



MINISTRY OF HUMAN RESOURCES



**IndSF** | INDUSTRIAL SKILLS  
FRAMEWORK

# INDUSTRIAL SKILLS FRAMEWORK (IndSF)

DIGITAL TECHNOLOGY  
(ANIMATION)

Second Edition

IN COLLABORATION WITH:



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**Wisma HRD Corp, Jalan Beringin, Bukit Damansara, 50490 Kuala Lumpur.**

Tel : 1300 88 4800

Fax : +603 2096 4999

Email : [support@hrdcorp.gov.my](mailto:support@hrdcorp.gov.my)

Website : [www.hrdcorp.gov.my](http://www.hrdcorp.gov.my)

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# ▶ **TABLE OF CONTENT**

---

**1. Acknowledgement** 3

---

**2. Industrial Skills Framework (IndSF) Taskforce** 4

---

**3. The Animation Pipeline** 5

---

**4. Overall Career Pathways** 6

---

**5. Pre-Production** 8

---

**6. Production** 18

---

**7. Post-Production** 41

---

**8. Sound & Audio** 49

---

**9. C-Level** 55

---

**10. Appendix** 69

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Universiti Teknikal Malaysia Melaka

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- ➔ **Anthony Raja Devadoss**  
Persatuan Industri Komputer dan Multimedia Malaysia (PIKOM)

