



Course information for

Bachelor of 3D Art and Animation

Associate Degree of 3D Art and Animation

Diploma of 3D Art and Animation

Course Number

HE20520 - Bachelor of 3D Art and Animation

HE20519 - Associate Degree of 3D Art and Animation

HE20518 - Diploma of 3D Art and Animation

Locations

Design Centre, Enmore

Go higher

Course Design

The Bachelor of 3D Art & Animation is a three-year professional degree, preparing graduates for careers as artists and animators in a number of visual media professions. This degree is designed to prepare graduates for work as creative content developer for 3D Art and Animation contexts and production environments, meeting international standards for the creation of entertainment products and communications media. Such professions currently include feature filmmaking, game design and development, television, virtual and augmented reality, online content development and advertising.

A Diploma of 3D Art and Animation is available and requires the completion of all eight Level 100 subjects. An Associate Degree of 3D Art and Animation is also available with the completion of eight Level 100 subjects and eight Level 200 subjects.

Course Learning Outcomes

Graduates of the Bachelor of 3D Art and Animation will:

- Have the ability synthesise complex technical knowledge with professional 3D art, design and animation skills; initiate and develop solutions in response to client briefs, in accordance with the agreed production pipeline.
- Research and analyse information and engage in critical debate and discussion to communicate ideas and intentions about design projects to clients and/or peers and work collaboratively for the realisation of 3D Art and Animation projects to meet client deadlines.
- Observe, evaluate and reflect on their own creative and decision-making processes; think critically and respond to feedback to inform future creative work; demonstrate a commitment to professional excellence through self-directed and ongoing professional development; and establish networks and professional relationships.

Graduates of the Associate Degree of 3D Art and Animation will:

- Produce work to a client brief in accordance with the production standards required across the pipeline.
- Communicate confidently, strategically and creatively to clearly convey intentions.
- Initiate and develop creative solutions to animation and pipeline problems.
- Apply and experiment with creative processes for a range of art and animation projects.
- Utilise collaborative methodologies and technologies as part of a creative process.
- Engage in teamwork and identify own strengths and limitations.

Graduates of the Diploma of 3D Art and Animation will:

- Identify support required to achieve production outcomes in accordance with the production standards and pipeline.
- Ability to analyse their own creative and production outputs within a professional framework.
- Ability to analyse and support the creative output of artists, animators and designers from a range of digital disciplines.
- Communicate clearly and confidently to clearly convey project, client requirements.
- Use collaborative methodologies and technologies to contribute to creative and technical processes.
- Contribute effectively to the work of animation project teams, work within defined project constraints, recognising own strengths and limitations.

3D Art and Animation Course Structure

The structure below is the typical study pattern for a full time student. Elective choice and study pattern is determined by the campus. Subjects are worth 5, 10 or 20 credit points (CP).

Year 1- Level 100: Foundation Knowledge and Skills

Semester 1	Complete all subjects
3DART102A	3D Artistry 1 (10CP)
3DCAM101A	Cameras & Lighting (10CP)
3DSST101A	Screen Studies (10CP)
3DVAS101A	Visual Arts 1 (10CP)
Semester 2	Complete all subjects
3DANI101A	Animation 1 (10CP)
3DART103A	3D Artistry 2 (10CP)
3DMOD102A	3D Modelling 1 (10CP)
3DVAS102A	Visual Arts 2 (10CP)

80 credit points required to complete Diploma of 3D Art and Animation

Year 2 - Level 200: Application and Development

Semester 1	Complete all subjects
3DMAT201A	Digital Matte Painting (10CP)
3DMOD201A	3D Modelling 2 (10CP)
3DPRG202A	3D Programming (5CP)
3DRET201A	Texturing & Shading (10CP)
3DRIG202A	3D Rigging (5CP)
Semester 2	Complete 3 Core plus one elective
3DRET202A	Rendering & Lighting (10CP)
3DSTU201A	3D Production Studio 1 (10CP)
3DDIG201A	Digital Compositing 1 (10CP)

