



Creative
Technology
Educators

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN

SUBJECT LIST

3D DESIGN

SUBJECT LIST

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BACHELOR OF INTERACTIVE MEDIA

3D DESIGN



2 YEAR – ACCELERATED DEGREE

YEAR 1

(start dates February, May, or September)

TRIMESTER 1 – SUBJECTS

Digital Storytelling (MED1008)

In this subject, students will learn how to use storytelling elements such as plot and character to make engaging films and games. Students will learn the steps of developing an idea to a point that it can be produced. These steps include development of logline, treatment, script, storyboard and animatic. Students will also discuss interactive digital storytelling and the opportunities different types of media can offer.

Creative Drawing (DES1020)

In this subject, students will be introduced to the basics of drawing. They will learn the basic fundamentals of all art creation such as: line, form, colour, texture, value and shape. Students will learn different creative drawing styles and apply them using various techniques. Students will also be challenged to venture out of their comfort zones and broaden their understanding of styles and mediums, as well as develop their knowledge of theory and research on successful creative drawing.

TRIMESTER 2 – SUBJECTS

Screen Language (FIL1010)

In this subject, students analyse and critique digital media using a theoretical framework of 'Entertainment'. Students also learn how to differentiate genre and forms of narrative communicative meaning. To ensure students are conversant in screen language on completion of the subject, they learn and critique narrative structure and visual style in depth. Elements of storytelling (e.g. theme and motif, design elements, mise en scene) are incorporated into the studies as well visual coding within digital media.

Digital Images (DES1013)

In this subject, students will learn the basic skills and knowledge needed to create digital graphics. They will learn to use industry-standard pixel, vector and layout-based tools, and also learn how these tools are integrated into wider digital practice. Students apply theory and evidence-based practice when creating and enhancing images.

Shooting and Editing (DES1050)

In this subject, students will be introduced to shooting and editing. The key focus of the subject is the fusing of three elements: photography, cinematography and editing. In engaging with best practice and widely used industry techniques, 'Shooting & Editing' challenges students to take a quick glimpse of screen production. A key learning outcome is that students produce their own material, photographs and videos, and edit them for multiple modern screen media platforms.

Animation (ANI1016)

In this subject, students will learn the processes used in animation. They will explore the basic concepts and crafts of character design such as character animation, timing, movement, composition and background art. These concepts will be drawn from traditional methodologies and will be applied using stop motion. Students will develop critical, conceptual and practical skills appropriate to creating animation.

Game Design (MED1022)

In this subject, students learn the principles of game design and how to apply these effectively to their own games. Students critically review case studies of traditional and electronic games to modern games and contemporary industry standards. The outcome will be the ability for the student to design engaging and effective games and game mechanics.

Introduction to 3D (ANI1006)

Students will be taught the basic underlying principles required to create their first 3D models, characters and animations. Students will learn using industry standard software: 3D interface navigation, basic 3D tools and techniques, character design, modeling tools, texturing, lighting, animation and rendering methods.

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN



2 YEAR – ACCELERATED DEGREE

TRIMESTER 3 – SUBJECTS

Digital Pathways (MED1001)

In this subject, students will learn the pathways art has taken, in which it has been influenced by remarkable individuals, culture, philosophy and historical events, to get to its contemporary forms. Students will develop an informed and knowledgeable vocabulary which will give them the ability to critique, discuss and review a wide range of visual culture and contemporary art practices. These tools and insights will enable students to better understand, and use contemporary aesthetics in digital media.

Digital Audio Design (FIL1020)

In this subject, students will be introduced to the creative and technical aspects of sound in digital media. Students will gain experience in recording sound, processing sound, and implementing it in a range of contexts. Students will learn to apply sound design principles which enhance and compliment communication, meaning and emotion in their works.

YEAR 2

(start dates February, May, or September)

TRIMESTER 1 – SUBJECTS

Entertainment and Media (MED1060)

In this subject, students will examine the role of entertainment and media in interactive media. Through a critical examination of the social and psychological reasons behind why we seek entertainment, students will identify the key characteristics of entertainment and the history and evolution of different forms of entertainment. A further area explored are the trends and issues that are shaping the global entertainment market, the role of producers in the commercialisation of the entertainment industry, and the impact upon contemporary audiences.

Design Principles (DES1014)

In this subject students learn about the fundamental design elements, such as colour, tone, shape, rhythm and texture, and how to apply these across a range of contexts in order to draw the eye and communicate concepts. Students will learn how to rationalise conceptual designs, be involved in constructive criticism activities in a professional and productive manner, and develop their own voice through exploration of design knowledge and theory.

3D Animation (ANI1031)

In this subject, students will expand on their skills from Introduction to 3D. Students will develop a primary focus on animation and secondary focus on rigging. Students will learn basic and intermediate animation theories and techniques. They will also apply the 12 principles of animation.

3D Modelling ANI1027

In this subject, students will learn modelling and sculpting techniques to create organic and inorganic 3D models. They will also work with advanced 3D techniques and texturing. An important component of the course is learning about industry standard workflows and professional model presentation. Specific techniques that will be examined include: Z-Brush, Advanced 3D techniques, Industry standard workflows, Organic and inorganic modelling, Texturing, Model presentation.

