ANIMATION/VFX - COLLEGE/UNIVERSITY

AXIS STUDIOS:
EDUCATION OUTREACH BOOKLET

2024

AXIS STUDIOS

MARVEL SNAP - Marvel

ANIMATION/VFX – COLLEGE/UNIVERSITY

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AXIS
STUDIOS

PURPOSE:

TO GIVE STUDENTS A GREATER UNDERSTANDING & AWARENESS OF THE ANIMATION & VFX INDUSTRY FROM AXIS STUDIOS' PERSPECTIVE.

| ART & DMP | EDITORIAL | CHARACTERS | ENVIRONMENTS | LAYOUT & PREVIS | RIGGING & CFX | ANIMATION | FX | LRC | PIPELINE + R&D | PRODUCTION | STUDIO VITAL ROLES |

AXIS STUDIOS

TARGET AUDIENCE:

STUDENTS CURRENTLY STUDYING IN FURTHER & HIGHER EDUCATION, AS WELL AS RECENT GRADUATES.

| ART & DMP | EDITORIAL | CHARACTERS | ENVIRONMENTS | LAYOUT & PREVIS | RIGGING & CFX | ANIMATION | FX | LRC | PIPELINE + R&D | PRODUCTION | STUDIO VITAL ROLES |

AXIS STUDIOS

INTRODUCTION

WHO ARE AXIS STUDIOS

AXIS STUDIOS is a multi-award-winning Animation & VFX studio. We have established a renowned global reputation for crafting bespoke and innovative entertainment experiences across Film, Television, Games, and Theme Parks. We continue to build upon our proven track record of producing captivating narratives in the realms of Animated entertainment and VFX. Our aim is to pioneer and deliver cutting-edge, top-tier content that captivates audiences worldwide.

Our studios were founded and continue to be led by creative minds, and we wholeheartedly embrace the enchantment of creativity. Irrespective of the project at hand, we remain steadfast in our commitment to the founders' original vision: crafting engaging narratives in animated entertainment and VFX, while uniting artists who are passionate about art, technology, filmmaking, and animation. We take pride in our dedication to diversity and in our unwavering enthusiasm for producing exquisite, innovative, and distinctive work.

Visit www.axisstudiosgroup.com for more information.

HALO INFINITE - Microsoft

CONTENTS PAGE

AXIS STUDIOS

CHAPTER 1:

INTRODUCTION TO INDUSTRY

Clash Royale: Card Evolution Trailer - Supercell

THE ANIMATION & VFX INDUSTRY

INTRODUCTION

The Animation and VFX industry is a dynamic and exciting field that constantly pushes creative boundaries and pioneers new ideas. Both Animation and VFX are mediums used in film, TV, gaming, advertising, and immersive experiences worldwide. In recent years, there have been significant growth and technological advancements in Animation and VFX, thanks to powerful computer software and hardware. This has made the industry more accessible to artists and studios of all sizes, leading to increased opportunities and competition.

Love, Death & Robots: Mason's Rats - Blur/Netflix

FOUR PILLARS OF ANIMATION PRODUCTION
Studio Operations
Production Management
Art/CG
Technology

Four Pillars of Animation Production,
not listed in any particular order.

THE ANIMATION & VFX INDUSTRY

FOUR PILLARS OF ANIMATION PRODUCTION

For the purposes of this booklet, we have divided animation production into four pillars, to help students and graduates think about where their skills are best suited. The four branches are; Studio Operations, Production Management, Art /CG and Technology. Each has its own focus and responsibilities and is vital in completing our projects.

IMPORTANT TAKEAWAYS FOR STUDENTS & GRADUATES:

- There is a thriving Animation & VFX industry, locally and internationally

- There are various roles with their own skills & expectations

- Students should focus on their portfolios / showreels to present their talent

CAREER PATHWAYS

FINDING YOUR WAY

Starting a career in the Animation and VFX industry can be quite confusing, and it's seldom a straightforward journey to your desired profession. At times, it involves acquainting yourself with the various choices and roles existing within a studio and industry. Choosing your career is not a fix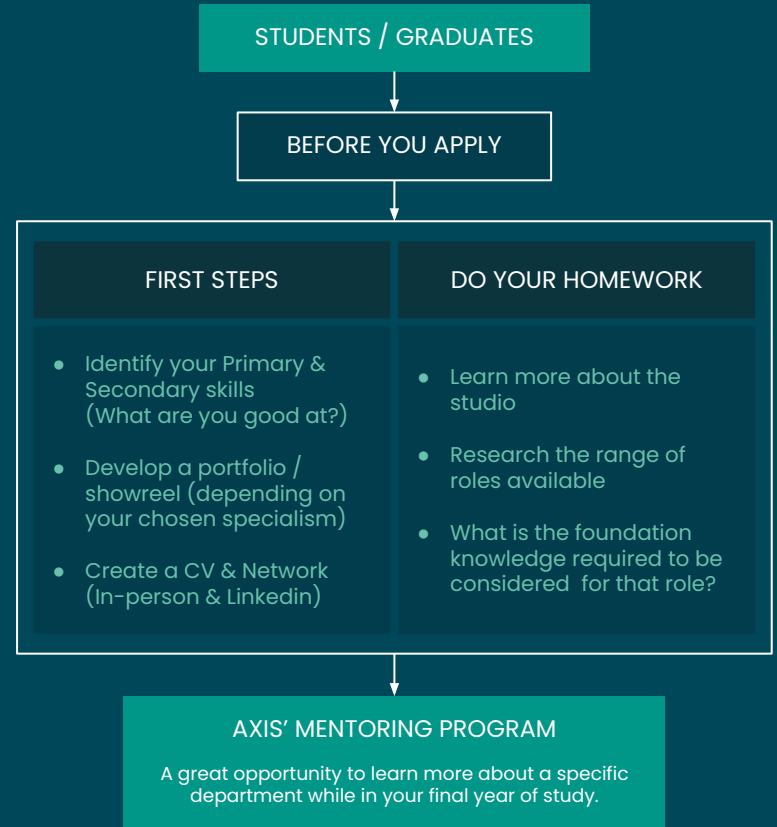ed path that locks an individual to a specific Department. Axis Studios is flexible to change. While many members of our studio staff have chosen to focus their careers within a specific department, this does not mean that they are incapable of changing roles or department. Once you are in a studio, it's considerably easier to change from one role to another, once you've grown more familiar with the needs and responsibilities of different departments.

CONSIDERATIONS:

- Attend festivals and events to get portfolio and career advice.

- Apply for the Mentoring Program (see chapter 4).

- Consider alternative roles (see page 85).

STUDENTS / GRADUATES

↓

BEFORE YOU APPLY

↓

FIRST STEPS	DO YOUR HOMEWORK
• Identify your Primary & Secondary skills (What are you good at?)	• Learn more about the studio
• Develop a portfolio / showreel (depending on your chosen specialism)	• Research the range of roles available
• Create a CV & Network (In-person & Linkedin)	• What is the foundation knowledge required to be considered for that role?

↓

AXIS' MENTORING PROGRAM

A great opportunity to learn more about a specific department while in your final year of study.

STUDIO LEVELS – FLOWCHART

FROM JUNIOR ARTIST AND BEYOND...

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        ┌─────────────────────────┐
        │   HEAD OF DEPT (HOD)     │
        └─────────────────────────┘
                    ▲
        ┌─────────────────────────┐
        │       SUPERVISOR        │
        └─────────────────────────┘
                    ▲
┌──────────────┐  ┌──────────────┐  ┌──────────┐
│  TECHNICAL   │  │ SENIOR (SNR) │  │   LEAD   │
│  DIRECTOR    │──│              │──│          │
│    (TD)      │  └──────────────┘  └──────────┘
└──────────────┘        ▲
        ┌─────────────────────────┐
        │      MIDDLE (MID)       │
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        │      JUNIOR (JNR)       │
        └─────────────────────────┘
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        │  ENTRY LEVEL POSITIONS  │
        └─────────────────────────┘
```

Studio roles are split into different levels based on the level of experience and responsibility. Career entry and progression is dependent on an individual's experience, knowledge and work ethos, particularly after MID. Each level will have its own duties, expectations and quality standards, which is a combination of years of experience and skill. While both entry-level and junior positions are early-career roles, entry-level positions typically require little to no prior experience, while junior positions may require some level of experience or expertise beyond the basics. Junior candidates can come directly from College, University, Axis' Mentoring Program or a direct application.

While both entry-level and junior positions are early-career roles, entry-level positions typically require little to no prior experience, while junior positions may require some level of experience or expertise beyond the basics. We recommend anyone applying for Junior positions should also be open to applying for Entry positions .
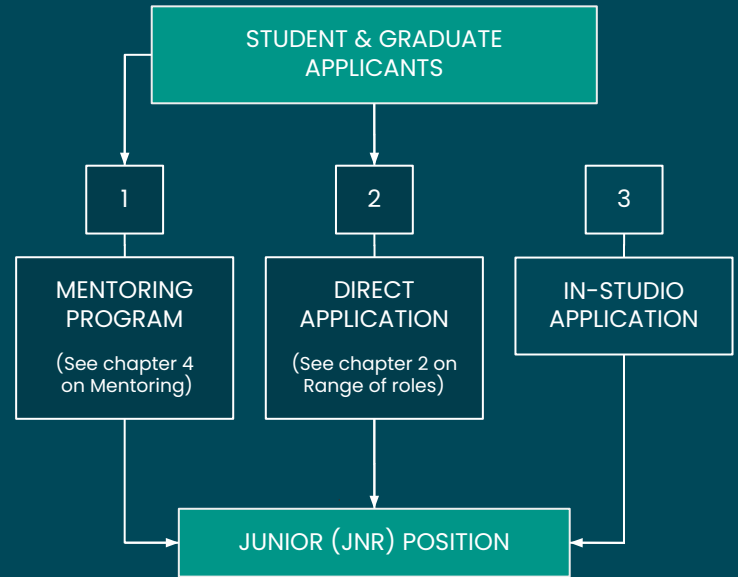
*Please note: Flowchart may differ by department and/or studio.
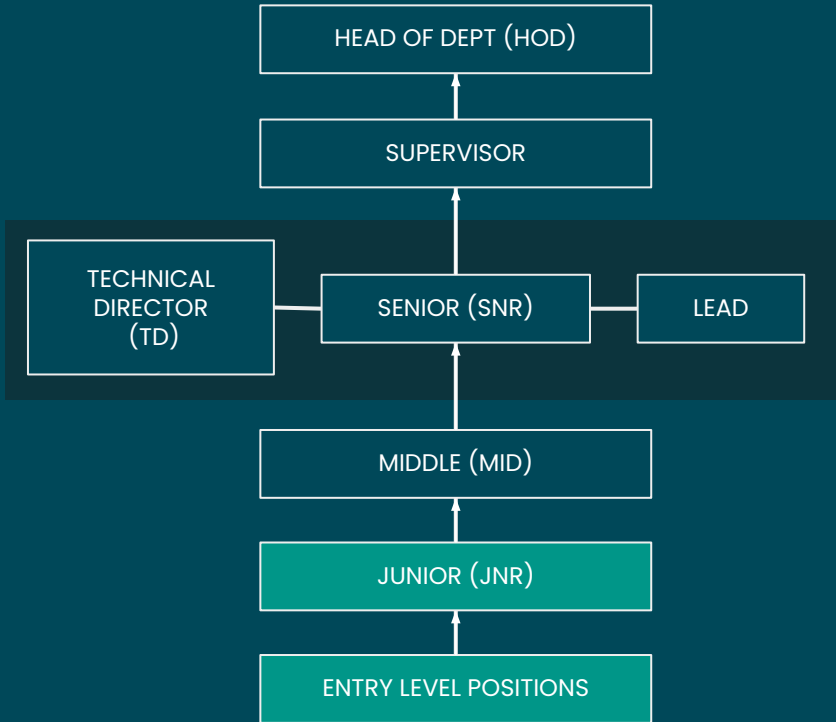
WHAT IS A JUNIOR?

INTRODUCTION

A Junior (JNR) position refers to an early-career CG role within the Animation & VFX industry. It is typically a base-level position [please see page 11 - flowchart] that offers individuals the opportunity to gain practical experience, learn new skills, and grow professionally, whilst working directly on a project/production i.e. you're doing the role, but with more simplified expectations/tasks. Some Junior applicants might have gained some industry experience before applying However, this is not indicative of the position. We also welcome in-studio applicants, for those looking for a career/departmental change.