Plus one elective selected from the following:

3DANI201A	Animation 2 (10CP)
3DDAT201A	3D Data Capture (10CP)
3DTCH201A	3D Technical Art 1 (10CP)

160 credit points required to complete Associate Degree of 3D Art and Animation

Year 3 - Level 300: SYNTHESIS

Semester 1	Complete 2 core plus one elective
3DPRT301A	3D Portfolio 1 (10CP)
3DSTU302A	3D Production Studio 2 (20CP)

Plus one elective selected from the following:

3DANI301A	3D Animation 1 (10CP)
3DAST301A	3D Asset Creation 1 (10CP)
3DDIG301A	Digital Compositing 2 (10CP)
3DLDV301A	3D Look Development 1 (10CP)
3DTCH301A	3D Technical Art 2 (10CP)

Other TAFE NSW subject at Level 300 (10CP) (Open Elective)

Semester 2	Complete 2 core plus one elective
3DPRT 302A	3D Portfolio 2 (10 CP)
3DSTU303A	3D Production Studio 3 (20CP)

Plus one elective selected from the following:

3DANI302A	3D Animation 2 (10CP)
3DAST302A	3D Asset Creation 2 (10CP)
3DDIG302A	Digital Compositing 3 (10CP)
3DLDV302A	3D Look Development 2 (10CP)
3DTCH302A	3D Technical Art 3 (10CP)

Other TAFE NSW subject at Level 300 (10CP) (Open Elective)

240 credit points required to complete Bachelor of 3D Art and Animation

Overview of subject requirements

The information on the following pages provides an overview and an indicative assessment schedule for each subject in the course. It is provided for information purposes only. The Subject Guide distributed to enrolled students will detail full learning and assessment requirements for each subject.

SUBJECT: 3D Artistry 1

CODE: 3DART102A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

The objective of this subject is to introduce students to the underpinning concepts, skills and principles involved in the study and application of 3D CGI. Students will also experiment with and develop efficient workflows and toolsets. Students will acquire knowledge of work health as safety considerations within 3D production environments.

Indicative assessment schedule

Exam	10%
Presentation	40%
Project	50%

SUBJECT: Cameras and Lighting

CODE: 3DCAM101A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

The objective of this subject is to provide practical experience in the use of real world cameras, lights and on set data collection for application to 3D CGI assets in a visual effects pipeline.

Indicative assessment schedule

Practical demonstration	30%
Journal	30%
Project	40%

SUBJECT: Screen Studies

CODE: 3DSST101A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

In this subject students will gain a broad overview of screen techniques used in film, television and emerging media. Topics within this subject include, narrative and its devices; development and history of film, television and the screen; the industrialisation and commercialisation of storytelling; copyright considerations and intellectual property responsibilities; an exploration of cinematography, screen composition, use of camera and lighting, and editing; and mise-en-scene.

Indicative assessment schedule

Exam	10%
Written task	20%
Presentation	20%
Project	50%

SUBJECT: Visual Arts 1

CODE: 3DVAS101A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

Students will gain knowledge of the applied theory and creation of visual artwork through collaborative participation in a series of lectures and tutorials. Practical workshops support the delivery whereby students can respond to critical feedback of their work.

Indicative assessment schedule

Portfolio	10%
Written task	10%
Journal	40%
Portfolio	40%

SUBJECT: Animation 1

CODE: 3DANI101A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

The objective of this subject is to expose students to the core body of knowledge and fundamental skill sets associated with the craft of animation. Students will apply fundamental principles of a range of animation forms, building foundation skill sets that are applicable to both 2D and 3D animation.

Indicative assessment schedule

Journal	15%
Portfolio	20%
Journal	15%
Portfolio	20%
Group Project	30%

3D Art and Animation

SUBJECT: 3D Artistry 2

CODE: 3DART103A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw

PREREQUISITES: 3DART102A & 3DCAM101A

Subject overview

The objective of this subject is to provide opportunities to practice and improve upon existing CGI skillsets whilst developing inter-disciplinary knowledge and the ability to successfully utilise complex 3D CGI production pipelines.