# INDUSTRIAL SKILLS FRAMEWORK (IndSF)

## TASKFORCE



➔ **CHIEF STRATEGY OFFICER  
(COVERING CHIEF EXECUTIVE)**

**Dr. Rony Ambrose Gobilee**



➔ **HEAD OF INDUSTRY INSIGHTS  
DEPARTMENT**

**Dr. Kalai Vani A/P Maniam**



➔ **TEAM MEMBERS**

**Jeremiah Fernandez**

**Aiman Nabil bin Noressam**

**Thilagaa A/P Rajanthren**

**Norfatiha Sahira binti Sabrom**

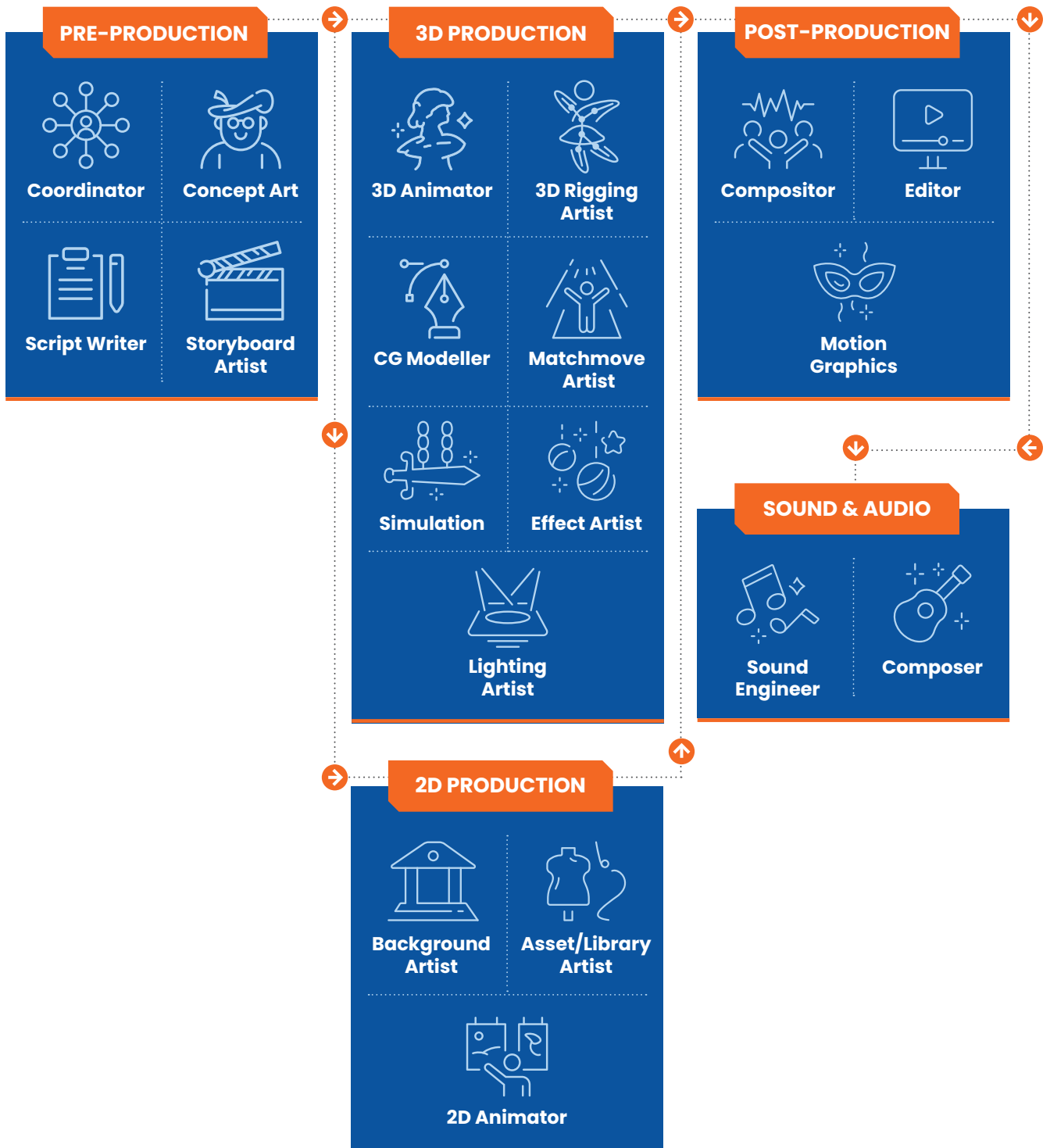
**Muhammad Hafizh bin Mohd Zahrain**

**Vasanthaan A/L Ponniah**

**Suria binti Musa**

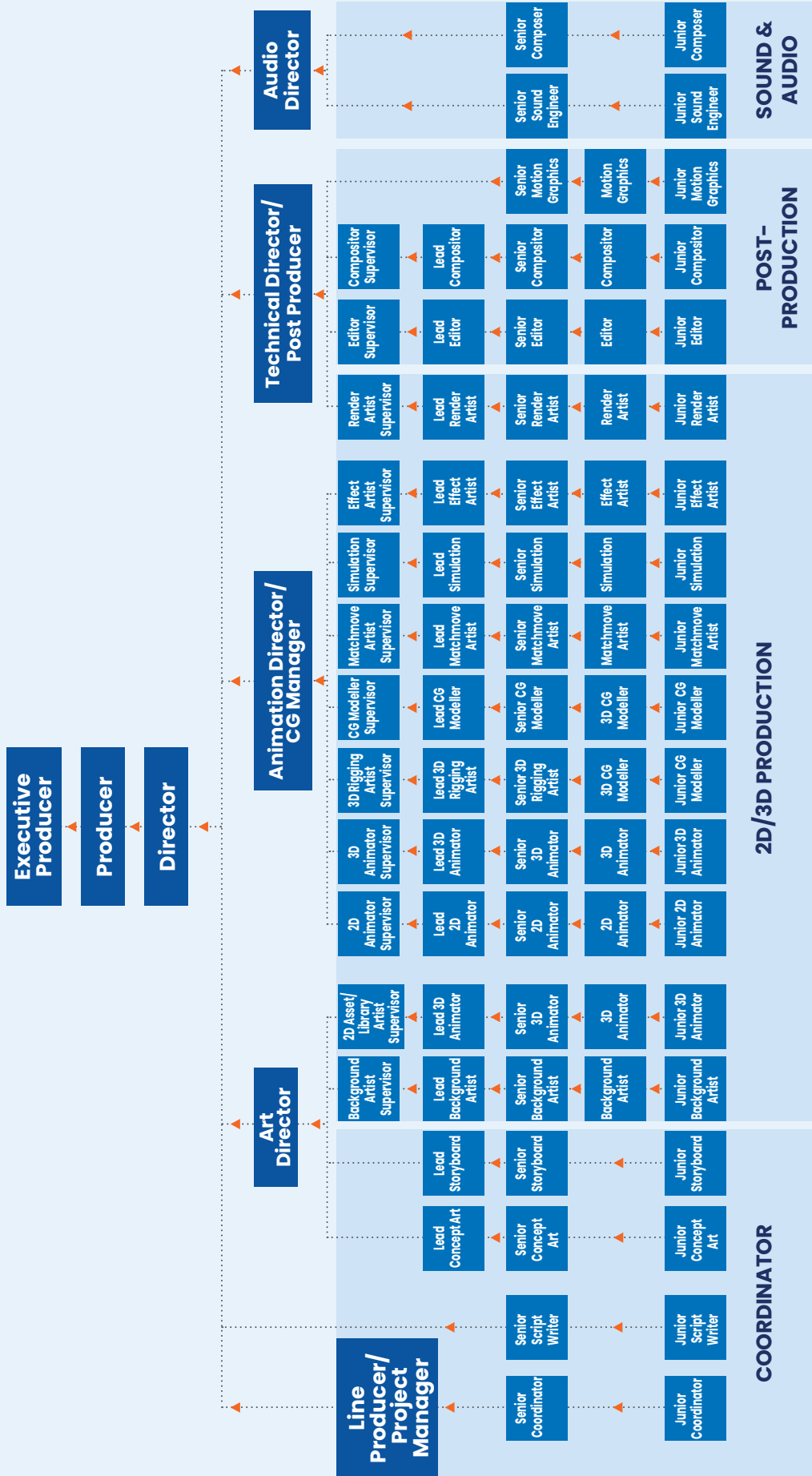
**Mohammad Asyraf bin Mohammad Nazir**

# THE ANIMATION PIPELINE



# OVERALL CAREER PATHWAYS

## ► IndSF DIGITAL TECHNOLOGY ANIMATION



# ANIMATION CAREER PATHWAYS INFO

## NOTE:

1. The animation career pathways can involve both vertical and horizontal movement, depending on your goals and the opportunities you pursue:
  - a. Vertical Movement:**
    - This involves climbing the career ladder within a specific area of expertise. For example:
      - Junior Animator > Animator > Senior Animator > Lead Animator > Supervisor Animation > Animator Director
      - This progression typically reflects increased responsibility, expertise and leadership within the same field.
  - b. Horizontal Movement:**
    - This involves branching out into different roles or areas within the animation industry to diversify skills. For example:
      - Moving from 2D animation to 3D animation, transitioning to storyboarding, character design, or technical roles like rigging or VFX.
      - Horizontal moves allow you to gain broader expertise and can make you more versatile and marketable.
2. Many animators blend both approaches throughout their careers, progressing vertically while also making horizontal shifts to explore new opportunities or specialise in emerging technologies.
3. The career map outlines job roles and potential paths in the animation industry, which can vary by company structure. Career progression depends on individual performance, skills, experience, aspirations and organisational needs.
4. Becoming an animator offers various advantages, even without a formal education. In the animation industry, your portfolio, creativity and technical skills are typically valued more than credentials.