Elective 1

Students may choose an elective from the approved elective subject list.

Advanced 3D Animation (ANI3032)

In this subject, students will learn in depth principles of performance animation. Students will learn to breathe life into their characters through the use of both age old and cutting edge animation techniques and will develop a strong understanding of emotion for acting. A primary focus will be on facial and full body performance animation. The subject will draw on a range of theoretical and research-based scholarship to explore cutting edge techniques and solutions in Advanced 3D Animation.

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN

2 YEAR – ACCELERATED DEGREE



TRIMESTER 2 – SUBJECTS

Decoding Media (MED3011)

In this subject, students will learn how to assess and critique a range of mass visual media, including movies, TV, games and the internet. Students learn how to source, interpret and apply qualitative and quantitative research methods. Students will critically understand the impact of politics, society and culture in an interactive media environment. A range of text types and media sources are used to decode media.

Elective 2 & 3

Students may choose an elective(s) from the approved elective subject list.

The Forge 1 (PRO1000)

Forge 1 is the first part of a subject that runs across 2 terms where students will learn to operate in a professional team under workplace-like pressure, applying their knowledge, skills and aptitudes to complete a project to contemporary industry standards. In Forge 1 the focus will be on researching client needs and preparing a range of pre-production material required for the development of an industry project. Planning and project management skills will be sharpened, and pre-visualization of narrative content will be developed to deliver comprehensive planning materials for a substantial production that will be completed in The Forge 2 in the final term of study. A key aim of the subject is to develop the student's speed and efficiency in a collaborative work environment. The process of brief, plan, execute, present and reflect will help students become accustomed to project-based work. Students will be mentored, critiqued and assessed during this process, with industry experts providing feedback on project outcomes.

TRIMESTER 3 – SUBJECTS

Elective 4

Students may choose an elective from the approved elective subject list.

The Launchpad (PRO1010)

This subject helps students search for and prepare themselves for employment. It provides guidelines for how to prepare effective resources for enhancing their prospects in finding employment. Students will be introduced to interview techniques and personal branding through the development of a professional internet and social media presence. They will also learn how to produce effective presentations of their high-quality work, targeted at employers.

The Forge 2 (PRO1001)

The Forge 2 is part of a subject that runs across 2 terms, where students will learn to operate in a professional team, under workplace-like pressure, applying their knowledge, skills and attitudes to complete a project to contemporary industry standards. During The Forge, students will focus on developing an industry project, based on the pre-production elements that were completed during The Forge 1 subject.

The production, to be completed in teams, will be developed in a double subject and presented to industry representatives at the completion of the project.

A key aim of the subject is to develop the student's speed and efficiency in a collaborative work environment. The process of brief, plan, execute, present and reflect will help students become accustomed to project-based work. The subject also challenges students to innovate, to learn from both success and failure, to "know themselves", and to learn how to work with others. Students will be mentored, critiqued and assessed during this process, with industry experts providing feedback on project outcomes.

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN

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T2	Screen Language FIL1010	Digital Images DES1013	Game Design MED1022	Introduction to 3D ANI1006
EXIT: DIPLOMA OF INTERACTIVE MEDIA				
T3	Digital Pathways MED1001	Digital Audio Design FIL1020	3D Animation ANI1031	3D Modelling ANI1027
YEAR 2				
T1	Entertainment and Media MED1060	Design Principles DES1014	Elective 1	Advanced 3D Animation ANI3032
EXIT: ASSOCIATE DEGREE IN INTERACTIVE MEDIA*				
T2	Decoding Media MED3011	Elective 2	Elective 3	The Forge 1 PRO1000
T3	Elective 4	The Launchpad PRO1010	The Forge 2 PRO1001	The Forge 2 PRO1001
EXIT: BACHELOR OF INTERACTIVE MEDIA*				

* Students studying this qualification do so with a specialist focus on 3D DESIGN

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN



3 YEAR – STANDARD DEGREE

YEAR 1

(start dates February, May, or September)

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3D DESIGN

3 YEAR – STANDARD DEGREE



YEAR 3

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TRIMESTER 3 – SUBJECTS

The Forge 2 (PRO1001)

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3D DESIGN



3 YEAR – STANDARD DEGREE

YEAR 1			
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T2	Animation ANI1016	Screen Language FIL1010	Digital Images DES1013
T3	Game Design MED1022	Introduction to 3D ANI1006	
EXIT: DIPLOMA OF INTERACTIVE MEDIA			
YEAR 2			
T1	Digital Pathways MED1001	Digital Audio Design FIL1020	3D Animation ANI1031
T2	3D Modelling ANI1027	Entertainment and Media MED1060	Design Principles DES1014
T3	Elective 1	Advanced 3D Animation ANI3032	
EXIT: ASSOCIATE DEGREE IN INTERACTIVE MEDIA*			
YEAR 3			
T1	Decoding Media MED3011	Elective 2	Elective 3
T2	Elective 4	The Launchpad PRO1010	The Forge 1 PRO1000
T3	The Forge 2 PRO1001	The Forge 2 PRO1001	
EXIT: BACHELOR OF INTERACTIVE MEDIA*			

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BACHELOR OF INTERACTIVE MEDIA

3D DESIGN



ELECTIVES

Electives are subject to availability and certain electives have prerequisites.