Indicative assessment schedule

Journal	20%
Presentation	20%
Journal	20%
Project	40%

SUBJECT: 3D Modelling 1

CODE: 3DMOD102A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DART102A

Subject overview

This subject will equip students with basic knowledge of modelling toolsets and will develop knowledge of modelling techniques and topology. Students will also be able to interpret 2D designs and relate those to a three-dimensional structure.

Indicative assessment schedule

Journal	45%
Project	25%
Practical demonstration	30%

SUBJECT: Visual Arts 2

CODE: 3DVAS102A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DVAS101A

Subject overview

Students will gain further knowledge of the applied theory and creation of visual artwork through collaborative participation in a series of lectures and tutorials. Practical workshops support the delivery of theoretical learning outcomes, providing students with opportunities to respond to critical feedback of their work.

Indicative assessment schedule

Journal	20%
Written task	10%
Journal	20%
Project	50%

SUBJECT: Digital Matte Painting

CODE: 3DMAT201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw

PREREQUISITES: 3DART102A, 3DART103A, 3DVAS101A & 3DVAS102A

Subject overview

Students will acquire core skills required by Digital Matte Painters working in 2D and 3D CGI contexts, providing foundation for further development in compositing and environment art.

Indicative assessment schedule

Exam	20%
Journal	40%
Project	40%

SUBJECT: 3D Modelling 2

CODE: 3DMOD201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DMOD102A

Subject overview

The objectives of this subject are to equip students with the ability to analyse an object's form, and identify and create core shapes underlying conceptual designs. Students will research anatomy and bio-mechanics and their relationship to a model's final sculpt, developing a range of sophisticated modelling and sculpting skill sets.

Indicative assessment schedule

Project	30%
Project	25%
Journal	45%

SUBJECT: 3D Programming

CODE: 3DPRG202A **CREDIT POINTS:** 5 **CONTACT HRS:** 2.5 hpw **PREREQUISITES:** Nil

Subject overview

Through participation in lectures, practical tutorials and individual research, students will acquire core knowledge of syntax, variables and data types, programming constructs and the development of basic user interfaces.

Indicative assessment schedule

Written task	40%
Project	60%

3D Art and Animation

SUBJECT: Texturing & Shading

CODE: 3DRET201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw

PREREQUISITES: 3DART103A & 3DCAM101A

Subject overview

Through participation in lectures, practical tutorials and conducting individual research, students will gain knowledge and skills in generating material workflows for simulated 3D surfaces.

Indicative assessment schedule

Practical demonstration	20%
Journal	40%
Project	40%

SUBJECT: 3D Rigging

CODE: 3DRIG202A **CREDIT POINTS:** 5 **CONTACT HRS:** 2.5 hpw **PREREQUISITES:** 3DART103A

Subject overview

Through participation in lectures, practical tutorials and individual research students will acquire valuable insight and core abilities in the application of workflows and methodologies fundamental to using sophisticated rigging systems in 3D animation productions.

Indicative assessment schedule

Written task	40%
Project	60%

SUBJECT: Rendering & Lighting

CODE: 3DRET202A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw

PREREQUISITES: 3DART103A, 3DCAM101A & 3DRET201A

Subject overview

Through participation in lectures, practical tutorials and individual research, students will gain a depth of knowledge and skill in rendering.

Indicative assessment schedule

Exam	20%
Journal	30%
Project	50%

SUBJECT: 3D Production Studio 1

CODE: 3DSTU201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

The objective of this subject is to develop professional workflows that allow students to work in a team environment. Students will utilise all the skills they have learnt throughout the course to date and will determine the importance of revision and iteration as the key ingredients to delivering high quality work.