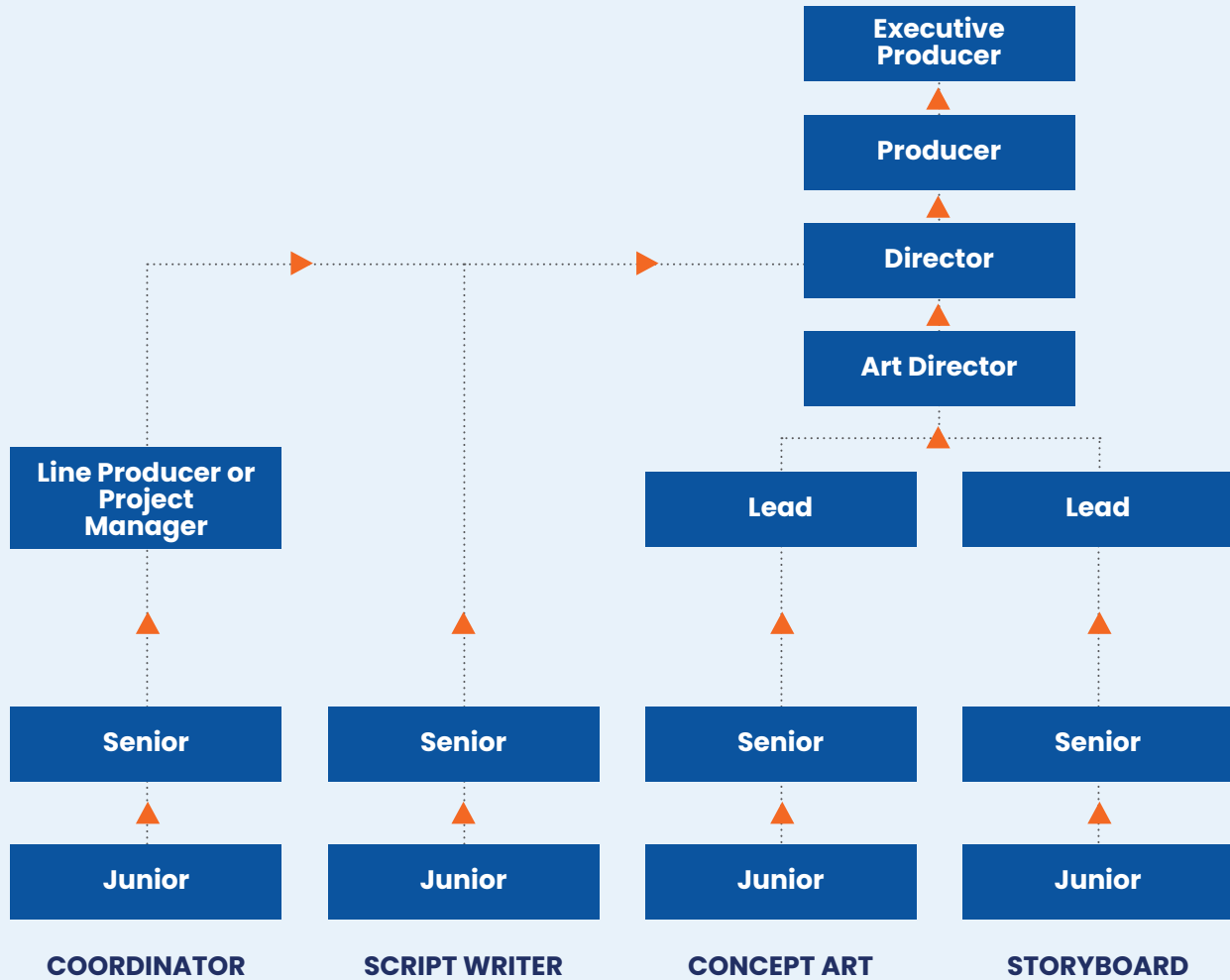
# **PRE-PRODUCTION**

**Once the funding and legal agreements are in place, the animation project is greenlit and enters pre-production. At this stage, the concept is developed, a script is drafted, storyboards are created and designs for all elements in the script are finalised.**

# CAREER PATHWAYS

## IndSF DIGITAL TECHNOLOGY ANIMATION

PRE-PRODUCTION





# COORDINATOR

PRE-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A Project Coordinator ensures that animation projects are completed on time, within scope and on budget, including administrative tasks, communication, and project management.

## RESPONSIBILITIES:

- Assist in the planning, scheduling and tracking of animation projects.
- Monitor project timelines and deliverables, ensuring deadlines are met.
- Maintain project documentation, including schedules, task lists and status reports.
- Act as liaison between various departments, including art, animation and production teams.
- Facilitate communication between the creative team and external clients or stakeholders.
- Schedule and coordinate meetings, take notes and distribute action items.
- Help allocate resources, including animators, artists and technical staff based on project needs.
- Track the availability of team members and freelancers to ensure the right resources are assigned to tasks.
- Manage project files, ensuring that all assets are organised and accessible.
- Prepare and distribute project-related documents such as scripts, storyboards and animatics.
- Assist in the review of animation outputs to ensure they meet project specifications.
- Coordinate feedback loops between clients and the creative team, ensuring revisions are addressed.
- Identify potential risks and issues that may affect project timelines or quality.
- Work with the Project Manager or Production Manager to oversee projects and timelines.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Coordinator	No	Certificate in Animation	Fresh entry	3	3
Coordinator	No	Diploma in Animation or relevant field	>3–5 years	4	4
Line Producer or Project Manager	No	Degree in Animation or relevant field	>5 years	4,5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# COORDINATOR

PRE-PRODUCTION

## CORE SKILLS:

- Project and file management skills
- Scheduling, planning and reporting
- Task prioritisation and tracking progress
- Technical proficiency in project management software, file formats and specifications
- Deadline management
- Workflow optimisation
- Risk identification and contingency planning
- Interdepartmental and team coordination
- Mediation and conflict resolution
- Budget management

## SOFT SKILLS:

- Time management
- Task delegations
- Portfolio development
- Creativity
- Attention to detail
- Technical adaptability
- Effective communication
- Problem-solving skills
- Storytelling skills
- Teamwork or working with others

## TOOLS:

- **Project Management:**
  - ◊ ShotGrid, Jira, Trello, Teamwork, Asana, Monday.com or Microsoft Project.
- **Communication:**
  - ◊ Slack, Microsoft Teams, Google Meet, Skype, Zoom or Discord.
- **File sharing and collaboration:**
  - ◊ Google Drive, Dropbox, OneDrive or Frame.io.
- **Scheduling and time management:**
  - ◊ Google Calendar, Microsoft Outlook or Calendly.