FILM RELATED

Motion Graphics ANI1050

In this subject, students learn the skills required to create motion graphics. Students will learn how to deconstruct logos, build 2D characters, and prepare them for animation in Adobe After Effects and Cinema 4D. They will be taught how to work in 2D with a variety of files, and make an animation that serves to entertain and inform.

Screen Production FIL1034

In this subject, students learn about digital screen production skills informed by industry practice. Including skills in direction, editing, production, lighting and sound. Students will critically review and analyse a range of techniques in screen production, arrive at solutions through evidence-based research, and further their technical skills in screen production.

Advanced Screen Production FIL3036

In this subject, students examine screen production, through a series of techniques and tools, students work on producing a high quality film. Students approach the subject through the lens of screen editing and using common academic framework, theories and research to develop versatility and skill in their production repertoire. The subject is highly intensive and encourages team-work, time management and project management skills.

Cinematography FIL1019

In this subject, students will learn how to use the technical and creative aspects of Cinematography to help create the director's vision. They will learn how composition and lighting are used to communicate both fact and emotion. They will also learn, through hands-on experience, how to solve onset gripping and lighting problems and the importance of communication within a production team. Students will also study cinema masters and best practice and apply what they see to their own work.

Visual Effects (VFX) FIL1060

In this subject, students learn the basic skills required to create visual effects in industry standard software. Students will learn how to composite multiple pieces of footage together and add visual effects to live action shots. They will learn skills including Multipass CGI Compositing, Colour Grading/Correction, Rotoscoping, Tracking, Keying, and Merge Operations to create a complete shot. Scholarly evidence and research findings are drawn upon to support students' knowledge of the discipline.

ANIMATION RELATED

2D Animation ANI1017

In this subject, students are introduced to a range of introductory skills for creating both basic and sophisticated animations. Students will learn how to develop and effectively use timeline based animation. Students will also learn the use of framebyframe animation, keyframing, importing and exporting images, drawing inside the development software, point based animation, tweening, animation on paths, effective walk cycles, nesting animations and the use of sound. Students will expand their range of drawing skills and also enhance their ability to create considered, well-designed animations.

Advanced 2D Animation ANI1037

Students will learn how to plan, animate and composite a professional level 2D Animation. Students will also learn the importance of sound design within their productions. Advanced 2D Animation continues on from 2D Animation. Students will bring their storyboards from the previous semester to then refine and use to build a final animation production.

Animation Production ANI1044

This subject aims to integrate traditional and digital animation production techniques, to produce an advanced, professionally finished animated outcome. Students will identify and apply industry best practice to inform project development and complete their project. They will also develop documentation needed for publishing and distribution of their animated film.

DRAWING RELATED

Digital Illustration DES1021

In this subject, students will learn how to use Photoshop to create digital paintings. They will learn how to use general painting theory in a digital environment. Students will learn efficient processes to create effective digital images.

BACHELOR OF INTERACTIVE MEDIA

3D DESIGN



ELECTIVES

Electives are subject to availability and certain electives have prerequisites.

GAME RELATED

Game Assets ANI3056

In this subject, students have the opportunity to expand the skills they developed from Introduction to 3D with the programs of Maya and Texturing from Photoshop and combining them together. The subject is project based with a strong focus on low poly modelling for games. The major roles in the 3D production pipeline are covered through concept art, design, modelling, UV unwrapping, texturing, exporting and importing into a game engine. Studying this subject gives students a deeper understanding and will primarily be focused on the inner workings of game props and asset building that contributes to the process of creating game levels within a game engine.

2D Interactivity INT1028

In this subject, students learn the fundamentals of programming by making a game. Throughout the subject students must utilise problem solving, programming logic and calculations to create fun and exciting interactive projects. A range of theories and research findings on 2D interactivity are included to ensure students gain a solid grounding in important models and tools needed to address common design challenges.

Game Development INT1029

This subject introduces students to using an industry standard 3D game engine. Students will use this software for developing future games and major projects. The subject involves learning object oriented programming to design and develop interactive games. Upon successful completion of this subject, students will be able to operate a game engine proficiently to develop simple 3D games, become familiar with programming fundamentals and most importantly develop their problem solving skills.

INDUSTRY PREPARATION

Professional Internship Program SPC3038

AIT's Professional Internship Program (PIP) aligns students with professional industry organisations where they will work to develop relevant skills oriented to their chosen Careers.

The program aims to enhance the contextual capabilities, skills and knowledge students have developed throughout their course. It will provide an opportunity for students to apply what they know, be mentored, receive feedback and seek opportunities for development in a real-world setting, as well as be exposed to emerging trends and technology that impact their industry.

This program can only be undertaken in the final term of the associated qualification. Prior to commencement, AIT will determine a suitable placement company based on the student's individual needs, to ensure their supervision, safety and wellbeing are adequate.