604 Dynamic Effects 2	6	15 credits
CGI605 Animation Lighting and Post-production	6	15 credits
CGI606 Real Time Lighting and Shading	6	15 credits
CGI607 Animation Technical Development	6	15 credits

CGI608 Real Time Technical Development	6	15 credits
CGI701 Motion Capture	7	15 credits
CGI702 Advanced Modelling	7	15 credits
CGI703 Advanced Animation	7	15 credits
CGI704 Advanced Visual Effects	7	15 credits
CGI705 Advanced Lighting and Post-Production	7	15 credits
CGI706 Advanced Real Time Lighting and Shading	7	15 credits
CGI707 Advanced CGI Technical Development	7	30 credits
CGI708 Advanced Real Time Technical Development	7	30 credits
Elective credits minimum		15

Compulsory credits	6	15
Specialist course credits	7	90
Elective course credits	5 - 7	15
Total		120

Maximum completion time:

The Graduate Diploma in Computer Generated Imagery qualification must be completed within six years of first enrolment in the programme. In cases where there are genuine reasons for this period to be extended, approval is required from the Curriculum Manager and the Academic Committee that covers this programme.

Requirements for Distinction and/or Merit for the Qualification:

Availability of Distinction	Not available
Availability of Merit	Not available

4.9 ACADEMIC REGALIA

Academic dress for Nelson Marlborough Institute of Technology graduands for graduation ceremonies which are held at NMIT Nelson and Marlborough:

- **Degree graduands:** black gown, hood, trencher
- **Graduate Diploma graduands:**
 - Graduands who have previously graduated with a degree: regalia appropriate to that degree **or** black gown with the NMIT diploma stole
 - Graduands who do not have a previous degree: black gown, NMIT diploma stole

The Graduation ceremony is a formal acknowledgement and recognition of a student's achievement and graduands are encouraged to dress appropriately.

Graduands are welcome to embellish their graduation regalia with garments of honour from their cultural tradition, such as a korowai or ta'ovala.

Refer to [NMIT Academic Statute s.4 Awards](#)

5. ASSESSMENT AND RESULTS

5.1 ASSESSMENT RATIONALE

In this programme assessment is used to engage students in learning that is productive, and feedback from assessment is used to actively improve student learning. Teachers create a system to support students' learning in which students and teachers are active participants in the learning process.

Design of assessment follows the principles of constructive alignment where the starting point is with the desired student and graduate outcomes, and the curriculum, the teaching methods and the assessment design are all aligned to those outcomes.

All summative assessments are mapped to the course learning outcomes and graduate profile outcomes to ensure students successfully completing the programme of study meet the graduate profile.

Learning and assessment activities are designed to enable students to develop and demonstrate the requirements of the graduate profile whilst implementing best industry practice in animation and computer generated imagery.

5.2 BASIS OF ASSESSMENT

Refer to Appendix 4 Graduate Profile and Assessment Maps

Assessment is Achievement Based.

Achievement Based Assessment measures student performance in relation to criteria which are specified in terms of grades and levels. This type of assessment is used for all the assessments in the programmes.

*Refer to NMIT Academic Statute s.3 Academic Regulations
NMIT Assessment Policy*

5.3 FORMATIVE AND SUMMATIVE ASSESSMENT

Assessment is an essential part of each course. There are regular assessments throughout a course. At the commencement of each course, students will be given an assessment schedule. This includes detailed information including the number, type, weighting and timing of the assessments set for that course.

- **Formative assessment** is assessment which facilitates learning and allows students to obtain feedback on progress, levels of skills and/or knowledge acquired without contributing to a final grade. It is a vital and integral part of the learning process.

Formative assessment may use any of the following:

- **Critical assessment:** This method allows students to assess their own particular levels of achievement against course and programme objectives and standards.
- **Peer Assessment:** Peer assessment allows students to receive feedback from peers on their progress to achieving stated objectives. Students will be given guidance in responsible peer assessment procedures. The process of giving feedback may be negotiated between tutor and students.
- **Tutor Assessment:** Assessment is carried out by the tutor of the course.
- **Summative assessment** is the assessment activity that contributes to the final result of the course. Summative assessment provides students with a specific measure of their learning in relation to course learning outcomes. Its purpose is to determine the student's level of achievement in attaining course outcomes and to ensure that students have met the requirements for progression and/or completion within the Programme.
Summative assessment may use any of the following:
 - **Tutor Assessment:** Assessment is carried out by tutorial staff
 - **Panel assessment:** Panel assessment involves a group of tutorial staff that could include external assessors.

5.4 METHODS OF ASSESSMENT

For all courses in a student's programme, a schedule including the number, type and timing of assessments shall be given to the student within the first two weeks of the course. Assessments are designed to aid the development of skills and knowledge and encourage early and sustained student engagement in the learning activities in the course.

A clear description of each assessment, associated requirements and assessment criteria and grade descriptors will be available to students prior to commencing work to be assessed.

Formative assessment will occur in response to set exercises throughout the courses, focussing on a range of student activities.

Methods of summative assessment include the following:
Case study
Practical studio project
Research and experimentation
Investigation and presentation
Project plan
Reflection
Critique/critical evaluation
Practical task/assignment
Tool development
Programming task
Presentation
Professionalism*

Professionalism*

All courses in the Animation and CGI programmes include an assessment of professionalism weighted at 10% of the course. This reflects industry workplace requirements and expectations which are integral to every course, irrespective of the delivery mode. Students are advised at the start of each course of the expectations and criteria that will be used for this assessment in the course, and the mechanisms to be used to collect evidence. Indicators of professionalism include the following:

Engagement	<ul style="list-style-type: none">• Attendance and engagement at scheduled classes, meetings, events, time management, meeting deadlines• Constructive engagement in face to face and online activities/discussions
Communication	<ul style="list-style-type: none">• Clear written and oral communication appropriate to a professional context• Presentation and public speaking skills• Ability to listen to others and consider different views/opinions
Team management	<ul style="list-style-type: none">• Constructive approach to collaborative problem solving and decision making• Show consideration and cultural sensitivity to colleagues• Take ownership and responsibility for contribution to team output• Demonstrate leadership where required
Self management	<ul style="list-style-type: none">• Demonstrate resilience and potential to improve own performance• Show initiative• Ethical behaviour e.g. Understand and apply appropriate compliance legislation

5.5 AUTHENTICITY OF STUDENT WORK

Academic integrity is a commitment from staff and learners to apply the fundamental values of honesty, trust, fairness, respect, and responsibility to all academic matters.

Students are held accountable in terms of the policies and procedures relating to authenticity of student work, through policies on academic misconduct (including plagiarism, cheating and misrepresenting identity for purposes of assessment), and assessment policies.

Students' design and process work will be submitted for assessment along with their finished works, providing supporting evidence for authenticity.

NMIT has a 'zero tolerance' approach to plagiarism, cheating and other forms of academic misconduct, and NMIT policy will be followed.

Refer to [NMIT Academic Statute s.3 Academic Regulations](#)
[NMIT Academic Integrity Policy](#)
[NMIT Academic Appeals Policy](#)
[NMIT Student Misconduct Procedure](#)
[NMIT Student Problem Resolution Framework](#)
[NMIT Assessment Policy](#)

5.6 ASSESSMENT RESULTS

Individual assessments may cover one or more of the learning outcomes.

The result for each assessment is given as a percentage mark. The pass mark for any summative assessment is 50%.

Each summative assessment in a course is assigned a percentage weighting.

Refer to *NMIT Academic Statute s.3 Academic Regulations*
NMIT Assessment Policy

5.7 COURSE RESULTS

The overall percentage mark for the course is calculated by adding the weighted results for all summative assessments.

To derive the course result the overall percentage mark is converted into a grade using Course Result Key **AC-TANZ-01**.

Assessment results and course grades will be entered into the student management system. The recording, checking and storage of results will be as per the NMIT policy.