```
                    STUDENT & GRADUATE
                        APPLICANTS

        1                   2                   3

    MENTORING           DIRECT            IN-STUDIO
    PROGRAM           APPLICATION         APPLICATION

  (See chapter 4    (See chapter 2 on
   on Mentoring)      Range of roles)

                  JUNIOR (JNR) POSITION
```

*The AXIS MENTORING PROGRAM presents an opportunity which can lead to an entry or Junior level position, depending on the individual. The Mentoring program does not guarantee employment after completion.
Please see the chapter 4; 'MENTORING' for details.

EXAMPLES OF CORE SKILLS

Cinematography and filmcraft	Ability to create surfaces that exist in the real-world	Understanding of different modelling techniques
Texturing and shading knowledge	Ability to translate 2D concepts into 3D objects	Understanding of the principles of Animation
Understanding of basic real-world physics	Art fundamentals	Understanding of coding

WHAT ARE CORE SKILLS?

CORE SKILLS DEFINED BY AXIS

Core Skills, [also known as 'Hard Skills' or 'Job-specific Skills'] refer to the skills and abilities that are essential for carrying out specific tasks and responsibilities within a particular role. These skills are typically technical, craft-oriented, or task-specific capabilities acquired through education, training, or practical experience.

To the left, we have listed several examples of Core Skills which vary across roles and departments. Successful candidates require a blend of both Core Skills and Soft Skills to excel in their roles. In each department, we have listed the Core Skills required for each role within this booklet.

APPLYING FOR ROLES WITHIN THE STUDIO

1. CORE SKILLS
2. STUDIO SOFT SKILLS

THE IMPORTANCE OF SOFT SKILLS

IT'S NOT ALL ABOUT THE ART...

Soft skills are vital within the industry and can easily be overlooked. Soft skills can be thought of as transferable or share skills across the departments. Some are general to the studio while some departments may look for specific qualities.

A strong portfolio or showreel may get you an interview; however, your soft skills will help us determine how you are able to work with the team and eventually thrive in a busy studio environment.

APPLYING FOR ROLES WITHIN THE STUDIO

1. CORE SKILLS | 2. STUDIO SOFT SKILLS

STUDIO SOFT SKILLS

Time Management	Strong communication	Adaptability and proactivity
Creativity	Leadership skills	Interpersonal skills
Teamwork	Attention to detail	Always willing to learn
Self-motivated and able to work independently	Organised	Able to interpret a brief
Problem-solving skills	Work ethic	Responds well to feedback

QUALITY BAR

WHAT IS THE QUALITY BAR?

The term "quality bar" refers to a benchmark that represents the level of quality expected for a particular production or project. It sets the standard for work quality, detail, and professionalism within the studio, with a focus on ensuring consistency and excellence across various production teams and departments. This leads to a final product that meets or even exceeds the studio's quality standards.

Alex Williams, Character Mentee 2022

CHAPTER 2:

RANGE OF ROLES

Warframe: The Duviri Paradox- Hammer Creative

DISPELLING MISCONCEPTIONS

"YOU DON'T NEED TO BE AN ANIMATOR TO WORK IN ANIMATION..."

SEE CHAPTER 2, 'RANGE OF ROLES'

Love, Death & Robots: The tall grass - Blur/Netflix

AXIS STUDIOS

AXIS STUDIOS
DEPARTMENTS/TEAMS

ART & DMP
(Art & Digital Matte Painting)

EDITORIAL
(Editing & Delivery Formating)

CHARACTERS
(Character Modelling, Surfacing, Groom & Props)

ENVIRONMENTS
(Environments & Assets)

LAYOUT & PREVIS
(Layout & Previsioination)

RIGGING & CFX
(Rigging, Cloth & Character effects)

ANIMATION
(Character Animation)

FX
(Effects & Transformations)

LRC
(Lighting, Rendering & Compositing)

PIPELINE + R&D
(Pipeline, Research & Development)

PRODUCTION
(Production Coordination & Management)

STUDIO VITAL ROLES
(People & Culture, Talent, Crew, Finance, Marketing, Technology. and Facilities)

The 'Range of roles' chapter structure mimics the Animation pipeline with departments, starting with ART & DMP to LRC.

AXIS STUDIOS

BREAKDOWN OF DEPARTMENT / TEAM PAGES

To enhance transparency and provide in-depth insights, we've segmented every Department/Team from the preceding page into four comprehensive sections which include;

- Summary & responsibilities,

- Roles within the department,

- Foundation knowledge

- department advice.

The department summaries offering a clear and concise overview of each Studio's facets incorporating case studies from our staff. These case studies offer personal narratives, detailing the unique career journeys and how they got started with the Studio and the Animation & VFX Industry.

No.	Section	Summary
1	SUMMARY & RESPONSIBILITIES	A short summary & responsibilities of what each department does.
2	ROLES WITHIN THE DEPARTMENT	Highlights the various roles & skills within each department, with applications/tools used.
3	FOUNDATION KNOWLEDGE	Fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.
4	DEPARTMENT ADVICE	Last piece of advice from the department.

STUDIO ROLE INDEX

The studio roles listed are colour-coded by department. Please note, that this is not an exhaustive list - instead, this list is intended to highlight key roles of particular interest for students & graduates.

Storyboard Artist	Concept Artist	DMP Artist	Editor	Assistant Editor	Character Artist
Surfacing Artist	Groom Artist	Modelling Artist	Texture & Shading Artist	Scene Assembly Artist	Previs & Layout Artist
Matchmove Artist	Rigging Artist	CFX Artist	Animator	Technical Animator	FX Artist
Lighting Artist	[VFX] Compositor	Technical Directors	Developer	Production Coordinator	Production Assistant
HR Assistant	Desktop Support	Crew Coordinator	Talent Coordinator	Facilities Assistant	Digital Marketing Apprentice

ART & DMP

"Where imagination is made real"

Gods and Monsters, In Development

Love, Death & Robots: Masons Rats - Blur/Netflix

ART & DMP

DEPARTMENT SUMMARY

The Art Department is responsible for transforming abstract ideas or briefs into tangible visualisations for projects. These initial visuals are crucial, and allow the Art Director to collaborate closely with the Director, CG Supervisor, Producer, and other departments to ensure consistent quality, adherence to the brief, and alignment with schedule and budget. The department is known for its creativity, problem-solving, collaboration, and exploration - all of which are just as essential as the ability to interpret design cues and create work that fits the envisioned universes.

DEPARTMENT RESPONSIBILITIES

The Art and DMP Department is responsible for Production Design, Art Direction, Storyboards, Colour Scripts, Concept Design and Production Art for all Characters, Creatures, Environments, Vehicles, Props and FX. Additionally, Digital Matte Painting, Motion Graphics, and 2D Illustrations all fall into the department's skills and expertise. Across photo-realistic, hyper-real and stylised projects, the department is a key part of all pitches, visual development and IP development within the studio.

ART & DMP

ROLES WITHIN THE DEPARTMENT

We wish to shine a spotlight on three distinctive roles within the Art & DMP department: Storyboard Artist, Concept Artist, and Digital Matte Painter (DMP). These roles play crucial and dynamic parts in our creative processes, contributing to the visual storytelling and conceptualisation aspects of our projects. There are a great number of different roles within the Art Department but due to the unique nature of these roles, they don't often receive distinct attention within a degree program.

APPLICATIONS/TOOLS

Artists working in the Art Dept use a wide variety of media, from traditional to digital (2D and/or 3D software), to create artwork. Examples of software used could be; Photoshop, Storyboard Pro and Blender.

ART & DMP ROLES

STORYBOARD ARTIST	CONCEPT ARTIST	DIGITAL MATTE PAINTER
A Storyboard Artist visually translates a script or story into a sequence of images. They create a narrative blueprint for a project.	A Concept Artist is responsible for creating visuals & designs that help establish the look, feel, and style of a project.	A Digital Matte Painter (DMP) is an artist who creates realistic or stylised backgrounds or environments using digital tools.
CORE SKILLS: • Art fundamentals • Posing, line of action & silhouettes • Anatomy and observation • Cinematography and filmcraft • Understanding of sequential storytelling	**CORE SKILLS:** • Art fundamentals • Engaging and compelling designs • Anatomy and observation • Cinematography and filmcraft • Understanding of form and function	**CORE SKILLS:** • Art fundamentals • Understanding of light & how it interacts with environments • Cinematography & filmcraft • Ability to seamlessly match 2/2.5D backgrounds to 3D foregrounds.

ART & DMP

FOUNDATION KNOWLEDGE

Essential foundational skills/knowledge relevant to the ART & DMP Department at Axis Studios that students or graduates should showcase when applying for a position within this department. While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Role	How to demonstrate FOUNDATION KNOWLEDGE
1	Concept Artists	Pick one or two existing Projects/IPs. For the discipline you're interested in, create new designs that could exist in those worlds. Storytelling through detailing, wear and tear/weathering is important. Also consider creating Production Art - turnarounds and material call out sheets - for some of your designs. If you're a 'generalist' concept artist, tackle a range subjects or styles. **Characters** – Convey each character's personality and role/purpose. Pay attention to proportions, anatomy, form and shape language. **Vehicles** - Designs should communicate each vehicle's function. **Props** – Keep in mind how function and ergonomics influence design. **Environments** – Clearly communicate the purpose and functionality of the space through design.
2	Storyboard Artist	From an existing script, chose a section then create a storyboard and/or animatic showing how it could be shot. Pay attention to framing, composition, character performance, narrative focus, camera moves and shot progression. Visual storytelling ranging from dramatic or emotive shots to more dynamic action/fighting will show versatility. Whether drama or action, character should come first and reflect an ability to convey performance and personality.
3	Digital Matte Painter	Pick shots/frames from an existing Project/IP, high resolution photographs or a fully textured, lit and rendered 3D foreground environment. Create a new DMP backgrounds. Focus on lighting, perspective, scale, atmospherics, composition, detail and where the viewer's attention should be focused. Ensure source images and foreground/DMP background work as an integrated whole. Demonstrate additional DMP skills through day to night, summer to winter, conversions of shots/stills . Also consider developing/showing DMP Camera Projection techniques and a mix of landscape and urban settings.

ART & DMP ADVICE

APPLYING FOR YOUR FIRST JOB

- **Portfolios** – how you present your folio is important. We don't expect award-winning layouts, but a professional-looking folio can make a big difference.

- **Sketchbooks** – having your sketchbook(s) with you at events or visible on your online portfolio allows recruiters to see your wider abilities and interests. Sketchbooks often give great insight into your creativity.

- **Mindset** – how you engage with others, approach your tasks and respond to questions asked by recruiters can convey a lot about your mindset. YOU are as important as your folio.

- **Work rate** – keep track of how long it takes you to create work; this is a question many recruiters will ask.

- **Style** - showcase your unique style while also demonstrating your range and versatility.

Scrooge: A Christmas Carol - Timeless films/Netflix

EDITORIAL
"Not just about assembly"

Scrooge: A Christmas Carol - Timeless Films/Netflix

EDITORIAL

DEPARTMENT SUMMARY

The Editorial Department actively participates in the entire production process, from inception to completion. Collaborating closely with storyboard artists and directors to craft 2D animatics is the initial iteration of projects and plays a significant role in shaping the creative groundwork for each endeavour. The department works with directors and the previsualisation team to transition these concepts into the 3D realm, while maintaining an active role in the creative process.

DEPARTMENT RESPONSIBILITIES

The Editorial team advances through our shot departments by utilising animation and rendered elements to construct the edit. The team plays a role in the final delivery process, which may involve direct client releases for online distribution or handovers to post-production facilities for projects requiring colour grading and technical preparations for broadcast.

Scrooge: A Christmas Carol - Timeless films/Netflix

EDITORIAL

ROLES WITHIN THE DEPARTMENT

Animation Editors collaborate with a wide variety of people and play a key role in bringing together the collective project. They will be good communicators as they will interpret ideas and present material. Within Axis there are two roles available to editors; editors and edit assistants.

APPLICATIONS/TOOLS

The studio principally uses Adobe Premiere Pro for short-format projects, whilst long-format projects are created in Avid Media Composer. Knowledge of Adobe Photoshop and After Effects is preferred but not essential.

EDITORIAL ROLES

EDITOR	ASSISTANT EDITOR
An Editor in an animation studio is responsible for crafting the best story possible while working to various scope and budget parameters. They are responsible for refining the various elements of an animated project to create a cohesive and engaging final product.	An Assistant Editor in an animation studio provides support to the editing department and assists with various tasks such as sourcing sound effects, colour grading and formatting files.