Indicative assessment schedule

Presentation (Project Schedule)	10%
Presentation (Client Review)	30%
Project	60%

SUBJECT: Digital Compositing 1

CODE: 3DDIG201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

Through participation in lectures, practical tutorials and individual research, students will gain a comprehensive range of core compositing skills for use with digital imagery and visual effects pipelines.

Indicative assessment schedule

Exam	15%
Practical demonstration	25%
Project	60%

SUBJECT: Animation 2

CODE: 3DANI201A **CREDIT POINTS:** 10 **CONTACT HRS:** 3 hpw **PREREQUISITES:** 3DANI101A

Subject overview

This subject will expose students to a range of animation principles and techniques, building a broad base of skill sets applicable to 2D and 3D animation.

Indicative assessment schedule

Journal	15%
Portfolio	20%
Journal	15%
Portfolio	20%
Group Project	30%

3D Art and Animation

SUBJECT: 3D Data Capture

CODE: 3DDAT201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DCAM101A

Subject overview

Students will explore a range of data capture facilities and techniques used in real world sets.

They will develop knowledge of real world cameras, lights and data capture workflows for application within a visual effects (VFX) pipeline.

Indicative assessment schedule

Practical demonstration	15%
Journal	25%
Project	60%

SUBJECT: 3D Technical Art 1

CODE: 3DTCH201A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DPRG202A & 3DRIG202A

Subject overview

The objectives of this subject are to introduce students to the skills required by industry for entry-level technical assistants.

Fundamental problem solving skills required to construct rigs and develop strategies for simplifying procedures used within 3D CGI pipelines are established, contributing broadly to a student's ability to research and evaluate technical issues.

Indicative assessment schedule

Exam	15%
Journal	25%
Project	60%

SUBJECT: 3D Portfolio 1

CODE: 3DPRT301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** Nil

Subject overview

This subject will provide students with the knowledge and skills required for creating and preparing pre-production material. Students will develop the ability to pitch personal concepts to peers and colleagues, learning how to accept and utilise criticism and adapt their work based on feedback.

Indicative assessment schedule

Report	20%
Presentation	25%
Presentation	25%
Project	30%

SUBJECT: 3D Production Studio 2

CODE: 3DSTU302A **CREDIT POINTS:** 20 **CONTACT HRS:** 10 hpw **PREREQUISITES:** 3DSTU201A

Subject overview

The objective of this subject is to expose students to a 3D CGI studio environment, provide them with guidance as to any specialised skill sets they should be developing and build confidence for applying for jobs after graduation.

Indicative assessment schedule

Interview	5%
Presentation	5%
Presentation	5%
Interview	5%
Project	80%

SUBJECT: 3D Animation 1

CODE: 3DANI301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DANI201A

Subject overview

This subject will expose students to a range of applications for animation principles, building a broad base of skill sets applicable to 3D animation techniques.

Indicative assessment schedule

Journal	15%
Portfolio	20%
Journal	15%
Portfolio	20%
Group project	30%

3D Art and Animation

SUBJECT: 3D Asset Creation 1

CODE: 3DAST301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DMOD201A

Subject overview

The aim of this subject is to develop professional workflows for asset creation from concept through to a final textured asset that is ready for rigging. Students will explore advanced workflows for sculpting as well as various re-topology, UV mapping and texturing pipelines. They will develop and apply skills used for creating characters and creatures that are informed by a study of anatomy, basic bio-mechanics, rigging concepts and surface flow.

Indicative assessment schedule

Presentation	20%
Journal	40%
Project	40%

SUBJECT: Digital Compositing 2

CODE: 3DDIG301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DDIG201A & 3DMAT201A

Subject overview

The objective of this subject is to develop a student's ability to critically assess and resolve a variety of compositing scenarios in production and post-production. Concepts of lighting, cameras and colour, contextualised within a 3D compositing environment, will be used to address a variety of workflow complexities inherent to visual effects (VFX) productions.