In order to pass a course a student must:

- Pass all assessments
- Meet all course learning outcomes
- Achieve a course result of C- or above

The Course Result Key AC-TANZ-01 is used:

RESULT	MARK RANGE (%)	DESCRIPTION
A+	90 - 100	Pass grades
A	85 - 89	
A-	80 - 84	
B+	75 - 79	
B	70 - 74	
B-	65 - 69	
C+	60 - 64	
C	55 - 59	
C-	50 - 54	
D	40 - 49	
E	0-39	No-pass grades

Other results that may be awarded:

RESULT	DESCRIPTION
Pass	Pass
Fail	Fail
CT	Credit Transfer
CC	Cross Credit
RPL	Recognition of Prior Learning
DNC	Did not complete
W	Withdrawn
AEG	Aegrotat
RP	Restricted pass**
CON	Conceded pass*
CP	Conditional pass**

**Note 1: A maximum of one Conceded Pass is permitted within the programme per student.*

***Note 2 RP and CP are not available in this programme.*

Refer to [NMIT Academic Statute s.3 Academic Regulations](#)
[NMIT Academic Statute s.7 Schedule of Course Result Keys](#)
[NMIT Assessment Policy](#)

5.8 ATTENDANCE REQUIREMENTS

		Details
Attendance requirement	Yes	International students must comply with Immigration NZ requirements of 100% attendance. Absences will be reported to Immigration New Zealand and may adversely affect Visa status.
Attendance recommendation	Yes	<ul style="list-style-type: none"> • It is acknowledged that students are more likely to succeed if they maintain regular attendance and engagement (for blended course deliveries with scheduled face to face classes) and regular engagement in online course activities. They are advised of this in the Programme Handbooks, on the Moodle sites and by the academic staff teaching the course. • Failure to attend scheduled/supervised learning and teaching sessions may also adversely affect the eligibility to receive loans and/or allowances for domestic (NZ) students. • Attendance at scheduled class sessions will be recorded centrally using the NMIT Student Management System, and registers can be accessed by all staff. Online engagement and progress is also monitored. • Non-attendance and non-participation can result in an NMIT instigated withdrawal of the student from the course. • Attendance and/or engagement is a key indicator of professionalism and will contribute to the assessment of professionalism.
Process for reporting absences	Yes	Students are responsible for notifying the Department Administrator or class tutor of any absence, by the first scheduled class session of the first day of absence. The Administrator is responsible for recording receipt of such notification in the student's file, and for advising the teacher(s) of student absence.

5.9 SPECIAL ASSESSMENT CIRCUMSTANCES

Special Assessment Circumstances	Yes/no	Details (e.g. provisions, rationale, procedures, restrictions, penalties)
Re-sits and Resubmissions	Yes	<ul style="list-style-type: none"> • A student who has submitted and reasonably attempted a piece of in-course assessment and who has failed that assessment task, will be allowed one re-submission of the assessment task within the timeframe given. • Requests for re-submissions must be made to the relevant staff member, no later than 5 working days after the assessment has been marked and returned to the student. • The maximum mark available for any resubmission of an assessment task shall be the minimum pass (50%)
Extensions	Yes	<ul style="list-style-type: none"> • Work submitted for summative assessment will have an assigned due date. Work to be assessed must be submitted on the due date to qualify for marking, unless an extension has been granted. • Students who anticipate difficulty in submitting assessments by the due time and date may request an extension. The extension must be agreed to prior to the assessment due date. • The staff member with responsibility for the relevant course has the authority to approve valid extensions that are within the course dates. • Extensions beyond the course end date must be approved by the Curriculum Manager and by the Academic Committee.
Alternative Assessment Arrangements	Yes	<p>If a student is unable to attend a summative assessment event for genuine reasons beyond the control of the student, an application may be made to the Curriculum Manager or delegate to sit the assessment at a different time or place. Wherever possible as much notice as possible should be given to give time to make alternative arrangements.</p>

Special Assessment Circumstances	Yes/no	Details (e.g. provisions, rationale, procedures, restrictions, penalties)
Aegrotat Pass	Yes	<p>If a student's performance in a summative assessment is affected by factors beyond the control of the student, the student may apply to the Curriculum Manager or delegate for consideration for special assessment. Examples include sickness, injury or bereavement.</p> <p>The application and approval process for aegrotat assessments and the process used to determine the assessment result or course result is described in the NMIT Academic Statute Section 3 Academic Regulations – Special Assessment Circumstances – Aegrotat Assessments.</p> <p>Limitations:</p> <ul style="list-style-type: none"> • Aegrotat consideration is only available for up to 50% of a course's total assessment • The minimum achievement of 50% in course work indicates eligibility for an aegrotat application, not an indication that the application will be successful. (Other criteria will be used to assess an aegrotat application.) • All decisions will be at the discretion of the Curriculum Manager <p>Consideration for an aegrotat will be restricted to a maximum of 25% of the total credits for the qualification.</p>
Compassionate Consideration	Yes	<p>If a student's performance in a summative assessment is affected by factors beyond the control of the student, the student may apply to the Curriculum Manager or delegate for compassionate consideration. Options for possible special arrangements may include:</p> <ul style="list-style-type: none"> • Alternative assessment arrangements • Re-sits and resubmissions <p><i>Note: Re-sits and resubmissions carried out under compassionate consideration conditions have no limit on the mark.</i></p>

Special Assessment Circumstances	Yes/no	Details (e.g. provisions, rationale, procedures, restrictions, penalties)
Special assistance in summative assessment	Yes	<p>Students wishing to receive special assistance in order to undertake a summative assessment shall, unless otherwise exempted, apply in writing no later than two (2)* weeks prior to the date of the summative assessment.</p> <p>Special assistance may be provided in a range of forms, including the following:</p> <ul style="list-style-type: none"> • Additional examination/assessment time normally not exceeding 15 minutes for each hour of examination/assessment • Assistance by a reader or writer • Use of special technology (for students with physical disabilities) <p>Applications for special assistance must state the nature of the disability and the type of assistance required.</p>
Conceded Pass	Yes	Information on Conceded Passes is in the NMIT Academic Statute Section 3 Academic Regulations – Results – Conceded Pass.
Reconsiderations (Re-marks)	Yes	Students may seek reconsideration of any assessment by applying in writing to the Curriculum Manager or delegate, within 10 working days of receiving the result, setting out the grounds for reconsideration.
Marks Carried Forward	No	Not available
Other Assessment Regulations	No	Not applicable
Assessment in Te Reo Māori		Request must be registered prior to the start of the course, and approval is required from the Curriculum Manager.

Refer to

NMIT Academic Statute s.3. Academic Regulations

5.10 MODERATION

Moderation is carried out to ensure that student assessments are valid and reliable, that course assessment procedures are fair and equitable, and that Nelson Marlborough Institute of Technology (NMIT) programme delivery is credible to academic stakeholders.

Moderation is also designed to check that assessments are aligned with course learning outcomes and graduate outcomes, and that all course materials are consistent, relevant and accurate before delivery.

Moderation's main purpose is for continuous improvement with outcomes reported in a constructive and informative way. Moderation results are used for improvement as part of self-assessment.

Evidence of student work may be required, therefore all student work will be retained until the moderation process is complete (may be up to three years). Moderators may also observe practical assessment.

As part of the programmes' moderation processes, work submitted for summative assessment may be viewed by moderators other than course tutors. In moderation of assessments, every reasonable effort is made to ensure that student confidentiality is maintained.

5.11 INTERNAL MODERATION

Internal moderation is undertaken by staff of NMIT or staff of contracted partners delivering NMIT programmes.

All qualifications offered under these Regulations operate an internal moderation process to ensure the fairness and appropriateness of assessments.

Internal Moderation	Description
Pre-Assessment Moderation	Internal moderation is mandatory for all new assessment activities, and any activity that has been substantially modified from its original form or altered by way of a review process.
Intra-Assessment moderation	Summative assessment judgments are peer moderated by academic staff where necessary to ensure accuracy and consistency of reported grades. Equivalent credit value courses are benchmarked against each other to ensure consistency of grade standing.
Post-Assessment Moderation	Course assessments are reviewed and evaluated according to an assessment moderation action plan, based on moderation feedback to ensure consistency of multi-delivery.

5.12 EXTERNAL MODERATION

External Moderation	Description
Post-Assessment Moderation	Each course is regularly moderated externally in accordance with the Annual Moderation Plan for the programme. The moderation processes for each academic year are planned by the Curriculum Manager or delegate, and the plan approved by the Academic Committee.
Intra-Assessment Moderation	When cross-programme moderation and/or quality assurance is required, external intra-assessment moderation is carried out.

6. OTHER REQUIREMENTS

The Nelson Marlborough Institute of Technology computer network is a central facility for all students. Rules governing student use of the computer network are provided.

Students must have access to a computing device, software and a broadband internet connection suitable to complete the courses. Specific computing requirements will be provided in course information packs and published on the NMIT website.

Students must provide their own external hard drive of at least 250 GB capacity.

Other requirements will depend on the particular course or courses being studied:

- Access to a device capable of capturing digital images, video and/or audio
- Sketchbook/art journal
- Stationery
- Art and drawing materials
- Drawing tablet
- Measuring tape (for location shooting)

7. EXTERNAL REGULATIONS

None

8. NMIT ACADEMIC REGULATIONS

The **NMIT Academic Statute** contains information that covers all programmes delivered by NMIT. Where information is relevant to a particular programme, that information is located in the Programme Regulations.

The list of academic terminology and the glossary of Māori terms – Kupu - are located in the **NMIT Academic Statute Section 2 Definitions**. Definitions of additional specialist terminology relevant to this Programme are located at the beginning of these Programme Regulations.