CORE SKILLS: • Cinematography and filmcraft • Sound design and editing techniques • Storytelling fundamentals	**CORE SKILLS:** • Cinematography and filmcraft • Sound design and editing techniques • Storytelling fundamentals • Technical knowledge of workflows and codes

EDITORIAL

FOUNDATION KNOWLEDGE

While not an exhaustive list, here are some essential foundational skills/knowledge relevant to the EDITORIAL department that students or graduates should showcase when applying.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Knowledge of Editing software	Strong technical knowledge of professional editing software. Demonstrating basic keying, amending frame rates, organising and manipulating video clips.
2	Strong File Management	Can effectively store files for projects - with logical naming conversions applied to ensure files are easy to find and replace.
3	Knowledge of Filmcraft and Storytelling	Demonstrate knowledge of visual storytelling/continuity editing/shot types/composition/pace and rhythm.
4	Sound Design	Demonstrating the integration of soundtracks, with music and sound effects for project/s.
5	Collaboration and Communication	Strong communication skills and collaboration with others.

EDITORIAL ADVICE

EDITING FOR ANIMATION

For Assistant Editors, we want to emphasise that prior experience in animation is not mandatory. We have witnessed individuals with diverse backgrounds, particularly those rooted in live-action TV and feature films, transition to work in animation. The beauty lies in the versatility of skills and experiences that different backgrounds bring to our dynamic and collaborative environment.

What truly unites successful Assistant Editors in our team is their unwavering commitment to hard work and an authentic passion for the art of editing and the broader craft of filmmaking. The ability to seamlessly transition from live-action to animation is a testament to the adaptability and dedication that these individuals exhibit.
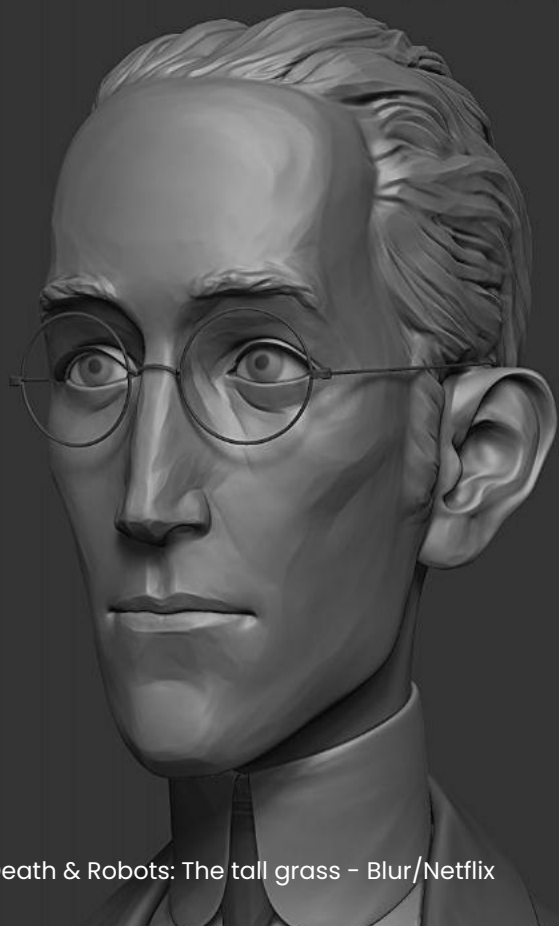
Clash of Clans: Hammer Jam - Supercell

CHARACTERS

"Where a hero's journey begins"

Warframe: The Duviri Paradox - Hammer Creative

CHARACTERS

DEPARTMENT SUMMARY

The Character Department crafts the heroes and villains featured in the stories we produce and work in a diverse array of styles, genres, and narratives. Each project presents new possibilities for the character team, whether it involves crafting monarchs, fantastical creatures, extraterrestrials, or vampires. The Character Department is always looking to be part of the solution – offering ideas, alternatives, and ways to plus the work.

DEPARTMENT RESPONSIBILITIES

The Character Department holds the primary responsibility of translating 2D concepts into vibrant, living CG characters. With close collaboration with directors, art directors, and other teams, the department ensures that these characters harmonise with the creative vision and meet the narrative needs of the project. Story-driven choices need to simultaneously adhere to all technical pipeline requirements.

Love, Death & Robots: The tall grass - Blur/Netflix

CHARACTERS

ROLES WITHIN THE DEPARTMENT

Most of the artists within the Character Department are skilled in modelling, sculpting, and surfacing. We have highlighted the following roles; Character Artist, Surfacing Artist and Groom Artist, as some opt to specialise in a single role. We aim for a well-rounded team that includes both character generalists and specialists to ensure we have the ideal combination of skill sets for our projects. It is worth noting that Groom Artist is a unique role, specialising on hair, fur and feathers for CG characters and creatures using Houdini.

APPLICATIONS/TOOLS

Thorough knowledge of a 3D Modelling package of your choice is essential. Some of the software packages used at Axis include (but not limited to): Autodesk Maya / 3DS Max / Zbrush / Substance 3D Painter / Arnold / Houdini.

CHARACTERS ROLES

CHARACTER ARTIST	SURFACING ARTIST	GROOM ARTIST
A Character Artist in an animation studio is responsible for modelling characters for the project to a high level and within the technical requirements.	A Surface Artist, also known as a texture artist or shader artist, is responsible for creating and applying textures, materials, and shaders to the surfaces of 3D models.	A Groom Artist in an animation studio is responsible for creating and styling the hair, fur, feathers, and other forms of grooming for characters and creatures.
CORE SKILLS: ● Anatomy and Observation ● Organic, cloth and hard surface modelling skills ● Able to translate 2D concepts into 3D objects ● Good sense of proportion	**CORE SKILLS:** ● Knowledge of core texturing and shading principles, both PBR and NPR (Physically-Based & Non-Realistic) ● Able to translate 2D concepts into 3D Asset ● Good sense of proportion	**CORE SKILLS:** ● Understanding of human & animal Anatomy ● Texturing and Shading knowledge ● Able to translate 2D concepts into 3D objects *Further details on Groom can be found on page 35.

CHARACTERS

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Character Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Form & Anatomy	Demonstrate a knowledge of anatomy to a solid level, showing a clear understanding of proportion, skeletal structure and boney landmarks, and the differences between bone, muscle, fat and skin.
2	Sculpting	Show clear evidence of a solid grasp of general sculpting skills, across a variety of forms including cloth, organics and hard surface. Work should demonstrate an understanding of form vs detail, rhythm and silhouette.
3	Modelling	Demonstrating clean & efficient poly modelling, with good placement of poly loops. Feature examples of cloth, hard-surface & organic modelling, with a clear emphasis on the quality of the objects rather than quantity. Demonstrate observation and understanding of how clothing, accessories and hard surface elements are constructed.
4	Texturing & Shading	Demonstrate your use of either stylised or realistic surfaces & textures. Showing evidence of clean UV / UDIM layout. Attention to detail is key and a eye for surfaces that exist in the real-world. With clear consideration in replicating the patterns & rhythms found in nature. Showing wear & tear, polish, scratches, dents, weathering & scaling across your textures, in a manner that's consistent with logic and the story of the asset. A good grasp of PBR principles is strongly recommended.

GROOM

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Groom in the Character Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Understanding of volume and direction/flow	A groom artists needs to understand volume but also flow, eg the direction the hair/fur follows across the asset. This is the equivalent of anatomy for a character artists and it is at the core of any groom.
2	Understand hair/fur textures	Understanding what will be done on the guide level and on the hair themselves to give texture to the groom. Groom artists should be comfortable with the idea of primary/mid/detail information and will know where they should be adding what kind of effect
3	Some basic technical knowledge	Having an understanding of guides implementation and how the hair will be interpolated, and how this might vary across different softwares is very important. This will affect how you setup your groom and the final result of the look and deformation.
4	Surfacing Knowledge	Shading can drastically affect how a groom will look especially on creatures so a basic knowledge is desirable.
5	Character Anatomy	Groom can have a huge impact on a character and understanding this is very important. On creatures it gets even more important as the groom can cover the entire body, requiring teamwork with the character artists to preserve the anatomy.

Gigi and Nate - Tempo Productions & Free Turn Entertainment

CHARACTERS ADVICE

LEVELING UP YOUR CHARACTERS

Characters are at the forefront of the stories we tell. The range of knowledge and skills needed to bring them to life is wide and varied, so it's important to approach everything with a questioning mind;

- *What are the unique properties of this form or surface, and how do I recreate that?*

Understanding form, possessing attention to detail, and having knowledge of how to build story into every decision made are all essential when creating characters.

Remember to always look at what the best are doing, be aware of the Quality bar in the industry, look for feedback and opportunities to learn wherever possible.

ENVIRONMENTS

"The builders of new worlds"

A Discovery of Witches – Bad Wolf

ENVIRONMENTS

DEPARTMENT SUMMARY

The Environments Department creates diverse worlds that serve as the backdrop for our narratives, ranging from barren deserts, lush jungles, earthbound snow capped mountains to sci-fi architecture at the far reaches of the universe and everything in between. Working closely with other departments, the Environments team build the architectural items that make up the locations, sculpt the natural terrains, and create the trees/foliage. They then combine these elements to form a space wherein stories can be told.

DEPARTMENT RESPONSIBILITIES

The Environments Department is responsible for realising the diverse worlds and locations crafted by the Art Department. From photorealistic to heavily stylised, the style of these locations changes from project to project, but the overall process remains the same. The Environments Department works closely with the Layout, Animation & LRC (Lighting, Rendering and Compositing) departments, ensuring that the settings not only suit the performance requirements, but also exhibit aesthetic appeal.

Magic: The Gathering, Crimson Vow - Wizards of the Coast

ENVIRONMENTS

ROLES WITHIN THE DEPARTMENT

Within the Environments Department, modelling, texturing and shading are essential to master, along with a keen perception of proportion, form, and an ability to discern subtle surface variations influenced by time. Some choose to specialise in a single role, such as modelling, texturing or scene assembly.

APPLICATIONS/TOOLS

- SideFX: HOUDINI (Scene assembly & final)
- Adobe Substance 3D Painter (Surface & texturing)

The Environments Department does not prescribe a specific software package for modelling, but encourages the use of tools that best suit the project's requirements and yield the best results. Software examples include (but are not limited to): Maya, 3DS Max, Blender, Mudbox, and Pixologic ZBrush.

ENVIRONMENTS ROLES

MODELLING ARTIST	TEXTURE & SHADER ARTIST	SCENE ASSEMBLY ARTIST
Modelling Artists (Modelers) create detailed models of various elements, such as buildings, terrain, vegetation, props, and architectural features.	Texture Artists create textures and surface appearance of 3D models. They bring realism, detail, and visual interest to the digital assets.	A Scene Assembly Artist is responsible for creating immersive and visually appealing landscapes, architecture, and props that make up the virtual worlds.
CORE SKILLS: ● Understanding of different modelling techniques (Hard Surface / SubDivision / Sculpting) ● Good sense of proportion ● Able to translate 2D concepts into 3D objects	**CORE SKILLS:** ● Able to create surfaces that exist in the real world. ● Able to translate 2D concepts into 3D Asset ● Knowledge of core texturing and shading principles, both PBR and NPR (Physically-based & Non-Realistic)	**CORE SKILLS:** ● Understanding of scene assembly & object arrangement ● Good sense of proportion ● Able to translate 2D concepts into 3D objects

ENVIRONMENTS

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Environments Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Modelling	Demonstrating clean & efficient polygon flow. Featuring examples of hard-surface & organic modelling, with a clear emphasis on the quality of the objects rather than quantity. Knowledge of the following modelling techniques: Hard Surface / SubDivision / Sculpting
2	Surfacing & texturing	Demonstrate your use of either stylised or realistic surfaces & textures. Showing evidence of clean UV / UDIM layout. Attention to detail is key and an eye for surfaces that exist in the real-world. With clear consideration in replicating the patterns & rhythms found in nature. Where possible, showing wear & tear, polish, scratches, dents, weathering & scaling across your textures.
3	Environment Scene Assembly	Demonstrate scene assembly in a small environment, with special care given towards scale, proportion and a natural arrangement of several objects within the scene. Evaluate objects that can be repeated to help populate the scene. With clear consideration in replicating the patterns & rhythms found in nature. All objects should be textured / surfaced.

*Please note:
It is recommended that students or graduates interested in Environments explore each foundation knowledge note for the three roles mentioned above. Following this, they should assess and identify their strongest skill set among the three.

ENVIRONMENTS ADVICE

HOW TO IMPROVE YOUR MODELLING

The importance of cultivating a keen eye for detail and drawing inspiration from nature cannot be over emphasised enough for modelling and texturing. This means replicating the patterns, rhythms, colours, shapes, consistencies and inconsistencies that are found in nature, as well as recognising how they relate to each other.

Start by creating a small and manageable scene. Build confidence and technical prowess with each model, while also keeping note of how long it takes you to complete an asset or prop. You should also experiment with different modelling techniques: Hard Surface, SubDivision and Sculpting.
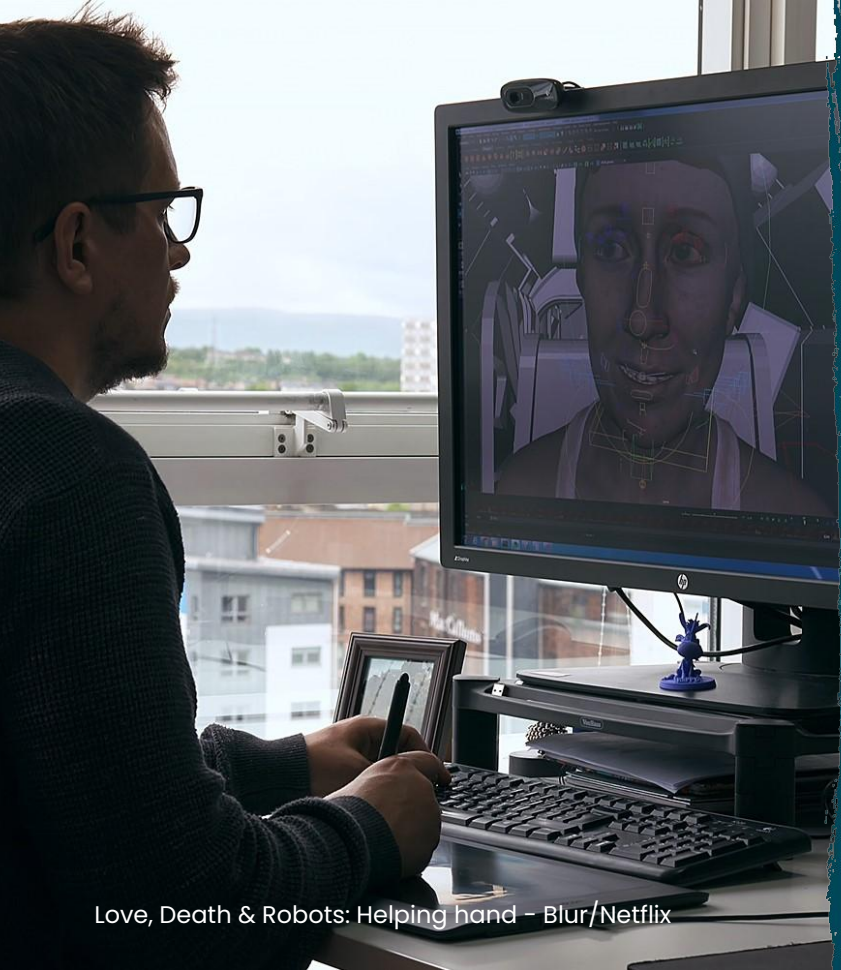
Palia - Singularity 6

PREVIS & LAYOUT

"The explorers of storytelling"