Indicative assessment schedule

Practical demonstration	15%
Journal	25%
Project	60%

SUBJECT: 3D Look Development 1

CODE: 3DLDV301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DRET201A & 3DRET202A

Subject overview

This subject allows students to develop professional workflows for look development and create photorealistic objects using CG techniques. Advanced methods for generating CG lighting, rendering, texturing and material solutions are explored through the analysis of real world objects and the application of digital skills.

Indicative assessment schedule

Exam (open book)	30%
Report	30%
Programming project	40%

SUBJECT: 3D Technical Art 2

CODE: 3DTCH301A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DTCH201A

Subject overview

The objective of this subject is to further develop a student's research and technical problem solving skills. This will be achieved through the development and construction of advanced rigging solutions and generation of strategies for automating and customising procedures used within 3D CGI pipelines.

Indicative assessment schedule

Practical demonstration	15%
Journal	25%
Project	60%

SUBJECT: 3D Portfolio 2

CODE: 3DPRT 302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DPRT301A

Subject overview

Students will acquire the skills and knowledge required to produce finalised material based upon an animatic and production schedule. They will develop an abilities required to adapt production material based upon the constructive criticism from peers and colleagues, and how to prioritise tasks within the confinement of set deadlines.

Indicative assessment schedule

Presentation	15%
Written task	10%
Presentation	15%
Project	60%

3D Art and Animation

SUBJECT: 3D Production Studio 3

CODE: 3DSTU303A **CREDIT POINTS:** 20 **CONTACT HRS:** 10 hpw **PREREQUISITES:** 3DSTU302A

Subject overview

This subject is designed to provide an alternative to the internship experience, by placing students in an institutionally based 3D studio practice firm. This is an operational business, which provides students with the opportunity to use the knowledge and skills they have gained in the classroom on real-world clients and briefs, while operating within a supported learning environment.

Indicative assessment schedule

Client project proposal	20%
Process diary	30%
Final group project presentation to client	20%
Self and peer assessment	30%

SUBJECT: 3D Animation 2

CODE: 3DANI302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DANI301A

Subject overview

This subject will cover a range of topics, the aim being to expose students to a range of applications of animation principles, building a broad base of skill sets applicable to 3D animation techniques and prepare them for entry level industry positions in 3D animation.

Indicative assessment schedule

Journal	15%
Portfolio	20%
Journal	15%
Portfolio	20%
Group project	30%

SUBJECT: 3D Asset Creation 2

CODE: 3DAST302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DAST301A

Subject overview

This subject delivers an overview of art history and methodologies used for understanding the context, form and sociological significance of artistic work from different periods.

Indicative assessment schedule

Presentation	30%
Project	30%
Project	40%

SUBJECT: Digital Compositing 3

CODE: 3DDIG302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DDIG301A

Subject overview

The objective of this subject to prepare students for the various tasks the role of a compositing artist in production and post-production demands. Upon completion students will be equipped with the entry level knowledge and critical thinking abilities required for resolving compositing challenges relevant to current industry visual effects (VFX) pipelines.

Indicative assessment schedule

Practical demonstration	15%
Journal	25%
Project	60%

SUBJECT: 3D Look Development 2

CODE: 3DLDV302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DLDV301A & 3DDIG201A

Subject overview

The objective of this subject is to further develop and actualise professional workflows for look development that allow students to create photorealistic objects in CG. Advanced methods for generating lighting, rendering, texturing and material solutions are explored via developing and applying skills necessary for integrating CG and live action plates.

Indicative assessment schedule

Exam (practical)	10%
Journal	30%
Project	60%

SUBJECT: 3D Technical Art 3

CODE: 3DTCH302A **CREDIT POINTS:** 10 **CONTACT HRS:** 5 hpw **PREREQUISITES:** 3DTCH301A

Subject overview

The objective of this subject is to further apply and expand upon problem solving skills and the ability to actualise innovative solutions to a variety of complex issues. Specifically, students will utilise their critical thinking abilities to research and plan strategies for solving technical issues within 3D CGI pipelines.

Indicative assessment schedule

Presentation	15%
Journal	25%
Project	60%