For all the programmes delivered by NMIT, information on the following is located in the **NMIT Academic Statute: Section 3 Academic Regulations and Section 4 Awards**:

SECTION 3: ACADEMIC REGULATIONS

- PURPOSE AND SCOPE
- PROGRAMME INFORMATION
 - COURSE INFORMATION
- ADMISSIONS AND ENROLMENT
 - Special Entry
 - Learners Under 16 Years of Age
 - Criminal Offence Declaration
 - Refusal of Admission
 - Late Applications
 - Enrolment
 - Limits on Student Numbers
 - Cancellation of Course or Programme
- ENROLMENT TRANSFER, CANCELLATION AND WITHDRAWAL
 - Transfer of Enrolment
 - Enrolment Cancellation
 - Enrolment Withdrawal
 - Enrolment Withdrawal Following Non Engagement
 - International Students on Approved Special Leave
- FEES
 - Refund of Fees
- TE TIRITI O WAITANGI
- EQUAL EDUCATIONAL OPPORTUNITY (EEoO)
- OFFSITE AND WORKPLACE LEARNING
- HEALTH AND SAFETY RISK MANAGEMENT
- CORE TRANSFERABLE SKILLS
- ASSESSMENT
 - Assessment in Te Reo Māori
 - Examinations
- SPECIAL ASSESSMENT CIRCUMSTANCES
 - Aegrotat Considerations

- Re-sits and Resubmissions
- Reconsideration of Assessment Results (Re-Mark)
- Students with a Disability/Impairment
- RESULTS
 - Assessment Results – Competency-Based Assessment
 - Assessment Standard Results
 - Assessment Results – Achievement-Based Assessment
 - Course Results – Competency-Based Assessment
 - Course Results – Achievement-Based Assessment
 - Other Results That May Be Awarded
 - Distinction or Merit for Qualifications
 - Conceded Pass
 - Course result Keys for Collaborative or Shared Programmes
 - Notification of Course Results
 - Availability of Marked Assessments
- RECOGNITION OF ACADEMIC CREDIT (RAC)
- STUDENT ACADEMIC APPEALS
- ACADEMIC INTEGRITY AND CONSEQUENCES OF BREACHING NMIT RULES
 - Penalties for Academic Misconduct
- UNSATISFACTORY ACADEMIC PROGRESS
- RE-ENROLMENT ON A COURSE OR PROGRAMME FOLLOWING EXCLUSION
- STUDENT GUIDANCE AND SUPPORT
 - Learner Services
- LEARNER JOURNEY
- THE LEARNER VOICE

APPENDIX ONE: TANZ COLLABORATIVE ACADEMIC REGULATIONS

- PURPOSE AND SCOPE
- DEFINITIONS
- PROGRAMME REGULATIONS AND COURSE INFORMATION
 - PROGRAMME REGULATIONS
 - COURSE INFORMATION
- AWARDS
 - QUALIFICATIONS
 - NON FORMAL AWARDS
- ADMISSION, ENTRY AND ENROLMENT
 - Admission
 - Entry
 - Additional requirements for International students
 - Special Admission
 - Enrolment
 - Limitations on student numbers
 - Fees
 - Cancellation of Programme or a Course
- ATTENDANCE/PARTICIPATION, UNSATISFACTORY PROGRESS AND PRACTICAL/PROFESSIONAL REQUIREMENTS
 - Attendance/Participation

- Unsatisfactory Academic Progress
- Practical/Professional Requirements
- Compulsory Academic Requirement
- CHANGES TO ENROLMENT IN PROGRAMMES
 - Transfer of Enrolment
 - Withdrawal from Course/Programme (domestic students)
 - Withdrawal from Course/Programme (international students)
 - Changes to an international student's residency status
 - Credit Recognition and Recognition of Prior Learning
- ASSESSMENT MATTERS
 - General
 - Assessment in Te Reo Māori
 - Special Assistance in Summative Assessment
 - Examinations
 - Extensions
 - Availability of Marked Assessments
 - Notification of Course / Programme Results
 - Aegrotat Consideration
 - Resubmissions (assessment-level)
 - Reassessment (course level)
 - Challenging Assessment Decisions
 - Appeals against a Grade
- ACADEMIC MISCONDUCT
 - Penalties for Academic Misconduct
- ASSESSMENT AND COURSE RESULTS
- References

SECTION 4: AWARDS

- AWARDS
- QUALIFICATIONS
 - NMIT Academic Seal
 - Academic Regalia
- NON-FORMAL AWARDS

Refer to *NMIT Academic Statute s.3 Academic Regulations*
 NMIT Academic Statute s.4 Awards

9. APPENDIX 1: BCGI GRADUATE OUTCOMES AND ASSESSMENT MAP

BACHELOR OF COMPUTER GENERATED IMAGERY	Core	GO 1	Apply problem solving skills to complex design, technical and workflow challenges to generate effective solutions for the CGI production pipeline.
		GO 2	Utilise reflection, critical analysis and personal enquiry, applying experience and researched knowledge effectively to CGI professional practice.
		GO 3	Apply and create CGI processes, procedures, tools and techniques to meet best practice industry requirements.
		GO 4	Contribute effectively to CGI project pipeline planning and management, and delivery of a range of CGI products to meet client requirements.
		GO 5	Perform both independently and collaboratively, and demonstrate effective communication and leadership skills within CGI production teams.
	Animation major	GO 6	Combine creativity and the understanding of motion, behaviours and expressions with knowledge and technical skills in animation, in the production of successful animation projects
		GO 7	Produce, present and evaluate innovative professional standard animation projects for a range of target markets or audiences.
	Visual Effects major	GO 8	Combine creativity and an understanding of natural dynamic changes with knowledge and technical skills in visual effects, in the production of successful visual effects projects.
		GO 9	Produce, present and evaluate innovative visual effects projects of a professional standard for target markets or audiences.
	Technical Development major	GO 10	Create and evaluate innovative custom scripts and specialist tools to meet a range of different CGI production needs.
		GO 11	Create and evaluate efficient professional production pipeline for animation and/or film and/or game development.

CGI501 Professional Practice 1													
Aim: Building and applying knowledge of professional and commercial CGI production practices and environments, the contexts in which they operate, safe work practices and the development of professional portfolios for the animated film and gaming industries.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Case Study: 40% (LO 1, 3, 4, 5) Project: 50% (LO 2, 6) Professionalism: 10% (LO 1, 2, 3, 4, 5)
1	Present an overview of the business of animation in the film and gaming industries.		*		*								
2	Describe specialist roles in professional film and game production studios.		*		*								
3	Investigate how an industry production pipeline would be used for an animated film or real time game animation project.		*		*								
4	Explain and discuss the fundamental aspects of media law, copyright, intellectual property and safe work practices as they relate to animation and game development, design and distribution.		*		*								
5	Explain the implications of Te Tiriti o Waitangi on the development, production and use of animated film and real time game animation in New Zealand.		*		*								
6	Investigate a range of production techniques used in the animated film and gaming industries.		*		*								

CGI502 3D Modelling 1													
Aim: Building core knowledge and skills in 3D modelling methods used in the production of animated film and real time game animation. Students will apply fundamental tools and techniques and experience the process of creating models for the animated film and gaming industries.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - 3D character modelling and texturing 45% (LO 1, 2, 3, 4, 5) Project - 3D background modelling and texturing 45% (LO 1, 2, 3, 4, 5) Professionalism 10% (LO 1, 2, 3, 4, 5)
1	Apply industry standard 3D modelling workflow to the life cycles of animation and game production.	*	*	*	*	*							
2	Produce 3D modelling work using industry-standard software.	*	*	*	*	*							
3	Create proxy models for layout design and industry-standard 3D production models for animation.	*	*	*	*	*							
4	Use industry standard workflow in generating texture maps for animation and game production pipelines.	*	*	*	*	*							
5	Produce 3D modelling for real time engines (AR, VR).	*	*	*	*	*							

CGI503 Rigging and Animation 1

Aim: Creating character animation and using contemporary industry techniques to produce photo-realistic and stylised animated characters.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – Rigging: 45% <i>(LO 4, 5)</i> Project – Animated sequence: 45% <i>(LO 1, 2, 3)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5)</i>
1	Explore and apply professional animation techniques and use the most effective techniques for animation or game design pipelines.	*	*	*	*	*							
2	Investigate the concept of key frames, timing and the techniques for creating them for the animation or gaming industries.	*	*	*	*	*							
3	Illustrate and discuss the significance of timing in animated film or gaming.	*	*	*	*	*							
4	Create a proxy rig for a 3D model.	*	*	*	*	*							
5	Rig a character and create character facial animation.	*	*	*	*	*							

CGI504 Dynamic Effects 1

Aim: Building knowledge of dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating basic visual effects and using them in animated film and game animation projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project natural phenomena- : 45% <i>(LO 1, 3, 4, 6)</i> Project - destruction effects : 45% <i>(LO 1, 2, 5, 6)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5, 6)</i>
1	Investigate industry practices for the integration of dynamic effects into animation and game production pipelines.	*	*	*	*	*							
2	Reference and simulate real world object interactions.	*	*	*	*	*							
3	Observe different types of anatomical and surface features and simulate them effectively for a digital character.	*	*	*	*	*							
4	Simulate simple moving surfaces.	*	*	*	*	*							
5	Achieve realistic simulations using various dynamics tools with selected specialist software.	*	*	*	*	*							
6	Produce dynamic effects to meet the requirements of a project brief within the constraints of time and budget.	*	*	*	*	*							