Love, Death & Robots: Helping hand - Blur/Netflix

PREVIS & LAYOUT

DEPARTMENT SUMMARY

The Previs and Layout Department function as a single department, but focus on two different stages of production. For Previs, the emphasis is on creative storytelling. The Previs team works closely with the director and editorial team, with the aim to give the client and crew a solid idea of the overall look and composition of a project. For Layout, it's all about technical execution. It is a more detail oriented stage that involves managing assets, ingesting motion capture or generating matchmove data, as well as building manifest lists for caching and ensuring everything is prepped and ready for the Animation team.

DEPARTMENT RESPONSIBILITIES

As a department, Previs and Layout are responsible not just for the creative approach to shots, but the technical approach too. Laying the foundation for a smooth execution in all downstream departments is a key responsibility, as is working with the Production Department to maintain scope limitations. This sets the groundwork to ensure other departments stay on budget.

Love, Death & Robots: Helping hand - Blur/Netflix

PREVIS & LAYOUT

ROLES WITHIN THE DEPARTMENT

Artists working in the Previs and Layout Department require a broad spectrum of skills, from the creative to the detail oriented and technical. Previs requires generalist skills, particularly within animation,as well as a flexible mindset. Layout is more technical in nature, and involves refining staging, composition and camera polish. We also want to highlight Matchmove Artists, who operate in the field of VFX and are responsible for the seamless integration of CG elements into real-world footage, which is achieved by matching their angles, positions, and camera motion.

APPLICATIONS/TOOLS

It is important to remember that storytelling is key. Try not to get too caught up in software. Instead, focus on the foundational skills.

- Autodesk MAYA
- Basic understanding of editing software (Davinci Resolve / Adobe Premiere)
- Some knowledge of a games engine (Unreal) is ideal

PREVIS & LAYOUT ROLES

PREVIS & LAYOUT ARTIST	MATCHMOVE ARTIST
AA Previs and Layout Artist establishes the initial composition, camera placement, and staging of scenes within a production. They create the foundation for the Animation process.	A Matchmove Artist works in VFX to convincingly blend shots from live-action footage, and marry them with computer-generated (CG) scenes.
CORE SKILLS: • Film Language & cinematography • Storytelling fundamentals • Knowledge of the Animation principles • Able to translate 2D concepts into 3D objects	**CORE SKILLS:** • Film Language & cinematography • Knowledge of the Animation principles

PREVIS & LAYOUT

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Previs and Layout Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Drama sequence	Source an audio clip in order to demonstrate the emotive interaction between characters. Block out a sequence with consideration given on setting the scene, editing, storytelling (beginning, middle and the end), framing and composition. Include relevant information, such as a top-down plan of the environment.
2	Action sequence	Source a piece of music for an exciting action or fighting sequence. Block out a sequence to build suspense and demonstrate the interaction between characters, setting the scene. Show evidence of editing and storytelling (beginning, middle and the end), framing and composition. Include relevant information, such as a top-down plan of the environment.
–	*Matchmove artist only	Demonstrate 3x separate sequences, which convincingly combines a live-action plate with computer-generated (CG) scene/s. Careful consideration should be given to lighting, shadows and texturing.

*Students / graduates can take inspiration from the drama and action sequence mentioned above, but must feature the addition of combined CG scenes with live-action plates. |

PREVIS & LAYOUT ADVICE

STORYTELLING

Story is key. The art of storytelling has, in one fashion or another, spanned thousands of years. A captivating and intriguing narrative not only sparks the imagination of the audience - it inspires those involved in the project.

In the realm of filmcraft, the significance of composition and framing cannot be overstated. It serves as the window in which the audience sees the story. When assessing the effectiveness of a particular shot, consider its context and how it contributes to the overall narrative. It's important to understand the role each shot has within the storyline. This is pivotal for creating a visually compelling and cohesive experience.

MARVEL Snap - Marvel

RIGGING & CFX

"Digital puppetry with feathers & fur"

Magic: The Gathering Dawn of the Phyrexian Invasion - Wizards of the Coast

RIGGING & CFX

DEPARTMENT SUMMARY

The Rigging and CFX (Character Effects) is the glue between the Modelling and Animation Departments. It ensures whatever asset, be it characters, props or vehicles, can be moved/animated. The Rigging and CFX Department work closely with the Character, Environmental and Animation departments to ensure an asset has the correct topology to be deformed, and the right controls to be able to move it in animation. This is achieved by building a rig, which is created by placing a skeletal structure, made using bones/joints, inside the models and making sure the range of movement meets the animation requirements.

DEPARTMENT RESPONSIBILITIES

Responsibilities of the Rigging and CFX department include the creation of mechanical but intuitive 'rigs' for posing characters, props and vehicles, physics-based simulation setup such as realistic skin, muscle and hair, coding tools and solving problems with mathematics.
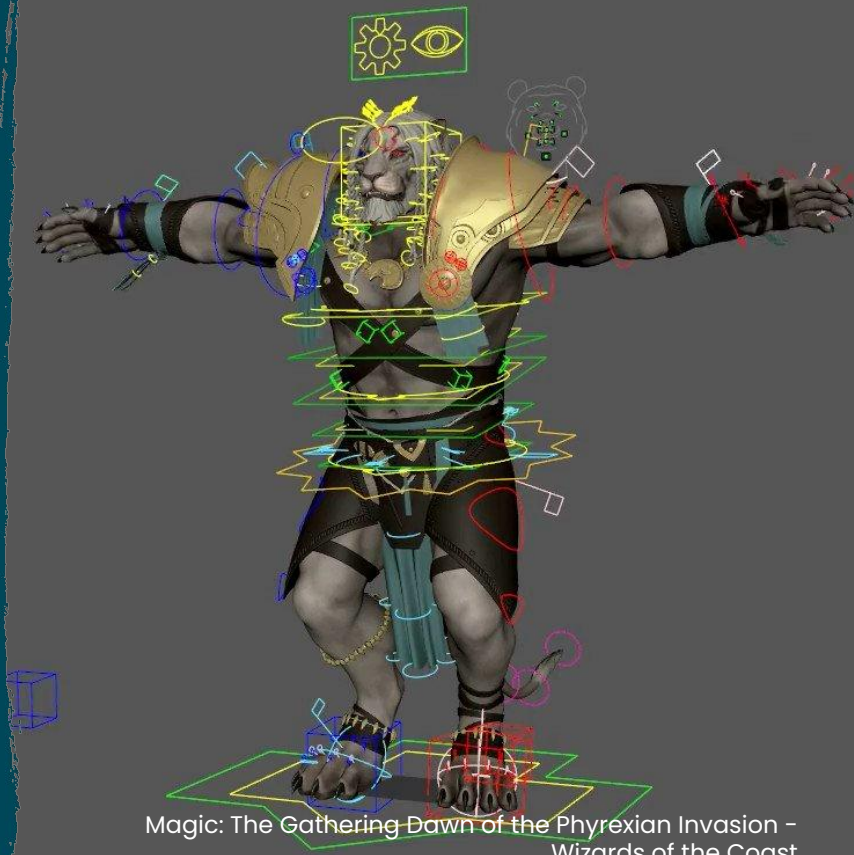
Magic: The Gathering Dawn of the Phyrexian Invasion - Wizards of the Coast

RIGGING

ROLES WITHIN THE DEPARTMENT

Offering a high-spirited, collaborative environment, our Rigging Department works in partnership with the Modelling and Animation departments, creating a product that is a blend between art and science. Their varied work includes; creating hyper realistic humans, stylized characters that squash and stretch, mechanical robots and spaceships, or ornate fantasy creatures.

Rigging Artists are a unique bunch with specialised yet varied skill sets.

- Body Rig Setups

- Hyperreal or Stylized Face Shape Modelling

- Mechanical Rigging for Vehicles and Environments

- Face Rig Setups

- Technical Direction and Coding

- Character or Vehicle Simulation Setups

RIGGING ROLES

RIGGING ARTIST	RIGGING (TD) TECHNICAL DIRECTOR
Rigging Artists play a vital role in providing the digital skeleton and control systems for characters, objects, and other elements that require Animation.	For further information about Rigging TDs, please see PIPELINE + R&D DEPARTMENT TECHNICAL DIRECTOR (page 75)

CORE SKILLS:
- Understanding of principles of Animation and design
- Knowledge of anatomy, kinematics and physical behaviours
- Adept skills in animation, modelling, art and coding
- Attention to detail, observational skills and analytical thinking.

RIGGING

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Rigging Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it is to be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Body Anatomy	Demonstrate an understanding of human and creature anatomy, kinematics and physical behaviours through skeletal articulation and volume preservation. Focus on aesthetics and naturalistic behaviours.
2	Facial Expression	The face is the most dynamic aspect of a rig. Knowledge of FACS (Facial Action Coding System) based facial setup is fundamental for those who would like to pursuit this area of rigging. Observe the anatomy and muscle movement in the face that combines to achieve dialogue and convey emotions. Form, lines, volumes, silhouettes are common visual language to both realistic and stylized characters. Face rigs draws on more on the artistic side of rigging, so skills in drawing and modelling are ideal.
3	Technical Knowledge (TD)	All riggers are encouraged to learn programming. In rigging, Python is a common language used for tools and rig setups. While we do not expect entry level riggers to be at an expert level, exposure to Python will accelerate a new rigger's growth. For those who prefer a TD position, knowledge in programmes such as pySide/QT, Maya API and C++ would be a plus. Machine learning software such as Ziva and Unreal will play an important role in rigging, so we highly encourage students to explore these softwares.
4	Animation Principles	Rigging is about motion. Whether you are working on hyper-realistic or stylised characters, the same principle of animation applies. Learning the 12 Principles of Animation will allow the rigger into the animator's mind, helping them to build rigs that are intuitive and expressive. Exposure to motion capture animation and motion editing will add to your skill set for hyper-real and game related projects.

CFX (Character Effects)

ROLES WITHIN THE DEPARTMENT

The CFX (Character Effects) Department enriches animated character movement by adding depth, realism, and visual appeal through simulating and managing various dynamic elements associated with them. They work directly with Animators, Riggers, Modellers, FX and Lighting Artists, and contribute significantly to the overall quality and believability of character performances in animated productions.

The CFX (Character Effects) team deals with:

- Simulation Setup
- Shot Simulating
- Creature Fur, Skin, Muscles and Feathers
- Post Simulation
- Technical (TD)
- Groom

CFX ROLES	
CFX ARTIST	**CFX (TD)** **TECHNICAL DIRECTOR**
A CFX (Character Effects) Artist creates complex effects and simulations specifically related to characters, creatures, or any task that requires real world or stylised simulations.	For further information about CFX TDs, please see PIPELINE + R&D DEPARTMENT TECHNICAL DIRECTOR (page 75)

CORE SKILLS:

- Houdini and Vellum comprehension
- Creative problem solving skills
- Eye for deformation and motion
- Interest in tailoring and drapery
- Python, VEX, HDA exposure
- Understanding of basic real-world physics

CFX

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the CFX (Character Effects) Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Cloth Simulation	Short but well executed pieces of cloth simulation work. Knowledge of Marvelous Designer will aid in the way you think in terms of 'tailoring'.
2	The Basics of Hair and Fur	Be sure to include some hair or fur work, whether complex or stylised. Show that you can translate the design from static groom to hair flow in motion. Working with hair demonstrates in-depth technical knowledge, androoming knowledge is always a plus.
3	Good Deformation	Show a display of good deformation, demonstrating that you understand different fabrics, their weight, how they crease, wrinkle and react to forces.
4	Skin Simulation	Having some skin simulation work is a massive plus as it shows a basic anatomy knowledge. Exposure to software such as Ziva and Houdini muscle are also a plus.
5	Technical Knowledge (TD)	Whether you are an artist or TD, technical and problem solving skills are a core part of CFX. Understanding natural forces and how they apply in realistic or cartoony simulations is important. Wind, gravity, spring action, tensile strength and turbulence are all physics terms that you should use to achieve artistically pleasing results.

CASE STUDY #1 – CHLOE

ROLE: CFX ARTIST

PERSONAL QUOTE

"I couldn't have done it without the team taking me under their wing and helping me. I want to do as much as possible to help students find their place. Axis is a fantastic place to work."

STUDIO PROGRESSION

Work experience Intern | Rigging Trainee | Technical Animation Support | CFX Junior TD | CFX Artist

ADVICE TO STUDENTS

"Be annoying. Send emails, send your CV, send your showreel and be stubborn. It's hard work and requires a lot of dedication.

Discipline is key. Decide what you want to do and dedicate time to it – put aside a little bit of time per week to work on your showreel or a scene."

While attending the MOVE Summit as a student, Chloe learned that rigging was a potential career option, and was keen to know more. Feeling frustrated that their university course didn't have more information on rigging, and fearing relocating to London was the only option, Axis Studios soon became their goal. Chloe interned on the studio front desk to get their foot in the door. Once in the studio, they managed to interview a rigger as part of their University honours project, their inspiration being that they felt there weren't enough case studies on the more technical fields of animation as opposed to creative. Their big chance came in the form of an email from the Head of CFX at Axis Studios. After seeing their portfolio, the Head of CFX offered Chloe an opportunity to work on a League of Legends project in Technical Animation and CFX clean up. Seizing the opportunity to raise their standard of work, they accepted and began developing their creative eye after cleaning up a more experienced artist's work. During quiet spells in production, different members of the team began to show Chloe their way around Houdini. Their supervisors thought they showed promise, and just a few days later, they were thrown into a project as a CFX Artist. It was their time working on Scrooge: A Christmas Carol that proved to be their biggest learning experience; they got a taste of leading others and cemented in themselves that they wanted to be a Lead Artist instead of a Technical Director. Looking ahead, Chloe is developing their leadership skills to take on more responsibility and is actively working up to leading a project.

RIGGING & CFX ADVICE

RIGGING AND CFX AS A CAREER