CGI505 Lighting and Post-production 1

Aim: Building understanding of the ways that lighting, rendering and compositing are used in animation, and the ways that real time lighting and shader design are used in game design, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - lighting and rendering for CGI : 45% (LO 1, 2, 3) Project - compositing for animation and real time effects: 45% (LO 3, 4, 5) Professionalism: 10% (LO 1, 2, 3, 4, 5)
1	Effectively use basic rendering technologies to generate a range of CG images.	*	*	*	*	*							
2	Explore, apply and evaluate a range of lighting techniques to create visual and emotive effects.	*	*	*	*	*							
3	Facilitate effective rendering solutions for animation production.	*	*	*	*	*							
4	Composite 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*							
5	Design and use basic PBR materials and shaders for real time applications.	*	*	*	*	*							

CGI506 Technical Development 1

Aim: Developing basic skills and knowledge of programming for animation and game development and to develop custom tools and functions for a successful production pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - Designing efficient production pipeline 45% (LO 1, 2, 4) Project - Using industry standard programming language to build tools for animation and game production pipeline 45% (LO 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Investigate and compare different programming languages used for animation, visual effects and real time applications.	*	*	*	*	*							
2	Evaluate the effectiveness of different scripting/programming for selected applications.	*	*	*	*	*							
3	Select and use a number of different scripting languages to achieve the desired effects and tools.	*	*	*	*	*							
4	Create custom tools to facilitate a production scenario.	*	*	*	*	*							

CGI507 CGI Project 1

Aim: Working as a member of a production team to plan, carry out and present an animated film or real time game animation project, utilising a range of industry-standard strategies, processes, tools and production techniques.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project planning 20% (LO 1) Team project: 50% (LO 2, 3) Reflection/Critique 20% (LO 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Work collaboratively within a team to plan, manage and implement a production pipeline and process to meet the requirements of a project brief.	*	*	*	*	*							
2	Create an animated work or game using a range of tools techniques and processes in response to a project brief.	*	*	*	*	*							
3	Apply problem solving skill to a range of creative and/or technical challenges in the development of an animation or game development project.	*	*	*	*	*							
4	Discuss their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving the requirements of a project brief.	*	*	*	*	*							

CGI601 Professional Practice 2

Aim: Developing knowledge of professional and commercial CGI production environments, including industry roles, functional relationships between studio departments, and how workflow affects (and is affected by) the broader production pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Presentation - sector investigation: 40% (LO 1, 3, 4) Presentation - pipeline: 50% (LO 2, 5) Professionalism: 10% (LO 1, 2, 3, 4, 5)
1	Investigate and discuss the use of animation and computer-generated imagery in a range of industry sectors.		*		*	*							
2	Identify production problem solving methods used in the film and gaming industries.	*	*		*	*							
3	Analyse how an industry production pipeline is used for an animated film or real time game animation project.	*	*		*	*							
4	Investigate and discuss the impact of relevant media law, copyright and intellectual property on specific animated film or real time game design and development, for distribution in Aotearoa New Zealand and/or globally.		*		*	*							
5	Create and pitch a business proposal for a project for a professional film or gaming production studio.	*	*		*	*		*		*		*	

CGI602 3D Modelling 2

Aim: Developing knowledge and skills in 3D modelling methods used for animation. Students apply tools and techniques and experience the process of how to create well-developed models for a variety of industries such as film and gaming.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS Project – 3D character modelling and procedural texturing: 45% (LO 1, 2, 3, 4, 5) Project – 3D background modelling and procedural texturing 45% (LO 1, 2, 3, 4, 5) Professionalism : 10% (LO 1, 2, 3, 4, 5)
1	Evaluate and use industry standard workflow and 3D modelling technologies in the production of animated film or real time game animation.	*	*	*	*	*	*	*					
2	Produce complex professional 3D modelling work using industry-standard software.	*	*	*	*	*	*	*					
3	Use proxy models for complex layout design for animation or game development.	*	*	*	*	*	*	*					
4	Develop procedural workflow in generating texture maps for the animation or game production pipeline.	*	*	*	*	*	*	*					
5	Produce complex 3D modelling for real time engines (AR, VR).	*	*	*	*	*	*	*					

CGI603 Rigging and Animation 2

Aim: Becoming familiar with contemporary techniques in character animation using a variety of animation tools and techniques used in the industry.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS Project – rigging: 45% (LO 4, 5) Project – key framing: 45% (LO 1, 2, 3) Professionalism : 10% (LO 1, 2, 3, 4, 5)
1	Use professional animation techniques and select the most effective techniques for an animated film or real time game design pipeline.	*	*	*	*	*	*	*					
2	Investigate and use advanced key frame techniques to create complex animation for the animated film or gaming industries.	*	*	*	*	*	*	*					
3	Investigate and examine the use of timing in different genres of animated film or real time game animation.	*	*	*	*	*	*	*					
4	Create a proxy rig for a complex 3D model.	*	*	*	*	*	*	*					
5	Rig a complex character and create realistic character facial animation.	*	*	*	*	*	*	*					

CGI604 Dynamic Effects 2													
Aim: Building knowledge of dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating complex and photorealistic visual effects and using them in animated film and real time game animation projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Test and evaluate a range of technical outcomes and their effectiveness in the production of dynamic effects within animated film or game production pipelines.	*	*	*	*	*			*	*			Project – dynamics for character: 45% (LO 1, 3, 5, 6) Project – dynamics for natural phenomena: 45% (LO 1, 2, 4, 5, 6) Professionalism: 10% (LO 1, 2, 3, 4, 5, 6)
2	Reference and simulate complex real world object interactions.	*	*	*	*	*			*	*			
3	Observe different types of anatomical and surface features and simulate them effectively for a complex digital character.	*	*	*	*	*			*	*			
4	Simulate interactive moving surfaces.	*	*	*	*				*	*			
5	Achieve complex realistic simulations using specialised dynamics tools.	*	*	*	*	*			*	*			
6	Produce complex dynamic effects to meet the requirements of a project brief within the constraints of time and budget.	*	*	*	*	*			*	*			

CGI605 Animation Lighting and Post-production													
Aim: Advancing understanding of the ways that lighting, rendering and compositing are used in animation, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Use advanced rendering technologies to generate CG images which realistically imitate real world materials and/or 3D objects and/or 3D scenes.	*	*	*	*	*	*	*	*	*			Project – lighting and rendering for CGI: 45% (LO 1, 2) Project – compositing for animation and real time rendering: 45% (LO 1, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for animation.	*	*	*	*	*	*	*	*	*			
3	Facilitate and design effective custom rendering solutions for animation production.	*	*	*	*	*	*	*	*	*			
4	Composite complex visual effects shots with 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*	*	*	*	*			

CGI606 Real Time Lighting and Shading													
Aim: Advancing understanding of the ways that real time lighting and shader design and effects are used in game design, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Use PBR materials and shaders in real time applications.	*	*	*	*	*	*	*	*	*			Project – lighting for real time: 45% (LO 1, 2)
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for game development.	*	*	*	*	*	*	*	*	*			
3	Design custom shaders for real time applications.	*	*	*	*	*	*	*	*	*			Professionalism: 10% (LO 1, 2, 3, 4)
4	Create photo realistic real time shaders for game development.	*	*	*	*	*	*	*	*	*			

CGI607 Animation Technical Development													
Aim: Developing production relevant skills and knowledge in programming and scripts used for animation and visual effects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement production programming language in animation and visual effects.	*	*	*	*	*					*	*	Project – Programming for animation and visual effects production 45% (LO 1, 2, 3, 4)
2	Evaluate the effectiveness of scripting/programming in complex animation scenarios.	*	*	*	*	*					*	*	
3	Select and use a number of different scripting languages to address complex technical issues in visual effects and animation.	*	*	*	*	*					*	*	Project – Tool development for lighting, compositing and post production 45% (LO 1, 2, 3, 4)
4	Create custom tools to facilitate complex animation production scenarios.	*	*	*	*	*					*	*	

CGI608 Real Time Technical Development													
Aim: Developing production relevant skills and knowledge in programming and scripts used for real time game development, including object-oriented programming (OOP).		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement production programming language in real time applications.	*	*	*	*	*					*	*	Project – programming for real time engines 45% <i>(LO 1, 2, 3, 4)</i> Project – tool development for real time visualisation 45% <i>(LO 1, 2, 3, 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
2	Evaluate the effectiveness of scripting/programming in complex real time scenarios.	*	*	*	*	*					*	*	
3	Select and use a number of different scripting languages to address complex technical issues in gaming and real time applications.	*	*	*	*	*					*	*	
4	Create custom tools to facilitate complex real time production scenarios.	*	*	*	*	*					*	*	

GCI609 CGI Animation Project													
Aim: Developing professional skills and knowledge in producing animation and VFX projects from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement an animation production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*	*	*	*	*			Project planning: 20% <i>(LO 1)</i> Team project- animation: 60% <i>(LO 2, 3)</i> Reflection/critique: 10% <i>(LO 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
2	Create an animated work using a range of tools techniques and processes in response to a client's brief.	*	*	*	*	*	*	*	*	*			
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of an animation project.	*	*	*	*	*	*	*	*	*			
4	Discuss and analyse their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*	*	*	*	*			

GCI610 CGI Real Time Project													
Aim: Developing professional skills and knowledge in producing real time game designs from the planning stages, through industry-standard production methods, to client's delivery and online distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS
1	Work collaboratively within a team to plan, manage and implement a real time game production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 20% (LO 1)
2	Create a game using a range of tools techniques and processes in response to a client's brief.	*	*	*	*	*					*	*	Team project- real time: 60% (LO 2, 3)
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of a game project.	*	*	*	*	*					*	*	Reflection/critique: 10% (LO 4)
4	Discuss and analyse their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI701 Motion Capture													
Aim: Developing advanced skills and knowledge in using motion capture technologies and real time animation pipeline for animation and real time game production pipelines.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS
1	Develop facial rigs to control and create a naturalistic level of detail in characters and creatures.	*	*	*	*	*	*	*	*	*	*	*	Project – Previsualisation with real time motion capture: 40% (LO 2, 3, 5)
2	Effectively use and evaluate real time motion capture production techniques for the animation and game industry.	*	*	*	*	*	*	*	*	*	*	*	Project – Motion capture for animation and real time engines: 50% (LO 1, 2, 3, 4, 5)
3	Effectively use and evaluate realistic real time motion capture animation data for visual effects visualisation.	*	*	*	*	*	*	*	*	*	*	*	
4	Code and develop artist-controlled simulation solution for a complex interactive simulation.	*	*	*	*	*	*	*	*	*	*	*	
5	Produce pre-visualization using motion control rigs, and stream motion capture data in real time on to the character.	*	*	*	*	*	*	*	*	*	*	*	Professionalism: 10% (LO 1, 2, 3, 4, 5)

CGI702 Advanced Modelling

Aim: Building students' advanced knowledge and skills in 3D modelling methods used for animation and real time engines. Students apply industry-standard tools and techniques, develop effective 3D modelling workflows between different 3D modelling packages and experience the process of how to create well-developed models for a variety of industries such as animation, visual effects (VFX) and real time game engines.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – 3D character modelling, shading and texturing: 45% (LO 1, 2, 3, 4, 5) Project – 3D background modelling shading and texturing 45% (LO 1, 2, 3, 4, 5) Professionalism : 10% (LO 1, 2, 3, 4, 5)
1	Use current industry standard workflow and 3D modelling technologies in animation and/or game production.	*	*	*	*	*	*	*	*	*	*	*	
2	Create, develop and evaluate complex professional 3D modelling work using industry-standard software and custom tools.	*	*	*	*	*	*	*	*	*	*	*	
3	Create, develop and evaluate efficient proxy models for complex layout design for animation and/or game development.	*	*	*	*	*	*	*	*	*	*	*	
4	Develop, evaluate the efficiency of procedural workflow in generating texture maps and shaders for the animation and/or game production pipeline.	*	*	*	*	*	*	*	*	*	*	*	
5	Produce, evaluate the efficiency of complex 3D modelling for real time engines (AR, VR).	*	*	*	*	*	*	*	*	*	*	*	

CGI703 Advanced Animation

Aim: Developing advanced skills and knowledge in producing animation, VFX projects and real time animatics from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project plan : 20% (LO 1) Project – Advanced Animation: 60% (LO 1, 2, 3, 4) Presentation – 10% (LO 1, 2, 3, 4) Professionalism : 10% (LO 1, 2, 3, 4)
1	Plan, manage and implement a production pipeline work for an animation and/or real time game engine to meet the targeted production timeframe.	*	*	*	*	*	*	*	*	*	*	*	
2	Create an animated work for an animation and/or real time game engine using a range of tools techniques and processes most efficient for the production requirement.	*	*	*	*	*	*	*	*	*	*	*	
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of an animation project, including writing and coding custom animation scripts to facilitate an animation and/or real time game development project.	*	*	*	*	*	*	*	*	*	*	*	
4	Utilise advanced skills in realistic character expressions and mechanical/interaction animation.	*	*	*	*	*	*	*	*	*	*	*	

CGI704 Advanced Visual Effects

Aim: Developing advanced skills in creating dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating complex and photorealistic visual effects and using them in animation and game projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project planning – 10% (LO 1, 2, 3, 4) Project – Visual Effects: 70% (LO 1, 2, 3, 4) Presentation: 10% (LO 1, 2, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Produce realistic and complex simulations using various dynamics tools with selected specialist software and custom scripts.	*	*	*	*	*	*	*	*	*	*	*	
2	Reference and simulate real world object interactions, and the principles of mathematics for visual effects work. Present the findings and outcomes of using different tools and scripts to efficiently produce the visual effects.	*	*	*	*	*	*	*	*	*	*	*	
3	Observe and evaluate different types of fur, hair and muscles and simulate them effectively for crowd simulation work.	*	*	*	*	*	*	*	*	*	*	*	
4	Produce and manage complex dynamic effects to integrate within the production shots and requirements.	*	*	*	*	*	*	*	*	*	*	*	

CGI705 Advanced Lighting and Post-production

Aim: Advancing understanding of the ways that lighting, rendering and compositing are used in animation and visual effects, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project planning: 10% (LO 1, 2, 3, 4) Project – Advanced lighting and compositing: 70% (LO 1, 2, 3, 4) Presentation: 10 % (LO 1, 2, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Use advanced rendering technologies to generate CG images which realistically imitate real world materials and/or 3D objects and/or 3D scenes.	*	*	*	*	*	*	*	*	*	*	*	
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for animation.	*	*	*	*	*	*	*	*	*	*	*	
3	Facilitate and design effective custom rendering solutions for animation production.	*	*	*	*	*	*	*	*	*	*	*	
4	Composite complex visual effects shots with 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*	*	*	*	*	*	*	

CGI706 Advanced Real Time Lighting and Shading													
Aim: Developing professional skills and advanced knowledge in producing real time PBR shaders and dynamic simulations from the planning stages, through industry-standard production methods, to client's delivery and online distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Write and code PBR materials and shaders in real time applications.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for game development.	*	*	*	*	*					*	*	Project – Advanced real time lighting and shading: 70% (LO 1, 2, 3, 4)
3	Design procedural and complex shaders for real time applications.	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Render complex photorealistic scenes for game development.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI707 Advanced CGI Technical Development													
Aim: Developing advanced skills and knowledge in programming and scripts used for animation and visual effects production and pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement maths for visual effects and use python programming language in animation and visual effects.	*	*	*	*	*					*	*	Project – Pipeline development for animation and visual effects: 45% (LO 1, 2, 3)
2	Use advanced python scripting/programming to debug and produce complex animation and visual effects sequences efficiently.	*	*	*	*	*					*	*	Project – Tools development for animation and visual effects 45% (LO 1, 2, 4)
3	Code advanced production tracking and management tools to facilitate storage and rendering pipelines for animation and visual effects production.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)
4	Create custom tools to facilitate complex animation production scenarios, including cloud-based scenes distribution and collaborative pipelines.	*	*	*	*	*					*	*	

CGI708 Advanced Real Time Technical Development													
Aim: Developing advanced production relevant skills and knowledge in programming and scripts used for real time game development, including object-oriented programming (OOP).		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement advanced production programming language in real time applications.	*	*	*	*	*					*	*	Project – Pipeline development for gaming and real time engines: 45% (LO 1, 2, 3, 4)
2	Evaluate the effectiveness and debugging of scripting/programming in complex real time scenarios.	*	*	*	*	*					*	*	
3	Code, select and use several different scripting languages to address complex technical issues in gaming and real time applications.	*	*	*	*	*					*	*	
4	Create custom advanced tools and scripts to facilitate complex real time production scenarios.	*	*	*	*	*					*	*	Project –Tools development for gaming and real time engines 45% (LO 1, 2, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)

CGI709 Advanced Animation Project													
Aim: Developing professional skills and knowledge in producing animation projects from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement an animation production and process to meet the requirements of a client's brief.	*	*	*	*	*	*	*					Project planning: 10% (LO 1, 2, 3, 4)
2	Create an animated short using custom tools techniques and processes in response to a client's brief.	*	*	*	*	*	*	*					
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex animated short.	*	*	*	*	*	*	*					Project – Advanced animation: 70% (LO 1, 2, 3, 4) Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*	*	*					
		*	*	*	*	*	*	*					Professionalism: 10% (LO 1, 2, 3, 4)

CGI710 Advanced Visual Effects Project													
Aim: Producing complex visual effects sequences from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement a visual effects production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*			*	*			Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and produce a visual effects sequence using custom tools techniques and processes in response to a client's brief.	*	*	*	*	*			*	*			Project – Advanced visual effects: 70% (LO 1, 2, 3, 4)
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of a visual effects sequence.	*	*	*	*	*			*	*			Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*			*	*			Professionalism: 10% (LO 1, 2, 3, 4)