If you're naturally curious and intrigued by the study of clothing behaviour, hair dynamics, or the visual expression of anatomy and facial emotions, Rigging and CFX could be a fulfilling path for you. This field combines anatomy, kinematics, design principles, and animation fundamentals. Whether you excel in life drawing, enjoy coding, or possess artistic sensibility, exploring Rigging and CFX could be a rewarding career choice.

APPLICATIONS

Due to the blend of artistic and technical tasks, a familiarity with scripting languages are advantageous in the Rigging and CFX Department.

- SOFTWARE – SideFX: HOUDINI, Autodesk Maya are core softwares.
  Ziva, Unreal, Marvelous Designer, zBrush are all complementary software that are regularly used.

- SCRIPTING – Python, Mel, Vex, hScript.
  Houdini and Maya API, C++ skills are a plus.

New World: Rise of the Angry Earth - Amazon Studios

ANIMATION

"Alchemists of motion"

League of Legends: Tales of Runeterra - Riot Games

ANIMATION

DEPARTMENT SUMMARY

The Animation Department works diligently to breathe life into characters and deliver engaging animated experiences. They create and produce animated performances, for films, television, cinemanics, and other forms of media, often working on a diverse range of projects and styles at any one time, from photorealism and living paintings to 2D cartoons. The department typically consists of a team of skilled animators and technical animators who combine artistic creativity, technical skills, and storytelling prowess to create visually captivating and entertaining animated performance.

DEPARTMENT RESPONSIBILITIES

The Animation Department is responsible for key frame animation, motion capture (Mo-cap), facial capture, crowds and creature animation across the spectrum of stylised projects, from hyper-photorealistic to more abstract.

League of Legends: Tales of Runeterra - Riot Games

ANIMATION

ROLES WITHIN THE DEPARTMENT

Within the Animation Department, we want to highlight two very distinct roles to students. These are the roles of Animator and Technical Animator. Animators bring sequences to life by applying real-world physics and character performance to create the illusion of life in CG puppets. This process contributes to realising the director's vision on screen. Technical Animators play a crucial role in supporting the Animation Department, handling tasks such as background animation, motion capture (Mo-cap), and facial capture. This role can serve as an entry position in the studio, with some professionals choosing to make it a long-term career.

APPLICATIONS/TOOLS

It is important to remember that storytelling is key. Try not to get too caught up in software - instead, focus on the foundational skills.
- Autodesk MAYA

ANIMATION ROLES	
ANIMATOR	TECHNICAL ANIMATOR
An Animator is responsible for bringing characters, objects, and scenes to life through movement and performance. They create compelling, fluid and believable animation via body mechanics and a solid understanding of physics.	A Technical Animator combines their knowledge of animation principles and technical skills to assist and support the animation team. They bridge the gap between the Animation Department as well as other departments, ensuring the smooth operation of the animation pipeline.
CORE SKILLS: - Understanding of the principles of Animation - Understanding of basic real-world physics - Good knowledge of cinematography - Posing, line of action & silhouettes - Anatomy and Observation	**CORE SKILLS:** - Understanding of the principles of Animation - Understanding of basic real-world physics

ANIMATION

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Animation Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Bouncing ball	Demonstrating the difference in time & space. Executing real-world physics, such as momentum and Inertia, while including relevant animation principles.
2	Walk cycle	Demonstrate a bi-pedal character walk cycle, bringing performance & emotion to a character's actions. Distill a emotion or mood to a character for a distinct walk cycle.
3	Body mechanics / pantomime shot	Demonstrate a bipedal character with head-to-toe full body animation. With body mechanics & complying story (storytelling element & action), with a level of personality & acting.
4	Close up acting / dialogue shot	Either a dialogue or close-up pantomime shot. Showing nuance acting performance, demonstrating a convincing performance which demonstrates a change in character emotion & performance.
5	Full body action shot	A sequence with one or two characters which showcases and demonstrates all previous knowledge, of body mechanics and full body action with the nuances of convincing performance. Mirroring a production shot with cinematography.

CASE STUDY #2 - STEPHEN

ROLE: ANIMATOR

PERSONAL
QUOTE

"There are so many exciting projects. I find the studio a very social place, with colleagues that are lifelong friends."

STUDIO
PROGRESSION

Animation Mentee | Technical Animation Support | Junior Animator | Animator

ADVICE TO
STUDENTS

"Don't stop after your fourth year. Keep working. Keep going and pushing until you get the job. Annoy people to get as much industry feedback and advice as you can. Make a schedule and stick to it"

STEPHEN'S STORY

From the time Stephen began carrying around his Disney VHS tapes as a kid, he knew animation was the career for him. He honed his drawing skills by pausing and sketching shots from his favourite Disney animated features. As soon as he figured out that being an Animator was a job, he became focused on making it his career. Stephen had set his mind on doing animation at the University of Dundee. Stephen was accepted for Animation Mentoring at Axis Studios and began coming into the studio every week for feedback and advice. Stephen describes this time as the most important part of his academic career, and feels that it ultimately changed his career trajectory. Stephen exhibited great potential during his time in the mentorship program at Axis Studios, and his supervisor soon gave him an Animation test [a contained brief to help demonstrate foundation level knowledge needed for the Animation dept.] for an upcoming show. Needless to say, Stephen impressed the team and started working for Axis the very next week. Stephen gives the same cautionary advice to all new junior animators - "while you want to work hard, impress and 'prove yourself', be careful of too many late nights and making yourself ill. A healthy work/life balance matters!"

ANIMATION ADVICE

ANIMATION STYLE

The style of Animation you choose to adopt and develop as a Junior is an important one. Even as a studio, individual style is a major factor in production. There are different styles of animation with different levels of abstraction, from hyper-realistic to the cartoon. At Axis Studios, we demonstrate multiple styles / a range of styles depending on the project.

Our suggestion would be to always be open to explore different styles of animation, but ultimately concentrate on a naturalistic style with enhanced performance, as this is arguably typical in the majority of Animation productions. An ideal candidate will be able to demonstrate a good understanding of the 12 principles of Animation, as well as real-world physics, creative performance of animation and good creative acting choices, which demonstrate both internal and external emotion.

The Incredible Hulk - Universal Studios

FX (EFFECTS)

"Sprinklers of magic"

Destiny 2: The Witch Queen - Bungie

FX (EFFECTS)

DEPARTMENT SUMMARY

When thinking of the FX (Effects) Department, you would be forgiven for immediately thinking of explosions and destruction work. However, the FX team oversees the creation of so much more - magical effects, snow, fire, rain, dust, interactions, abstract environmental builds, vegetation growth, character transformations, portals, complex shading are just some of the exciting aspects that the FX Department brings to productions. The world of FX can feel daunting, as it requires a perfect blend of both technical and artistic skill sets. The department specialises in combining both scripting, problem solving and logical solutions with animation timing, colour scheme and look development.

DEPARTMENT RESPONSIBILITIES

The FX Department is responsible for creating realistic and visually engaging effects, as well as enhancing the overall quality and visual impact of animated projects.FX artists should be able to shade, render and comp. It is a generalist department with a large focus on FX-simulations. In short, the work is consistently fun - and consistently challenging.

Destiny 2: The Witch Queen - Bungie

FX (EFFECTS)

ROLES WITHIN THE DEPARTMENT

There is little variety in terms of roles in the FX Department, with the levels of Junior and Senior largely defining responsibilities and complexity of shots assigned. A Junior FX Artist is most likely to receive less complicated FX shots, suited to their level of knowledge and experience. A Senior FX-Artist will receive more challenging tasks and shots, playing a key role in helping Junior members to grow and develop. The FX-Technical Director co-operates with the Head of FX, Supervisors and Leads to ensure the FX team have the tool sets they need and help them solve day to day technical difficulties.

APPLICATIONS/TOOLS

It is important to remember that storytelling is key. Try not to get too caught up in software. Instead, focus on the foundation skills.

- SideFX: HOUDINI & Foundry Nuke

FX (EFFECTS) ROLES

FX ARTIST	FX (TD) TECHNICAL DIRECTOR
An FX (Effects) Artist creates visual effects and elements, bringing dynamic and realistic effects to animated scenes.	For further information about FX TDs, please see PIPELINE + R&D DEPARTMENT TECHNICAL DIRECTOR (page 75)

CORE SKILLS:

- An eye for detail, color, lighting, and composition
- Understanding of basic real-world physics
- Cinematography & filmcraft
- Understanding of the principles of animation

FX (EFFECTS)

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the FX (EFFECTS) department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Volumetric	Experiment with examples of Volumetric effects, such as fluids, smoke, fire and fog. Mimicking real-world substances showcases that you can create a sense of depth, density, and realism.
2	Particles	Experiment with examples of particle elements that are used to simulate dust, raindrops, sparks, snowflakes, magical effects or debris. Consider factors such as velocity, direction, lifespan and interaction with other objects and forces.
3	Rigid Bodies	Experiment with examples of rigid body simulations to recreate the movement and interaction of solid objects in a realistic way. You can do this through physics-based Animations, such as falling objects and collisions.
4	Procedural Animation	Experiment with examples of procedural animation, simulating water, fire, or crowd movements - namely, repetitive or complex Animations.
5	Experiment with Stylised and Realistic	Experiment with creating an effect in both stylised and realistic ways, and compare the results - for example, a stylised and realistic version of a waterfall.

FX (EFFECTS) ADVICE

FOCUSING YOUR LEARNING

As a Junior FX Artist, it is essential to concentrate your learning on key elements in order to help you build a strong foundation that will allow you to grow in this role. First and foremost, a strong knowledge of your main software is crucial for approaching tasks from a technical standpoint. Moreover, mastering your tools will enable you to use them creatively, and even deviate from its intended purpose. This can create appealing, fresh looking and innovative FX.

This aligns with an understanding of basic real-world physics and animation principles. Being able to merge appealing shapes and timings with a physically correct simulation is the perfect mix when it comes to high quality effects in any style. Additionally, a key element is simply being a great team player - effective communication, skill sharing, mutual support, and being proactive are invaluable skills in a Junior FX Artist. This is the best methodology to grow and learn from the others and collectively strengthen the team.

Palia - Singularity 6

LIGHTING, RENDERING & COMPOSITING

"Casters of light & emotion"

Scrooge: A Christmas Carol - Timeless Films/Netflix

Diablo: Immortal - Blizzard Entertainment

LIGHTING, RENDERING & COMPOSITING (LRC)

DEPARTMENT SUMMARY

The Lighting, Rendering & Compositing (LRC) Department works across a diverse range of genres and styles, and lighting is a key component of telling our stories -especially when considering how lighting can convey mood, tone, atmosphere, time and setting. The LRC department uses their technical skills, artistic sensibilities, and collaboration with other departments to create visually stunning and immersive animated worlds in one of the final stages in the production process.

DEPARTMENT RESPONSIBILITIES

The LRC Department is responsible for creating and controlling the lighting effects within a digital or CG animated scene. They work closely with other departments, such as the Modelling, Texturing, and Animation teams, to enhance the visual quality, mood, and atmosphere of final rendered frames.

LIGHTING, RENDERING & COMPOSITING (LRC)

ROLES WITHIN THE DEPARTMENT

The role of Lighting Artists is unique and not often thoroughly explained to students. A Junior Lighting Artist typically handles less complex lighting shots aligned with their level of knowledge and experience, and are often supported by a Senior Lighting Artist. The Lighting TDs address technical issues, troubleshoot software and hardware problems, and optimise rendering processes, while Compositors integrate live-action and CG footage within the VFX pipeline.

APPLICATIONS/TOOLS

It is important to remember that storytelling is key. Try not to get too caught up in software, focus instead on the foundational skills.

- SideFX: Houdini, Autodesk Maya and The Foundry Nuke.