CGI711 Advanced CGI Technical Development Project													
Aim: Developing professional skills and knowledge in scripting and coding for animation production from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team and to plan, manage and implement an animation production, pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and produce an animated short using custom tools techniques and processes in response to a client's brief within a tight budget and time.	*	*	*	*	*					*	*	Project – Advanced CGI Technical Development: 70% (LO 1, 2, 3, 4)
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex animated short.	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI712 Advanced Real Time Technical Development Project

Aim: Developing advanced skills and knowledge in scripting and coding for real time game development from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS
1	Work collaboratively within a team to plan, manage, create custom tools and scripts and implement a real time production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and create a game and/or AR/VR experience by creating range of tools techniques and processes in response to a client's brief within a tight budget and time.	*	*	*	*	*					*	*	Project – Advanced real time: 70% (LO 1, 2, 3, 4)
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex game project or AR/VR experience.	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

10. APPENDIX 1: GDCGI GRADUATE OUTCOMES AND ASSESSMENT MAP

GRADUATE DIPLOMA IN COMPUTER GENERATED IMAGERY	Core	GO 1	Apply problem solving skills to specialist design, technical and workflow challenges to generate effective solutions for the CGI production pipeline.
		GO 2	Utilise reflection, critical analysis and personal enquiry, applying experience and researched knowledge effectively to CGI professional practice.
		GO 3	Apply and create CGI processes, procedures, tools and specialist techniques to meet best practice industry requirements.
		GO 4	Contribute effectively to CGI project pipeline planning and management, and delivery of a range of specialist CGI products to meet client requirements.
		GO 5	Perform both independently and collaboratively, and demonstrate effective communication and leadership skills within a specialist CGI production team.
	Animation focus	GO 6	Combine creativity and the understanding of motion, behaviours and expressions with knowledge and technical skills in animation, in the production of successful animation projects.
		GO 7	Produce, present and evaluate innovative professional standard animation projects for a range of target markets or audiences.
	Visual Effects focus	GO 8	Combine creativity and an understanding of natural dynamic changes with knowledge and technical skills in visual effects, in the production of successful visual effects projects.
		GO 9	Produce, present and evaluate innovative visual effects projects of a professional standard for target markets or audiences.
	Technical Development focus	GO 10	Create and evaluate innovative custom scripts and specialist tools to meet a range of different CGI production needs.
		GO 11	Create and evaluate efficient professional production pipeline for animation and/or film and/or game development.

CGI501 Professional Practice 1

Aim: Building and applying knowledge of professional and commercial CGI production practices and environments, the contexts in which they operate, safe work practices and the development of professional portfolios for the animated film and gaming industries.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Case Study: 40% (LO 1, 3, 4, 5) Project: 50% (LO 2, 6) Professionalism: 10% (LO 1, 2, 3, 4, 5)
1	Present an overview of the business of animation in the film and gaming industries.		*		*								
2	Describe specialist roles in professional film and game production studios.		*		*								
3	Investigate how an industry production pipeline would be used for an animated film or real time game animation project.		*		*								
4	Explain and discuss the fundamental aspects of media law, copyright, intellectual property and safe work practices as they relate to animation and game development, design and distribution.		*		*								
5	Explain the implications of Te Tiriti o Waitangi on the development, production and use of animated film and real time game animation in New Zealand.		*		*								
6	Investigate a range of production techniques used in the animated film and gaming industries.		*		*								

CGI502 3D Modelling 1

Aim: Building core knowledge and skills in 3D modelling methods used in the production of animated film and real time game animation. Students will apply fundamental tools and techniques and experience the process of creating models for the animated film and gaming industries.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - 3D character modelling and texturing 45% (LO 1, 2, 3, 4, 5) Project - 3D background modelling and texturing 45% LO 1, 2, 3, 5, 5) Professionalism 10% (LO 1, 2, 3, 4, 5)
1	Apply industry standard 3D modelling workflow to the life cycles of animation and game production.	*	*	*	*	*							
2	Produce 3D modelling work using industry-standard software.	*	*	*	*	*							
3	Create proxy models for layout design and industry-standard 3D production models for animation.	*	*	*	*	*							
4	Use industry standard workflow in generating texture maps for animation and game production pipelines.	*	*	*	*	*							
5	Produce 3D modelling for real-time engines (AR, VR).	*	*	*	*	*							

CGI503 Rigging and Animation 1													
Aim: Creating character animation and using contemporary industry techniques to produce photo-realistic and stylised animated characters.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – Rigging: 45% (LO 4, 5) Project – Animated sequence: 45% (LO 1, 2, 3) Professionalism: 10% (LO 1, 2, 3, 4, 5)
1	Explore and apply professional animation techniques and use the most effective techniques for animation or game design pipelines.	*	*	*	*	*							
2	Investigate the concept of key frames, timing and the techniques for creating them for the animation or gaming industries.	*	*	*	*	*							
3	Illustrate and discuss the significance of timing in animated film or gaming.	*	*	*	*	*							
4	Create a proxy rig for a 3D model.	*	*	*	*	*							
5	Rig a character and create character facial animation.	*	*	*	*	*							

CGI504 Dynamic Effects 1													
Aim: Building knowledge of dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating basic visual effects and using them in animated film and game animation projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - natural phenomena: 45% (LO 1, 3, 4, 6) Project - destruction effects: 45% (LO 1, 2, 5, 6) Professionalism: 10% (LO 1, 2, 3, 4, 5, 6)
1	Investigate industry practices for the integration of dynamic effects into animation and game production pipelines.	*	*	*	*	*							
2	Reference and simulate real world object interactions.	*	*	*	*	*							
3	Observe different types of anatomical and surface features and simulate them effectively for a digital character.	*	*	*	*	*							
4	Simulate simple moving surfaces.	*	*	*	*	*							
5	Achieve realistic simulations using various dynamics tools with selected specialist software.	*	*	*	*	*							
6	Produce dynamic effects to meet the requirements of a project brief within the constraints of time and budget.	*	*	*	*	*							

CGI505 Lighting and Post-production 1													
Aim: Building understanding of the ways that lighting, rendering and compositing are used in animation, and the ways that real time lighting and shader design are used in game design, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - lighting and rendering for CGI: 45% <i>(LO 1, 2, 3)</i> Project - compositing for animation and real time effects: 45% <i>(Learning Outcomes 3, 4, 5)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5)</i>
1	Effectively use basic rendering technologies to generate a range of CG images.	*	*	*	*	*							
2	Explore, apply and evaluate a range of lighting techniques to create visual and emotive effects.	*	*	*	*	*							
3	Facilitate effective rendering solutions for animation production.	*	*	*	*	*							
4	Composite 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*							
5	Design and use basic PBR materials and shaders for real time applications.	*	*	*	*	*							

CGI506 Technical Development 1													
Aim: Developing basic skills and knowledge of programming for animation and game development and to develop custom tools and functions for a successful production pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project - Designing efficient production pipeline 45% <i>(LO 1, 2, 4)</i> Project - Using industry standard programming language to build tools for animation and game production pipeline 45% <i>LO 3, 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
1	Investigate and compare different programming languages used for animation, visual effects and real time applications.	*	*	*	*	*							
2	Evaluate the effectiveness of different scripting/programming for selected applications.	*	*	*	*	*							
3	Select and use a number of different scripting languages to achieve the desired effects and tools.	*	*	*	*	*							
4	Create custom tools to facilitate a production scenario.	*	*	*	*	*							

CGI507 CGI Project 1

Aim: Working as a member of a production team to plan, carry out and present an animated film or real time game animation project, utilising a range of industry-standard strategies, processes, tools and production techniques.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS Project planning 20% <i>(LO 1)</i> Team project: 50% (LO 2, 3) Reflection/Critique 20% <i>(LO 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
1	Work collaboratively within a team to plan, manage and implement a production pipeline and process to meet the requirements of a project brief.	*	*	*	*	*							
2	Create an animated work or game using a range of tools techniques and processes in response to a project brief.	*	*	*	*	*							
3	Apply problem solving skill to a range of creative and/or technical challenges in the development of an animation or game development project.	*	*	*	*	*							
4	Discuss their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving the requirements of a project brief.	*	*	*	*	*							

CGI601 Professional Practice 2

Aim: Developing knowledge of professional and commercial CGI production environments, including industry roles, functional relationships between studio departments, and how workflow affects (and is affected by) the broader production pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS Presentation - sector investigation: 40% <i>(LO 1, 3, 4)</i> Presentation - pipeline: 50% <i>(LO 2, 5)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5)</i>
1	Investigate and discuss the use of animation and computer-generated imagery in a range of industry sectors.		*		*	*							
2	Identify production problem solving methods used in the film and gaming industries.	*	*		*	*							
3	Analyse how an industry production pipeline is used for an animated film or real time game animation project.	*	*		*	*							
4	Investigate and discuss the impact of relevant media law, copyright and intellectual property on specific animated film or real time game design and development, for distribution in Aotearoa New Zealand and/or globally.		*		*	*							
5	Create and pitch a business proposal for a project for a professional film or gaming production studio.	*	*		*	*		*		*		*	