- Knowledge of Arnold Renderer (Autodesk).

LIGHTING, RENDERING & COMPOSITING (LRC) ROLES		
LIGHTING ARTIST	**[VFX] COMPOSITOR**	**LIGHTING (TD) TECHNICAL DIRECTOR**
A Lighting Artist creates and implements lighting effects for various projects. They work to enhance the visual quality, mood, and atmosphere of a scene through the use of lighting techniques.	A Compositor's primary function is to seamlessly integrate all the layers or elements of a shot, including live-action and computer graphic elements.	For further information about Lighting TDs, please see PIPELINE + R&D DEPARTMENT TECHNICAL DIRECTOR (page 75)
CORE SKILLS: ● Understanding of Lighting Principles ● Composition and Cinematography ● Understanding of Texture and Materials	CORE SKILLS: ● Understanding of Visual Effects ● Layering & Integration ● Color Grading ● Masking & Rotoscoping ● Tracking & Matchmoving	

LIGHTING, RENDERING & COMPOSITING (LRC)

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Lighting, Rendering and Compositing (LRC) department at Axis Studios. It outlines the fundamental skills/ knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

ROLES	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
Lighting Artist	Character Lighting	Using a fully modelled, textured and shaded character, demonstrate different lighting styles. Showcasing your understanding of light behavior, color theory, image composition, atmosphere & mood.
	Environment Lighting	Using a fully modelled, textured and shaded interior and exterior environments, demonstrate different lighting styles and showcase your understanding of light behavior, color theory, image composition, atmosphere & mood.
	Technical Knowledge (TD)	For those who prefer a TD position, knowledge such as pySide/QT, Maya API and C++ would be a plus.
[VFX] Compositor	Procedural Animation	Demonstrate the breakdown of moving 3D shots, showcasing their rendered and composited elements. Highlight the implementation of render layers and enhancement techniques aimed at elevating the realism of the shots. This demonstration underscores proficiency in composition, color theory, image properties, 2D tracking, blue/green screen extractions, layering, and color grading.

CASE STUDY #3 - DANIEL

ROLE: REAL-TIME LIGHTING ARTIST

PERSONAL
QUOTE

"Having a job you enjoy is honestly the best thing you can do in life."

STUDIO
PROGRESSION

Resource Assistant | Junior Lighting & Compositing Artist | Lighting & Compositing Artist

ADVICE TO
STUDENTS

"Hard work will always pay off. Although your showreel is important, you as a person can also help land your first step into the industry by showing how hard working and passionate you are. It's all about showing your potential.

Be patient and persistent, and if it takes a little longer, that's totally fine. Have faith in yourself and keep pushing."

After graduating from DJCAD with his degree in Animation, Daniel was hard at work balancing two jobs while constantly refining his showreel to pursue his true passion - the animation sector. Like many students, Daniel created a general showreel with the hope of casting a wide net for job opportunities. His first break into the industry came when Daniel joined Axis Studios as a Resource Assistant. This granted him the chance to get to know the different departments and speak to different artists and Heads of Department. Daniel credits this time as helping him pinpoint what he wanted to do, which was Lighting. Upon deciding Lighting was his chosen career, Daniel organised the usage of a computer within the studio to enable him to work and learn the software after hours. He worked on shots in his own time, and summoned the courage to ask the Head of Lighting to review his shots and consider Daniel for a project. The HOD was impressed and, with the support and influence of other line managers, Daniel started lighting on his first show. After working on a few projects (and consistently seeking new challenges!)Daniel requested the opportunity to work on an upcoming Real-time project, and thus became a core member of the Realtime department at Axis Studios. Daniel is a true believer of giving back the support he was given, helping out other people looking to transition into the artist side. He has begun leading and working between Realtime and pre-rendered work, as well as mentoring a lighting student this year through Axis Mentorship Program.

LIGHTING, RENDERING & COMPOSITING (LRC)
ADVICE

MASTERING THE BASICS

It is crucial for students to demonstrate a strong grasp of lighting fundamentals and techniques in order to be considered for roles within the LRC department. This means mastering the basics by simply practising, and then showcasing your proficiency in leveraging lighting features within 3D software application/s.

It's vital to acknowledge that the LRC Department seeks to evaluate your proficiency in leveraging lighting features within 3D software applications. Although game engines are valuable tools in our studio, it is imperative to initially showcase your foundational expertise in lighting within a 3D animation software package.

Diablo 2: Resurrected - Blizzard Entertainment

DISPELLING MISCONCEPTIONS

"STEM is imperative in the creation of animation"

Science, Technology, Engineering & Maths (STEM)

CONTINUE WITH 'RANGE OF ROLES'

Warframe, The Duviri Paradox - Hammer Creative

AXIS STUDIOS

PIPELINE + R&D

#INCLUDE; <INSERT.QUOTE>

Marvel Snap - Marvel / Disney

PIPELINE + R&D

DEPARTMENT SUMMARY

The Pipeline, Research and Development (R&D) Department plays a crucial role in the production process by collaborating with all departments to design, develop and maintain artist tools alongside core applications and services used by Axis Studios. These include: reviewing tools and delivery tools, production and asset tracking services, software environment management and more. Together, these systems form the building blocks that enable the data creation and flow required for delivery of final content.

DEPARTMENT RESPONSIBILITIES

The primary responsibility of the Pipeline, Research and Development (R&D) Department is to design, develop, implement, and maintain the production pipeline. The "pipeline" refers to the interconnected series of steps and tools that are used to manage and streamline the creation of animated content. The team acts as a bridge between the creative teams and the technical infrastructure of an animation studio.

Marvel Snap – Marvel / Disney

PIPELINE + R&D

ROLES WITHIN THE DEPARTMENT

Positions in this department can frequently appear under various titles. Among them, Pipeline Technical Director (TD) stands out as the most prevalent within the department. A Department TD is often referred to as a 'Technical Artist' — this is someone with an artistic foundation who has developed a technical leaning that enables the individual a dual perspective to offer a wider range of solutions to tackle technical challenges. R&D developers are akin to software developers, often focusing on longer-term and larger scale development projects.

APPLICATIONS & CODING LANGUAGES

Python is the principle coding language used in the Pipeline, Research and Development (R&D) Department. However, it is recommended for graduates to have some knowledge of one of the DCC - Digital Content Creation tools (such as; Houdini / Maya / Nuke).

PIPELINE + R&D ROLES

PIPELINE (TD) TECHNICAL DIRECTOR	DEPARTMENT (TD) TECHNICAL DIRECTOR	R&D DEVELOPER
PIPELINE TDs are responsible for addressing software problems, handling project focused tasks, managing the software environment, liaising with the show, overseeing ticket management, and facilitating escalations to R&D when necessary.	DEPARTMENT TDs are tasked with aiding the artists in their designated departments by creating tools that enhance their quality of work life and assisting in managing any technical hurdles that may emerge within the department or projects.	R&D DEVELOPERS work behind the scenes, handling long-term and high-level development projects, focusing on crafting new features, tools, and workflows. Their responsibility involves maintaining and adhering to coding standards.

SHARED PIPELINE + R&D CORE SKILLS:
Excellent communicator. Knowledge of: Python / GIt / Debugging / DCCs [Digital Content Creation tools] / ShotGrid / Jira

PIPELINE + R&D

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Pipeline, Research and Development (R&D) Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Python	Demonstrate a thorough understanding of Python by showcasing several examples of code you have written, edited and tested.
2	GIT	GIT is used as an industry standard software version control system for managing, sharing, reviewing and updating source code. Consider using providers such as GitHub, GitLab, or Bitbucket, to help showcase your code.
3	Debugging	Demonstrate your systematic process of identifying, analysing, and rectifying errors in software. Be sure to highlight any use of debugging tools that you used to diagnose and correct issues, and include screen captures of the software functioning as intended.
4	DCC [Digital Content Creation tools]	Demonstrate an understanding of at least one of the Digital Content Creation tools such as: Houdini, Maya and/or Nuke. An affinity and skill for a specific department can help in trying to decide upon Department Technical Directors.

PIPELINE + R&D ADVICE

SOFTWARE DEVELOPMENT FOR ANIMATION

While pursuing a career coding within an Animation studio might not appear as an obvious career choice, those who explore roles in the Pipeline, Research and Development (R&D) Department view it as a fusion of scientific expertise and creative problem-solving. It involves software development tailored for animation production, where many individuals often examine a single completed shot.

Each shot on screen carries a unique story from behind the scenes, encompassing the people involved, challenges encountered, and the solutions devised. It's crucial to recognise that the robust tools crafted by the Pipeline, Research and Development (R&D) Department leave a lasting legacy, serving multiple shows in the studio's ongoing projects.

A Man Called Otto -Sony US

PRODUCTION

"Where planning meets execution"

Valorant: Duality Official Lore Cinematic - Riot Games

PRODUCTION

DEPARTMENT SUMMARY

The Production Department, plans and oversees the entire timeline of projects, from pre-production all the way through to post-production. Producers, Production Managers, Production Coordinators, and Production Assistants work together to ensure that the project is completed on time, within budget, and to the highest quality standards. Project types include Short Form (trailers / cinematics / special projects like 'Love, Death & Robots'), Features, Episodic and VFX.

DEPARTMENT RESPONSIBILITIES

The Production Department is responsible for planning, executing and managing the logistical and administrative aspects of projects. Regularly liaising with both our clients and our internal teams, they ensure that projects are completed successfully, as planned, on budget, and that the experience is as smooth and enjoyable as possible for the wider project team.

League of Legends: Wild Rift - Riot Game

PRODUCTION

ROLES WITHIN THE DEPARTMENT

Roles within the Production Department are perhaps lesser known to students and graduates as potential career options. Two entry-level positions suitable for those in the early stages of a career are Production Coordinator and Production Assistant. These roles serve as integral support functions for the broader Production team, providing individuals with valuable opportunities to gain insights into studio operations and processes. The Production Assistant position is commonly regarded as an entry-level role, serving as a stepping stone for individuals aspiring to enter the field of production within the studio environment.

APPLICATIONS/TOOLS

The Production Department relies on various industry software in their daily work, with key applications listed below:

- Autodesk ShotGrid
- Microsoft Word, Excel and PowerPoint (or)
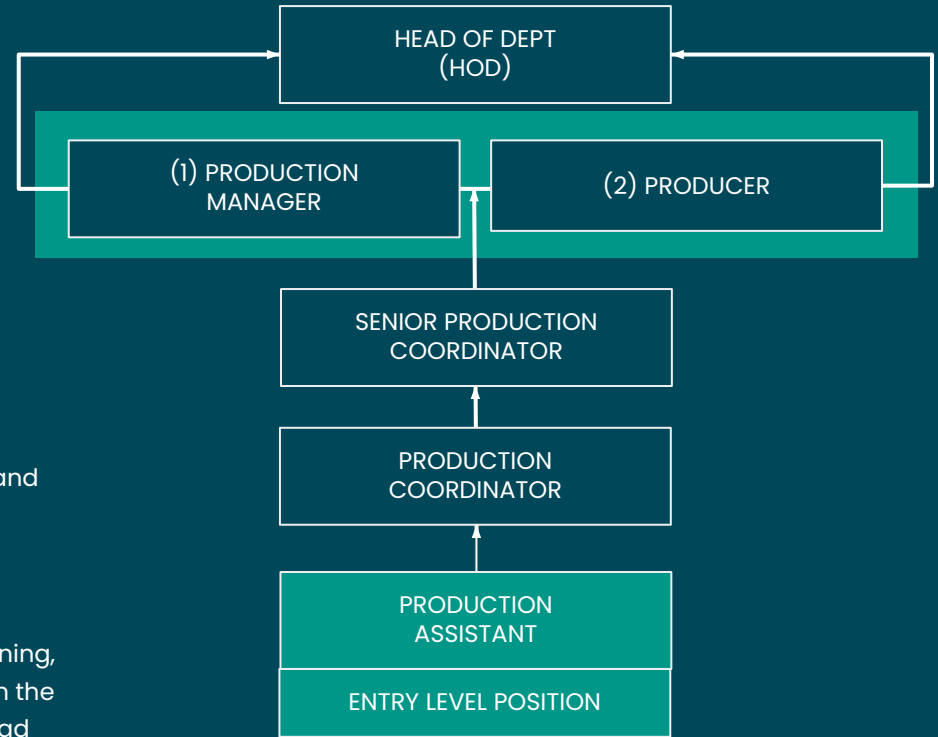- Google Docs, Sheets and Slides

PRODUCTION ROLES

PRODUCTION COORDINATOR	PRODUCTION ASSISTANT
A Production Coordinator provides support to the production management team and ensures the smooth operation of the production process across project's. They work closely with Leads and artists to execute the project's schedule and tasks.	A Production Assistant is the first step in developing a career in Production, providing valuable support to the production team by assisting with administrative tasks and general production support.
CORE SKILLS: • Understanding of Production • Planning and organising skills • Creative thinking • Strong communication skills • Strong presentation skills • Exceptional time management	**CORE SKILLS:** • Confident in planning and organising • Good time management • Strong communication skills • Presentation skills

PRODUCTION

PRODUCTION FLOW CHART OF ROLES

In this booklet, we have streamlined the organisational chart to emphasise the unique characteristics between two key roles within the Production Department: (1) Production Manager and (2) Producer. Both roles play an indispensable part within the department, with Producers typically steering the creative direction, and Production Managers primarily managing the execution and operational aspects.

- Producers Producers are primarily focused on the creative, client and financial aspects of a project, always staying within budget and schedule. They provide the main point for client contact, and are responsible for the overall strategy for a successful delivery.

- Production Managers concentrate on the schedule, resource planning, day-to-day logistics and operational aspects. They tag-team with the Producer to successfully run a larger project by maintaining a broad overview of all project departments.

```
                    HEAD OF DEPT
                       (HOD)

    (1) PRODUCTION              (2) PRODUCER
      MANAGER

            SENIOR PRODUCTION
              COORDINATOR

                PRODUCTION
                COORDINATOR

                PRODUCTION
                 ASSISTANT

            ENTRY LEVEL POSITION
```

Above, is an example of a simplified flow chart for Production project roles/hierarchy.

PRODUCTION

FOUNDATION KNOWLEDGE

This page is dedicated to essential foundational knowledge relevant to the Production Department at Axis Studios. It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Presentation Skills	Presentation skills can often be overlooked, but they encompass the art of conveying ideas engagingly to an audience. Presentation skills involve clear content organisation, confident body language, varied vocal delivery, and the construction of effective visual aids.
2	Time Management	Time management skills involve effectively prioritising tasks, setting goals, planning schedules, and allocating time to various activities. It requires organisation, focus, and the ability to balance competing demands with resilience.
3	Communication Skills	Communication skills are the ability to convey information, thoughts, and emotions effectively. They encompass clear expression, active listening, empathy, and adapting to various contexts.
4	Team Working Skills	Teamwork skills involve collaborating harmoniously with others to achieve shared goals. They encompass effective communication, active listening, conflict resolution, and the ability to contribute positively to group dynamics.
5	Planning and Organisation Skills	Planning and organisational skills entail efficiently structuring tasks, setting priorities, allocating resources, and scheduling activities.
6	Creative and Solution Focused Problem Solving	Solution-focused problem solving involves identifying practical resolutions to challenges. It centres on understanding the problem, envisioning desired outcomes, and devising actionable steps to achieve them.

CASE STUDY #4 - MARION

ROLE: PRODUCTION ASSISTANT

PERSONAL QUOTE

"Everything came together once I decided what I wanted to do and what I was good at"

STUDIO PROGRESSION

Talent Assistant | Receptionist Administrator | Contract Administrator | Studio Administrator | Production Assistant

ADVICE TO STUDENTS

"Indulge in what you enjoy and have passion for."

"Don't hold yourself back from what you want to do, but don't expect someone to offer you the opportunity. You have to go after it".

MARION'S STORY

Marion is the first to admit that she did not have an easy time breaking into her chosen industry - especially in the beginning! - but she accepts that it is all part of the journey. Having overcome a 10-year childhood chronic illness, which prevented her from completing her secondary education, Marion was determined to make up for lost time. As Marion graduated from college (twice!), and finished her HND while pregnant. When life calmed a little and her daughter started primary school, Marion decided to go back to college to study Visual Communication, which led her to pursue her Computer Animation Arts degree at UWS. It was during her Animation Production unit at university that her personality began to shine through in her art, and she was elected as a Team Leader, which gave her a taste of production coordination. Seeing potential in her, Marion's lecturer put her forward for work experience in the Talent Team at Axis Studios. Marion immediately fell in love with the people and the environment. Once her foot was in the door at Axis, Marion saw the range of possibilities available to her. She continued to work at Axis part-time while finishing her degree, contributing to various departments. After graduating, Marion worked with the Studio Team and became a permanent member of the Axis team. After receiving particularly positive feedback, she found that her personality and working style best suited the Production Department.

PRODUCTION ADVICE

SHOWCASING YOUR SKILLS

To help demonstrate and showcase the skills listed in the foundation level knowledge page. Consider recording yourself as a project presentation video with visual aids. In this video, be sure to include practical examples and explanations that highlight how you applied specific skills at various stages of a project.

Think of this as your 'Production Portfolio', which demonstrates the foundational knowledge and skills you need to apply for a entry level production role;

- Presentation Skills
- Time Management
- Communication Skills
- Team Working Skills
- Planning and Organisation Skills
- Creative and solution Focused Problem Solving

HALO INFINITE: Story - Microsoft

STUDIO VITAL ROLES

"Vital by name, vital by nature"

League of Legends: Project Hunters - Riot Games

STUDIO VITAL ROLES

SUMMARY

"Studio Vital Roles" is a collective term for several teams within Axis Studios that are responsible and essential for the daily running of the studio. Without them, the studio would come to an abrupt halt.

Studio vital roles includes the following Departments and Teams:

- PEOPLE & CULTURE
- TALENT (RECRUITMENT)
- CREW
- FINANCE
- MARKETING
- TECHNOLOGY
- FACILITIES

These vital roles work together to support the creative and technical aspects of all projects by managing resources, assisting in meeting production objectives, advising departments, telling the unseen story of the Studio and delivering our high-quality content. Their expertise contributes to the overall success of the Studio and its projects. While not every Studio has this collection of roles and teams, we could not imagine Axis Studios without them.

Diablo: Immortal - Blizzard Entertainment

STUDIO VITAL ROLES

OVERVIEW OF TEAMS WITHIN STUDIO VITAL ROLES

PEOPLE & CULTURE	TALENT	CREW	FINANCE	MARKETING	TECHNOLOGY TEAM	FACILITIES
The People and Culture Team are responsible for the entire employee experience journey, from entry to exit and everything in between. They support and advise all our people, as well as supporting the culture and work environment we cultivate within the studio.	The Talent Team has an overview across all the different departments of the studio, helping to fill recruitment gaps and needs within the production pipeline as and when they occur.	The Crew Team is responsible for the overall allocation of crew members and suppliers to our various projects. They keep track of project milestones and the changes that often occur.	Our Finance Team analyses, collects and evaluates the numbers behind the Axis machine, from invoice processing to payroll and business analysis.	The Marketing Team is involved in all internal and external communications at the studio. With a flair for analytics and strategy, our Marketing team wears many hats!.	The Technology Team ensures that the studio's technology resources are secure, reliable, and efficient, allowing the artists and production teams to work safely and effectively.	The Facilities Team manages the physical infrastructure and maintains a safe and functional work environment, supporting the needs of the employees.

STUDIO VITAL ROLES

FOUNDATION KNOWLEDGE

This This page is dedicated to essential foundational knowledge relevant to the Studio Vital Roles teams at Axis Studios.

It outlines the fundamental skills/knowledge that students or graduates should showcase when applying for a position within this department.

While not an exhaustive list, it can be used as a springboard for students and graduates interested in pursuing a career within the Animation/VFX Industry.

No.	Foundation Knowledge	How to demonstrate FOUNDATION KNOWLEDGE
1	Curriculum Vitae (CV)	Provide an up- to- date CV which showcases your skillset/s (both Primary & secondary), work experience and education. Be sure to include a personal statement, taking care to highlight any information you believe to be especially relevant to your application.
2	Cover Letter	Provide a cover letter which is bespoke to the role you are applying for. Pay special attention to highlight any experience/s you believe strengthens your application. Some also use this opportunity to provide further information about themselves and their particular career ambitions.
3	Highlight Skills and Interests	This is an excellent opportunity to highlight any skills or interests in specific topics or departments. This better informs the studio of your career aspirations beyond the entry role you are applying for.
4	Professional Qualifications	Certain roles within the Vital Studio Roles require applicants to hold specific professional qualifications before applying. *Please check job roles for these requirements.

Diablo: Immortal - Blizzard Entertainment

STUDIO VITAL ROLES ADVICE

CAREER & ENTRY LEVEL ROLES

The career options are as diverse as the range of the positions available within the Studio Vital Roles. Most teams within Studio Vital Roles are centred around interpersonal roles, whether they involve interactions with clients, the public, studio personnel, or a combination. The emphasis is on working with people and problem solving. Vital roles that are also entry level roles can be an excellent opportunity for those leaving education and/or looking into a complete career change. They allow you to be immersed in a highly creative environment whilst also building core skills for the Animation/VFX industry.

*See next page for a list of ENTRY LEVEL ROLES.

APPLICATIONS/TOOLS

Each team in Studio Vital Roles utilities specific software. This varies from team to team. For day-to-day general studio tasks and communication, knowledge of Microsoft Word, Excel and PowerPoint (or) Google Docs, Sheets and Slides, and Adobe Suite are ideal.

STUDIO VITAL ROLES - ENTRY LEVEL ROLES

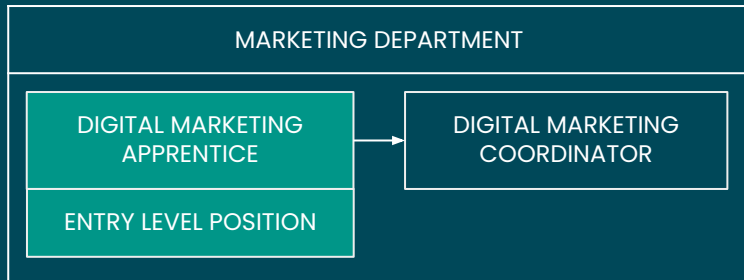| HUMAN RESOURCES (HR) ASSISTANT	DESKTOP SUPPORT	CREW COORDINATOR	TALENT COORDINATOR	FACILITIES ASSISTANT	DIGITAL MARKETING APPRENTICE
PEOPLE & CULTURE	TECHNOLOGY TEAM	CREW	TALENT	FACILITIES	MARKETING
HR Assistants help sort all the employee contracts, deal with requests for help, maintain vital employee records and ensure the smooth operation of the People and Culture Team.	Desktop Support provides technical assistance and troubleshooting for computer users, ensuring hardware and software operate smoothly.	Crew Coordinators assist in the allocation of studio/crew members and suppliers to our various projects. They also keep track of important changes and milestones.	The primary duty of the Talent Coordinator is to support the studio's recruitment needs by actively seeking and recruiting freelance artists.	Facilities Assistant is an entry-level position that combines technical, administrative, and creative support duties through supporting the studio and production teams.	A Digital Marketing Apprentice assists in executing online marketing campaigns. They also analyse data, manages social media, and learns various digital marketing techniques on the job.

SHARED CORE SKILLS:
Excellent communicator / well organised / eager to learn / able to multitask
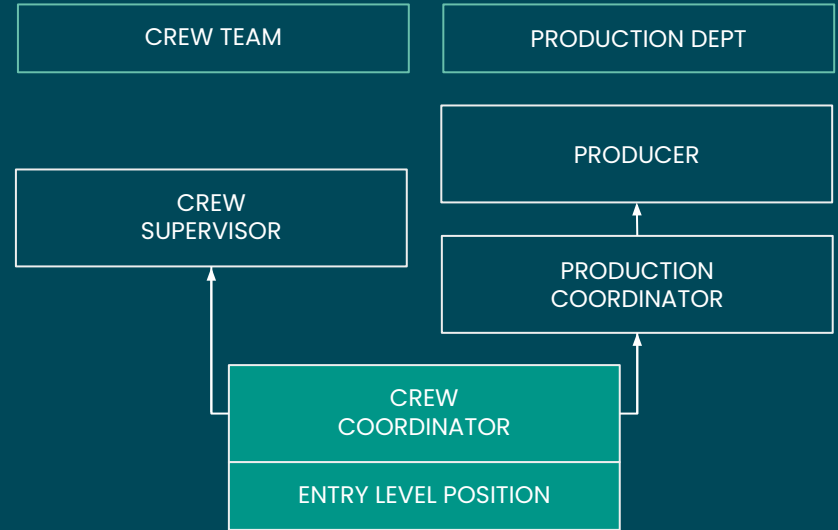
STUDIO VITAL ROLES

ENTRY LEVEL ROLES - CAREER DEVELOPMENT

Some Entry Level roles have a clear department progression route - for example, a Digital Marketing Apprentice (BELOW) would progress within the Marketing Department. Other roles offer more diversity. For example, a Crew Coordinator (RIGHT) can utilise their transferable skills and experience of overseeing the allocation of talent across several departments and projects, into two possible career pathways - they could opt for, a career progression into Crew Supervisor, but alternatively, they may prefer to become a Production Coordinator within the Production department.

Example 1: Digital Marketing Apprentice progression route

MARKETING DEPARTMENT	
DIGITAL MARKETING APPRENTICE	DIGITAL MARKETING COORDINATOR
ENTRY LEVEL POSITION	

Example 2: Crew Coordinator career pathways

CREW TEAM	PRODUCTION DEPT

CREW SUPERVISOR	PRODUCER
	PRODUCTION COORDINATOR
CREW COORDINATOR	
ENTRY LEVEL POSITION	

Above is an example of the potential career development routes for Crew Coordinators.

CHAPTER 3:

HOW TO APPLY

League of Legends: Project Hunters - Riot Games
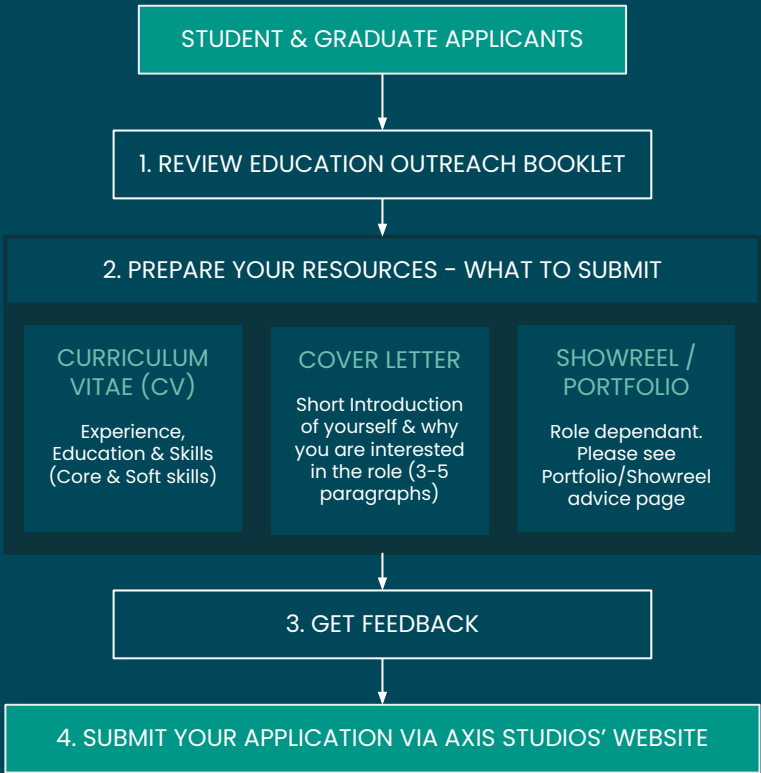
HOW TO APPLY?

SUBMITTING YOUR APPLICATION

We would encourage all students and graduates eager to submit an application to Axis Studios to read through this booklet carefully to learn more about the industry, our studio and the various roles we have in each department. To apply directly, please use the Careers page on the Axis Studios website. For information on Axis' Mentoring Program, please refer to Chapter 4 and consult with your College/University course leader.