CGI602 3D Modelling 2

Aim: Developing knowledge and skills in 3D modelling methods used for animation. Students apply tools and techniques and experience the process of how to create well-developed models for a variety of industries such as film and gaming.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – 3D character modelling and procedural texturing: 45% <i>(LO 1, 2, 3, 4, 5)</i> Project – 3D background modelling and procedural texturing 45% <i>(LO 1, 2, 3, 4, 5)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5)</i>
1	Evaluate and use industry standard workflow and 3D modelling technologies in the production of animated film or real time game animation.	*	*	*	*	*	*	*					
2	Produce complex professional 3D modelling work using industry-standard software.	*	*	*	*	*	*	*					
3	Use proxy models for complex layout design for animation or game development.	*	*	*	*	*	*	*					
4	Develop procedural workflow in generating texture maps for the animation or game production pipeline.	*	*	*	*	*	*	*					
5	Produce complex 3D modelling for real-time engines (AR, VR).	*	*	*	*	*	*	*					

CGI603 Rigging and Animation 2

Aim: Becoming familiar with contemporary techniques in character animation using a variety of animation tools and techniques used in the industry.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – rigging: 45% <i>(LO 4, 5)</i> Project – key framing: 45% <i>(LO 1, 2, 3)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4, 5)</i>
1	Use professional animation techniques and select the most effective techniques for an animated film or real time game design pipeline.	*	*	*	*	*	*	*					
2	Investigate and use advanced key frame techniques to create complex animation for the animated film or gaming industries.	*	*	*	*	*	*	*					
3	Investigate and examine the use of timing in different genres of animated film or real time game animation.	*	*	*	*	*	*	*					
4	Create a proxy rig for a complex 3D model.	*	*	*	*	*	*	*					
5	Rig a complex character and create realistic character facial animation.	*	*	*	*	*	*	*					

CGI604 Dynamic Effects 2

Aim: Building knowledge of dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating complex and photorealistic visual effects and using them in animated film and real time game animation projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – dynamics for character: 45% (LO 1, 3, 5, 6) Project – dynamics for natural phenomena: 45% (LO 1, 2, 4, 5, 6) Professionalism: 10% (LO 1, 2, 3, 4, 5, 6)
1	Test and evaluate a range of technical outcomes and their effectiveness in the production of dynamic effects within animated film or game production pipelines.	*	*	*	*	*			*	*			
2	Reference and simulate complex real world object interactions.	*	*	*	*	*			*	*			
3	Observe different types of anatomical and surface features and simulate them effectively for a complex digital character.	*	*	*	*	*			*	*			
4	Simulate interactive moving surfaces.	*	*	*	*				*	*			
5	Achieve complex realistic simulations using specialised dynamics tools.	*	*	*	*	*			*	*			
6	Produce complex dynamic effects to meet the requirements of a project brief within the constraints of time and budget.	*	*	*	*	*			*	*			

CGI605 Animation Lighting and Post-production

Aim: Advancing understanding of the ways that lighting, rendering and compositing are used in animation, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – lighting and rendering for CGI: 45% (LO 1, 2) Project – compositing for animation and real time rendering: 45% (LO 1, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Use advanced rendering technologies to generate CG images which realistically imitate real world materials and/or 3D objects and/or 3D scenes.	*	*	*	*	*	*	*	*	*			
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for animation.	*	*	*	*	*	*	*	*	*			
3	Facilitate and design effective custom rendering solutions for animation production.	*	*	*	*	*	*	*	*	*			
4	Composite complex visual effects shots with 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*	*	*	*	*			

CGI606 Real Time Lighting and Shading													
Aim: Advancing understanding of the ways that real time lighting and shader design and effects are used in game design, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – lighting for real time: 45% (LO 1, 2) Project – real time shading: 45% (LO 1, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Use PBR materials and shaders in real-time applications.	*	*	*	*	*	*	*	*	*			
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for game development.	*	*	*	*	*	*	*	*	*			
3	Design custom shaders for real time applications.	*	*	*	*	*	*	*	*	*			
4	Create photo realistic real time shaders for game development.	*	*	*	*	*	*	*	*	*			

CGI607 Animation Technical Development													
Aim: Developing production relevant skills and knowledge in programming and scripts used for animation and visual effects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – programming for animation and visual effects production 45% (LO 1, 2, 3, 4) Project –tool development for lighting, compositing and post production 45% (LO 1, 2, 3, 44) Professionalism: 10% (LO 1, 2, 3, 4)
1	Implement production programming language in animation and visual effects.	*	*	*	*	*					*	*	
2	Evaluate the effectiveness of scripting/programming in complex animation scenarios.	*	*	*	*	*					*	*	
3	Select and use a number of different scripting languages to address complex technical issues in visual effects and animation.	*	*	*	*	*					*	*	
4	Create custom tools to facilitate complex animation production scenarios.	*	*	*	*	*					*	*	

CGI608 Real Time Technical Development													
Aim: Developing production relevant skills and knowledge in programming and scripts used for real-time game development, including object-oriented programming (OOP).		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement production programming language in real time applications.	*	*	*	*	*					*	*	Project – programming for real time engines 45% <i>(LO 1, 2, 3, 4)</i> Project –tool development for real time visualisation 45% <i>(LO 1, 2, 3, 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
2	Evaluate the effectiveness of scripting/programming in complex real time scenarios.	*	*	*	*	*					*	*	
3	Select and use a number of different scripting languages to address complex technical issues in gaming and real time applications.	*	*	*	*	*					*	*	
4	Create custom tools to facilitate complex real time production scenarios.	*	*	*	*	*					*	*	

GCI609 CGI Animation Project													
Aim: Developing professional skills and knowledge in producing animation and VFX projects from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement an animation production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*	*	*	*	*			Project planning: 20% <i>(LO 1)</i> Team project- Animation: 60% <i>(LO 2, 3)</i> Reflection/critique: 10% <i>(LO 4)</i> Professionalism: 10% <i>(LO 1, 2, 3, 4)</i>
2	Create an animated work using a range of tools techniques and processes in response to a client's brief.	*	*	*	*	*	*	*	*	*			
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of an animation project.	*	*	*	*	*	*	*	*	*			
4	Discuss and analyse their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*	*	*	*	*			

GCI610 CGI Real Time Project													
Aim: Developing professional skills and knowledge in producing real-time game designs from the planning stages, through industry-standard production methods, to client's delivery and online distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS
1	Work collaboratively within a team to plan, manage and implement a real time game production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 20% (LO 1)
2	Create a game using a range of tools techniques and processes in response to a client's brief.	*	*	*	*	*					*	*	Team project- real time: 60% (LO 2, 3)
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of a game project.	*	*	*	*	*					*	*	Reflection/critique: 10% (LO 4)
4	Discuss and analyse their own and other's work with regard to its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI701 Motion Capture													
Aim: Developing advanced skills and knowledge in using motion capture technologies and real time animation pipeline for animation and real time game production pipelines.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESMENTS
1	Develop facial rigs to control and create a naturalistic level of detail in characters and creatures.	*	*	*	*	*	*	*	*	*	*	*	Project – Previsualisation with real time motion capture: 40% (LO 2, 3, 5)
2	Effectively use and evaluate real time motion capture production techniques for the animation and game industry.	*	*	*	*	*	*	*	*	*	*	*	Project – Motion capture for animation and real time engines: 50% (LO 1, 2, 3, 4, 5)
3	Effectively use and evaluate realistic real time motion capture animation data for visual effects visualisation.	*	*	*	*	*	*	*	*	*	*	*	
4	Code and develop artist-controlled simulation solution for a complex interactive simulation.	*	*	*	*	*	*	*	*	*	*	*	
5	Produce pre-visualization using motion control rigs, and stream motion capture data in real time on to the character.	*	*	*	*	*	*	*	*	*	*	*	Professionalism: 10% (LO 1, 2, 3, 4, 5)

CGI702 Advanced Modelling

Aim: Building students' advanced knowledge and skills in 3D modelling methods used for animation and real time engines. Students apply industry-standard tools and techniques, develop effective 3D modelling workflows between different 3D modelling packages and experience the process of how to create well-developed models for a variety of industries such as animation, visual effects (VFX) and real time game engines.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project – 3D character modelling, shading and texturing: 45% (LO 1, 2, 3, 4, 5) Project – 3D background modelling shading and texturing 45% (LO 1, 2, 3, 4, 5) Professionalism : 10% (LO 1, 2, 3, 4, 5)
1	Use current industry standard workflow and 3D modelling technologies in animation and/or game production.	*	*	*	*	*	*	*	*	*	*	*	
2	Create, develop and evaluate complex professional 3D modelling work using industry-standard software and custom tools.	*	*	*	*	*	*	*	*	*	*	*	
3	Create, develop and evaluate efficient proxy models for complex layout design for animation and/or game development.	*	*	*	*	*	*	*	*	*	*	*	
4	Develop, evaluate the efficiency of procedural workflow in generating texture maps and shaders for the animation and/or game production pipeline.	*	*	*	*	*	*	*	*	*	*	*	
5	Produce, evaluate the efficiency of complex 3D modelling for real time engines (AR, VR).	*	*	*	*	*	*	*	*	*	*	*	