We have created a simplified graphic (left) to help illustrate and explain the application process. We strongly recommend that students and graduates seek as much feedback as possible on their portfolio or showreel before applying in order to present their best work. Axis Studios frequently provides portfolio reviews at various events and festivals, which can also help to provide valuable interview and presentation practice.

STUDENT & GRADUATE APPLICANTS

↓

1. REVIEW EDUCATION OUTREACH BOOKLET

↓

2. PREPARE YOUR RESOURCES - WHAT TO SUBMIT

CURRICULUM VITAE (CV)

Experience, Education & Skills (Core & Soft skills)

COVER LETTER

Short Introduction of yourself & why you are interested in the role (3-5 paragraphs)

SHOWREEL / PORTFOLIO

Role dependant. Please see Portfolio/Showreel advice page

↓

3. GET FEEDBACK

↓

4. SUBMIT YOUR APPLICATION VIA AXIS STUDIOS' WEBSITE

The View Conference

HOW TO SPECIALISE

CHOOSING YOUR SKILLSET

If you're having a hard time trying to decide where to specialise your skillset or perhaps you are looking for more direction on what to do after your Education. We have listed a couple points [below] to help get you get started. Think about what you'd like to do after graduating, and working backwards from there.

FIRST STEPS TO GET YOU STARTED

- Gather up your best work for either a portfolio or showreel (dependant on your chosen speciality).
- Get as much feedback as possible (to help identify your strongest work).
- Analyse what are you good at?
- Research studio roles and the Quality bar
- Do you have the Foundation knowledge?
- Do your Core skills align?

DISPELLING MISCONCEPTIONS

"THERE IS NO RIGHT OR WRONG CAREER PATH. ONLY THE RIGHT PATH FOR YOU."

SEE 'STUDIO ROLE INDEX'

Palia - Singularity 6

AXIS STUDIOS

PORTFOLIO ADVICE

GENERAL ADVICE

- Ensure you have your name and contact information clearly attached / on display on your portfolio.

- Your portfolio should clearly communicate the type of work you are interested in and want to do.

- Prioritise quality over quantity with regards to portfolio pieces.

- Place your best work at the top and try to show progression between each piece.

- Showcase your preferred and range of visual styles.

ARTSTATION (www.artstation.com)

- Artstation is a great platform for constructing your portfolio, which is free, easy to use and accessibility to share with future employers. Please note, Artstation requires users to be at least 18 years old.

DEPARTMENT ADVICE

ART & DMP

- Don't be afraid to show your exploratory sketches that support your final pieces.

- Orthographic and call out sheets are a bonus.

- Character Concept Artist - should have a minimum of 6 characters. Convey each character's personality and role/purpose. Pay attention to proportions, anatomy, form and shape language.

- Vehicles Concept Artist - should have a minimum of 6 vehicles. Designs should communicate each vehicle's function.

- Props Concept Artist – Should have a mix of 10 small, medium and large props. Keep in mind how function and ergonomics influence design.

- Environments Concept Artist – design 3 environments. Clearly communicate the purpose and functionality of the space through design.

- Digital Matte Painter - should have 6 DMPs at 4K resolution.

PORTFOLIO ADVICE

DEPARTMENT ADVICE

CHARACTERS & GROOM

- Three good pieces will always be preferable to eight lower quality ones.

- Demonstrate you can model and texture props & objects to a good standard is important.

- Character modelling - Showcase a minimum of 3x detailed models with wireframes.

- Character texturing - Demonstrate your use of either stylised or realistic surfaces & textures, on a minimum of 3x objects.

DEPARTMENT ADVICE

ENVIRONMENTS

- Showcase a range of textured and lit assets, as still images from several angles.

- Showreels can be useful in demonstrating fly throughs of environments or turntables of objects. But are not essential.

- Environments modelling - Showcase a minimum of 3 detailed asset models with wireframes.

- Environments texturing - Demonstrate your use of either stylised or realistic surfaces & textures, on a minimum of 3 objects.

SHOWREEL ADVICE

GENERAL ADVICE

- Ensure you have your name and contact information clearly displayed at the beginning and end of your showreel.

- Prioritise quality over quantity for showreel pieces.

- Showreel runtime of 40-50 (max) seconds, unless otherwise stated in department advice.

- The emphasis is on demonstrating your foundation knowledge for a specific department. Please see chapter 2 'Range of roles' for more information on foundation knowledge for each department.

- Highlight your contribution for any group project work. Such as a breakdown of the final images / shots.

VIMEO (www.vimeo.com) / YOUTUBE (www.youtube.com)

- Either Vimeo or YouTube are great resources to upload your showreel to. Keeping in mind, Vimeo does not have adverts and allows for better quality videos.

DEPARTMENT ADVICE

EDITORIAL

- Showreel length of 60-90 seconds.

- Demonstrating both (1) a montage cut to music, and (2) a full piece or number of sequences.

- Showing a variety of work, sound effects & chosen editing style.

CFX & RIGGING

- Showreel length of 3-5 minutes.

- Having a mixture of finished render shots as well as shots of your setups.

- Self developed Tool/Script showcases are beneficial too.

SHOWREEL ADVICE

DEPARTMENT ADVICE

LRC (Lighting, Rendering & Compositing)

- Aim to demonstrate the real life photography lighting principles, applied into CG images.

- Consider adding a color script and/or a lighting reference within a project.

- Character Lighting - Using a fully modelled, textured and shaded character, demonstrate 3x distinct lighting styles.

- Environment Lighting - Using a fully modelled, textured and shaded interior and exterior environments, demonstrate 3x distinct lighting styles.

- [VFX] Compositor (Procedural animation) Demonstrate the breakdown of 3 moving 3D shots. Which have been rendered and then composited and include render layers and enhancement techniques you have employed to increase the believability of the shots.

CURRICULUM VITAE (CV) ADVICE

GENERAL ADVICE

- Ensure you have your name and contact information clearly attached / on display on your CV.

- Your CV is your story and should clearly communicate any skills (Core or Soft Skills) and work experience you believe is relevant to your application.

- Previous experience of working in a Studio or in the Animation industry is not essential but can be a bonus.

- You should also include a cover letter that is unique to the Studio & the role you are applying for - why Axis Studios?

CV TEMPLATES

- There are various free CV templates available online, which can be easily adapted to suit the individual and the department they are applying for.

DEPARTMENT ADVICE

PIPELINE & R+D

- You should include examples of your coding, such as GIT links with your CV.

- You are encouraged to include examples of your 'code in practice' via screen capture as a showreel.

CHAPTER 4:

MENTORING

New World: Rise of the Angry Earth - Amazon Studios

AXIS STUDIOS

AXIS MENTORSHIP PROGRAM

SUMMARY

The Axis Mentoring Program is a student-led opportunity that welcomes those in their final year of study to work with an Axis mentor in their chosen field throughout the academic term. Axis Studios artists generously volunteer up to one hour of weekly feedback, enabling students to seek specialised technical guidance from an industry expert. Both institute course leaders and mentees have reported significant improvement in student work since beginning the mentoring program.

Students who have completed the Axis Mentoring Program have subsequently secured positions either directly within Axis Studios or the broader industry after graduation.

*For more information please contact your course leader or tutor.

Playgrounds - The Art Department

AXIS MENTORSHIP PROGRAM

DEPARTMENT MENTORING BRIEFS

In order to be considered for the Axis Studios Mentoring program, candidates should be in their final year of study and must submit a response to at least one of the Department mentoring briefs, which are specific to each department.

We have prepared an 11-minute video presentation that provides a comprehensive overview of the Mentoring program and should help answer the majority of questions - please watch here.

Mentees & Mentors at the MENTORING WRAP PARTY 2023

Environments Mentoring brief

You are tasked to select an environment from a project Axis has created in the past and recreate it in another style of an Axis project. This could be an interior or exterior environment. The environment should be modelled, textured, and shaded. Think carefully about the scale and type of environment you select. Please provide reference for the style and example project you have selected.

- Create a fly-through of the environment to present it.

- Top tip - only model/texture what the camera sees/gets close to.

- We would like to see base model, wireframe, textured and shaded versions of the environment.

Above, is an example of one of the department mentoring briefs. In this case the Environments mentoring brief.

List of Institutes affiliated with Axis Studios' Mentoring program 2023/24

Abertay University

University of Dundee

UNIVERSITY OF THE WEST of SCOTLAND
UWS

GCU
Glasgow Caledonian University

Edinburgh Napier UNIVERSITY

CITY OF GLASGOW COLLEGE

AXIS MENTORSHIP PROGRAM

AFFILIATES & STUDIO STATEMENT

"The Axis Mentorship Program has been a long-standing gateway into growing talent for the future, as well as allowing our staff the opportunity to develop their feedback skills.

We have seen Mentees develop into Senior roles with Axis Studios, as well as the broader industry. Offering support to those facing similar challenges has consistently been a fulfilling practice and is regarded as an integral aspect of Axis Studio's culture."

Bruce Sutherland, Head of CG (Animation division)

THE STUDIO

THE CULTURE AT AXIS STUDIOS

You can ask anyone here at Axis, what is their favourite thing about working at Axis Studios is, and they will all say the people (second is the great range of projects we work on for our amazing clients). We are a humble and warm bunch, and we have worked hard to maintain a very special and inclusive culture where everyone is comfortable to be themselves, feels supported, and therefore they bring their best self to work every day.

We nurture our talent, everyone has a voice and we don't do ego's, this is probably why people stay with us for longer than the industry average and really grow their careers here. Our people make the world more interesting; we are passionate, fearless and always on the quest to crack great creativity. So whilst working hard for our clients, at Axis Studios we make sure we look after our people because they are our most important asset.

Houdini Connect Feature

NETWORKING

VISITING EVENTS & GETTING FEEDBACK

Axis Studios makes a point to attend festivals and events, both locally and internationally. At the events, our team participates in portfolio reviews, panel discussions & presentations. We pride ourselves on having a welcoming and supportive environment and we are always happy to help.

We regularly host various internal social events to help balance the fast paced nature of our industry, these include; roundtable discussions, social clubs, monthly screenings, guest talks and town hall meetings - which allows the studio to share updates on recent projects & events.

- Keep an eye out on our website and social media platforms, for more information on where we are presenting & visiting.

- The reason we are at events is to support and inform, so don't be shy come up and say hi!

FMX — Film & Media Exchange

FINAL MESSAGE

WE SINCERELY HOPE THE INFORMATION CONTAINED IN THIS BOOKLET PROVES HELPFUL & USEFUL TO YOU ON YOUR CAREER JOURNEY.

AXIS
STUDIOS

*Please consider the environment before printing this booklet.

AXIS STUDIOS:
EDUCATION OUTREACH BOOKLET
2024

For more information please contact

Jon Mortimer, Education and Early Careers Advisor.

jonathanmortimer@axisanimation.com

axisstudiosgroup.com

CG
7.1, Skypark 1
8 Elliot Place
Glasgow
G3 8EP

VFX
The Bottle Yard Film Studios
Whitchurch Lane
Bristol
BS14 0BH

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