CGI703 Advanced Animation

Aim: Developing advanced skills and knowledge in producing animation, VFX projects and real time animatics from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project plan : 20% (LO 1) Project – Advanced Animation: 60% (LO 1, 2, 3, 4) Presentation – 10% (LO 1, 2, 3, 4) Professionalism : 10% (LO 1, 2, 3, 4)
1	Plan, manage and implement a production pipeline work for an animation and/or real time game engine to meet the targeted production timeframe.	*	*	*	*	*	*	*	*	*	*	*	
2	Create an animated work for an animation and/or real time game engine using a range of tools techniques and processes most efficient for the production requirement.	*	*	*	*	*	*	*	*	*	*	*	
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of an animation project, including writing and coding custom animation scripts to facilitate an animation and/or real time game development project.	*	*	*	*	*	*	*	*	*	*	*	
4	Utilise advanced skills in realistic character expressions and mechanical/interaction animation.	*	*	*	*	*	*	*	*	*	*	*	

CGI704 Advanced Visual Effects

Aim: Developing advanced skills in creating dynamic effects (FX) and how they are used in a variety of scenarios, developing the practical skills for creating complex and photorealistic visual effects and using them in animation and game projects.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project planning – 10% (LO 1, 2, 3, 4) Project – Visual Effects: 70% (LO 1, 2, 3, 4) Presentation: 10% (LO 1, 2, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Produce realistic and complex simulations using various dynamics tools with selected specialist software and custom scripts.	*	*	*	*	*	*	*	*	*	*	*	
2	Reference and simulate real world object interactions, and the principles of mathematics for visual effects work. Present the findings and outcomes of using different tools and scripts to efficiently produce the visual effects.	*	*	*	*	*	*	*	*	*	*	*	
3	Observe and evaluate different types of fur, hair and muscles and simulate them effectively for crowd simulation work.	*	*	*	*	*	*	*	*	*	*	*	
4	Produce and manage complex dynamic effects to integrate within the production shots and requirements.	*	*	*	*	*	*	*	*	*	*	*	

CGI705 Advanced Lighting and Post-production

Aim: Advancing understanding of the ways that lighting, rendering and compositing are used in animation and visual effects, and developing the practical and technical skills to carry out these processes to industry requirements.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS Project planning: 10% (LO 1, 2, 3, 4) Project – Advanced lighting and compositing: 70% (LO 1, 2, 3, 4) Presentation: 10 % (LO 1, 2, 3, 4) Professionalism: 10% (LO 1, 2, 3, 4)
1	Use advanced rendering technologies to generate CG images which realistically imitate real world materials and/or 3D objects and/or 3D scenes.	*	*	*	*	*	*	*	*	*	*	*	
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for animation.	*	*	*	*	*	*	*	*	*	*	*	
3	Facilitate and design effective custom rendering solutions for animation production.	*	*	*	*	*	*	*	*	*	*	*	
4	Composite complex visual effects shots with 3D rendered sequences to produce multi-layered animated sequences.	*	*	*	*	*	*	*	*	*	*	*	

CGI706 Advanced Real Time Lighting and Shading													
Aim: Developing professional skills and advanced knowledge in producing real time PBR shaders and dynamic simulations from the planning stages, through industry-standard production methods, to client's delivery and online distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Write and code PBR materials and shaders in real time applications.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Explore, apply, design and evaluate a range of complex lighting techniques to create custom visual and emotive effects for game development.	*	*	*	*	*					*	*	Project – Advanced real time lighting and shading: 70% (LO 1, 2, 3, 4)
3	Design procedural and complex shaders for real time applications.	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Render complex photorealistic scenes for game development.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI707 Advanced CGI Technical Development													
Aim: Developing advanced skills and knowledge in programming and scripts used for animation and visual effects production and pipeline.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement maths for visual effects and use python programming language in animation and visual effects.	*	*	*	*	*					*	*	Project – Pipeline development for animation and visual effects: 45% (LO 1, 2, 3)
2	Use advanced python scripting/programming to debug and produce complex animation and visual effects sequences efficiently.	*	*	*	*	*					*	*	Project – Tools development for animation and visual effects 45% (LO 1, 2, 4)
3	Code advanced production tracking and management tools to facilitate storage and rendering pipelines for animation and visual effects production.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)
4	Create custom tools to facilitate complex animation production scenarios, including cloud-based scenes distribution and collaborative pipelines.	*	*	*	*	*					*	*	

CGI708 Advanced Real Time Technical Development													
Aim: Developing advanced production relevant skills and knowledge in programming and scripts used for real time game development, including object-oriented programming (OOP).		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Implement advanced production programming language in real time applications.	*	*	*	*	*					*	*	Project – Pipeline development for gaming and real time engines: 45% (LO 1, 2, 3, 4)
2	Evaluate the effectiveness and debugging of scripting/programming in complex real time scenarios.	*	*	*	*	*					*	*	
3	Code, select and use several different scripting languages to address complex technical issues in gaming and real time applications.	*	*	*	*	*					*	*	
4	Create custom advanced tools and scripts to facilitate complex real time production scenarios.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI709 Advanced Animation Project													
Aim: Developing professional skills and knowledge in producing animation projects from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement an animation production and process to meet the requirements of a client's brief.	*	*	*	*	*	*	*					Project planning: 10% (LO 1, 2, 3, 4)
2	Create an animated short using custom tools techniques and processes in response to a client's brief.	*	*	*	*	*	*	*					Project – Advanced animation: 70% (LO 1, 2, 3, 4)
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex animated short	*	*	*	*	*	*	*					Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*	*	*					Professionalism: 10% (LO 1, 2, 3, 4)

CGI710 Advanced Visual Effects Project													
Aim: Producing complex visual effects sequences from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage and implement a visual effects production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*			*	*			Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and produce a visual effects sequence using custom tools techniques and processes in response to a client's brief.	*	*	*	*	*			*	*			Project – Advanced visual effects: 70% (LO 1, 2, 3, 4)
3	Apply problem solving skill to a range of complex creative and/or technical challenges in the development of a visual effects sequence	*	*	*	*	*			*	*			Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*			*	*			Professionalism: 10% (LO 1, 2, 3, 4)

CGI711 Advanced CGI Technical Development Project													
Aim: Developing professional skills and knowledge in scripting and coding for animation production from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team and to plan, manage and implement an animation production, pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and produce an animated short using custom tools techniques and processes in response to a client's brief within a tight budget and time.	*	*	*	*	*					*	*	Project – Advanced CGI Technical Development: 70% (LO 1, 2, 3, 4)
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex animated short	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

CGI712 Advanced Real Time Technical Development Project													
Aim: Developing advanced skills and knowledge in scripting and coding for real time game development from the planning stages, through production methods and to final client's delivery and distribution.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	SUMMATIVE ASSESSMENTS
1	Work collaboratively within a team to plan, manage, create custom tools and scripts and implement a real time production pipeline and process to meet the requirements of a client's brief.	*	*	*	*	*					*	*	Project planning: 10% (LO 1, 2, 3, 4)
2	Discuss, plan and create a game and/or AR/VR experience by creating range of tools techniques and processes in response to a client's brief within a tight budget and time.	*	*	*	*	*					*	*	Project – Advanced real time: 70% (LO 1, 2, 3, 4)
3	Solve, evaluate and debug a range of complex creative and/or technical challenges in the development of a complex game project or AR/VR experience	*	*	*	*	*					*	*	Presentation: 10 % (LO 1, 2, 3, 4)
4	Discuss, evaluate and analyse their own and other's work regarding its success in relation to the stated artistic and technical goals, including achieving client's needs and requirements.	*	*	*	*	*					*	*	Professionalism: 10% (LO 1, 2, 3, 4)

GCI611 Graduate Diploma CGI Professional Practice													
Aim: Developing existing knowledge of contemporary CGI production environments, industry roles, processes, expectations and issues.		GO 1	GO 2	GO 3	GO 4	GO 5	GO 6	GO 7	GO 8	GO 9	GO 10	GO 11	
1	Investigate and discuss ways that new technologies are used to facilitate and implement the production of animation and computer-generated imagery in a range of industry sectors.		*		*	*							SUMMATIVE ASSESSMENTS
2	Identify production problem solving methods used in the film and gaming industries based on the latest tools and technologies used in the industry.	*	*		*	*							Presentation– investigation: 45% (LO 1, 3, 4)
3	Analyse how an industry production pipeline can be improved for an animated film or real time game animation project.	*	*		*	*							Presentation – pipeline: 45% (LO 2, 3, 5)
4	Investigate, discuss and present the findings regarding the impact of relevant media law, copyright and intellectual property on specific animated film or real time game design and development, for distribution in Aotearoa New Zealand and/or globally.		*		*	*							Professionalism: 10% (LO 1, 2, 3, 4, 5)
5	Create and pitch a business proposal for setting up production workflow scenario within a professional film or gaming production studio (domestic and/or international).		*		*	*		*		*		*	