## RECOMMENDED CERTIFICATION:

- Relevant animation/multimedia/project management certifications from any education Institution.
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia



# SCRIPT WRITER

PRE-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A script writer creates compelling story narratives and dialogues for animations, ensuring engaging and coherent storylines for animated projects.

## RESPONSIBILITIES:

- Develop and write scripts for animation projects.
- Create engaging stories, dialogues and character interactions.
- Collaborate with directors and animators to align script with visual elements.
- Revise and edit scripts based on feedback.
- Ensure coherence and continuity in the storyline.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Script Writer	Yes	Certificate in Creative Writing	Fresh entry	2,3	3
Senior Script Writer	Yes	Diploma/Degree in Creative Writing or relevant field	>3–5 years	4	5,6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# SCRIPT WRITER

PRE-PRODUCTION

## CORE SKILLS:

- Understanding storytelling and narrative development pacing and dramatic timing.
- Dialogue writing and character development.
- Understanding of animation and visual storytelling.
- Script formatting and structure.
- Adaptability to different genres and styles.
- Research

## SOFT SKILLS:

- Creativity and imagination.
- Strong communication and collaboration.
- Attention to detail and narrative consistency.
- Ability to incorporate feedback.
- Time management and organisation.
- Observational skills

## TOOLS:

- **Scriptwriting Software:**
  - ◊ Final Draft, Celtx and Studio Binder
- **Collaboration Tools:**
  - ◊ Google Docs and Microsoft Word

## RECOMMENDED CERTIFICATION:

- **TVET Certifications for Animation in Malaysia:**
  - ◊ Certificate in Creative Writing



# CONCEPT ART

PRE-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A concept artist designs visual ideas and concepts for animation projects, creating detailed art to guide production.

## RESPONSIBILITIES:

- Research to gather reference materials.
- Create visual concepts and designs for animation projects.
- Develop character designs, environments and props.
- Work closely with directors and animators to establish visual style.
- Produce concept art and illustrations for project reference.
- Revise designs based on feedback and project needs.
- Present and explain concepts to stakeholders, incorporating feedback and making adjustments as needed.
- Manage and organise concept art assets.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Concept Art	Yes	Certificate in Animation	Fresh entry	2,3	3
Senior Concept Art	Yes	Diploma in Animation or relevant field	>3–5 years	4	5
Lead Concept Art	Yes	Degree in Animation or relevant field	>5 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# CONCEPT ART

PRE-PRODUCTION

## CORE SKILLS:

- Strong drawing and illustration abilities.
- Proficiency in visual storytelling and design.
- Understanding of animation techniques and principles.
- Ability to create detailed and imaginative concept art.
- Knowledge of color theory and composition.
- Creativity and artistic vision.

## SOFT SKILLS:

- Effective communication and collaboration.
- Attention to detail and design consistency.
- Flexibility and adaptability to feedback.
- Strong time management and organisation.

## TOOLS:

- **Adobe Photoshop**
- **Adobe Illustrator**
- **Adobe Animate**
- **Krita**
- **Paint Tool Sai**
- **Procreate**
- **Other digital art software**

## RECOMMENDED CERTIFICATION:

- **TVET Certifications for Animation in Malaysia:**
  - ◊ Certificate in Creative Multimedia



# STORYBOARD

PRE-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Translating scripts and concepts into visual narratives by creating detailed storyboards that outline the sequence of events and character actions to guide the animation process.

## RESPONSIBILITIES:

- Ability to translate scripts into storyboards to outline scenes and sequences for animations.
- Develop visual representations of key moments, camera angles and character actions.
- Collaborate with directors and animators to ensure alignment with the project's vision.
- Revise storyboards based on feedback and project requirements.
- Ensure continuity and clarity in visual storytelling.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Storyboard	Yes	Certificate in Animation	Fresh entry	2,3	3
Senior Storyboard	Yes	Diploma in Animation or relevant field	>3–5 years	4	4
Lead Storyboard	Yes	Degree in Animation or relevant field	>5 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# STORYBOARD

PRE-PRODUCTION

## CORE SKILLS:

- Strong drawing and illustration skills.
- Understanding of composition, Mise en scene and cinematography.
- Ability to visualise, plan and time sequences effectively.
- Knowledge of storytelling and narrative structure.
- Proficiency in visual communication.

## SOFT SKILLS:

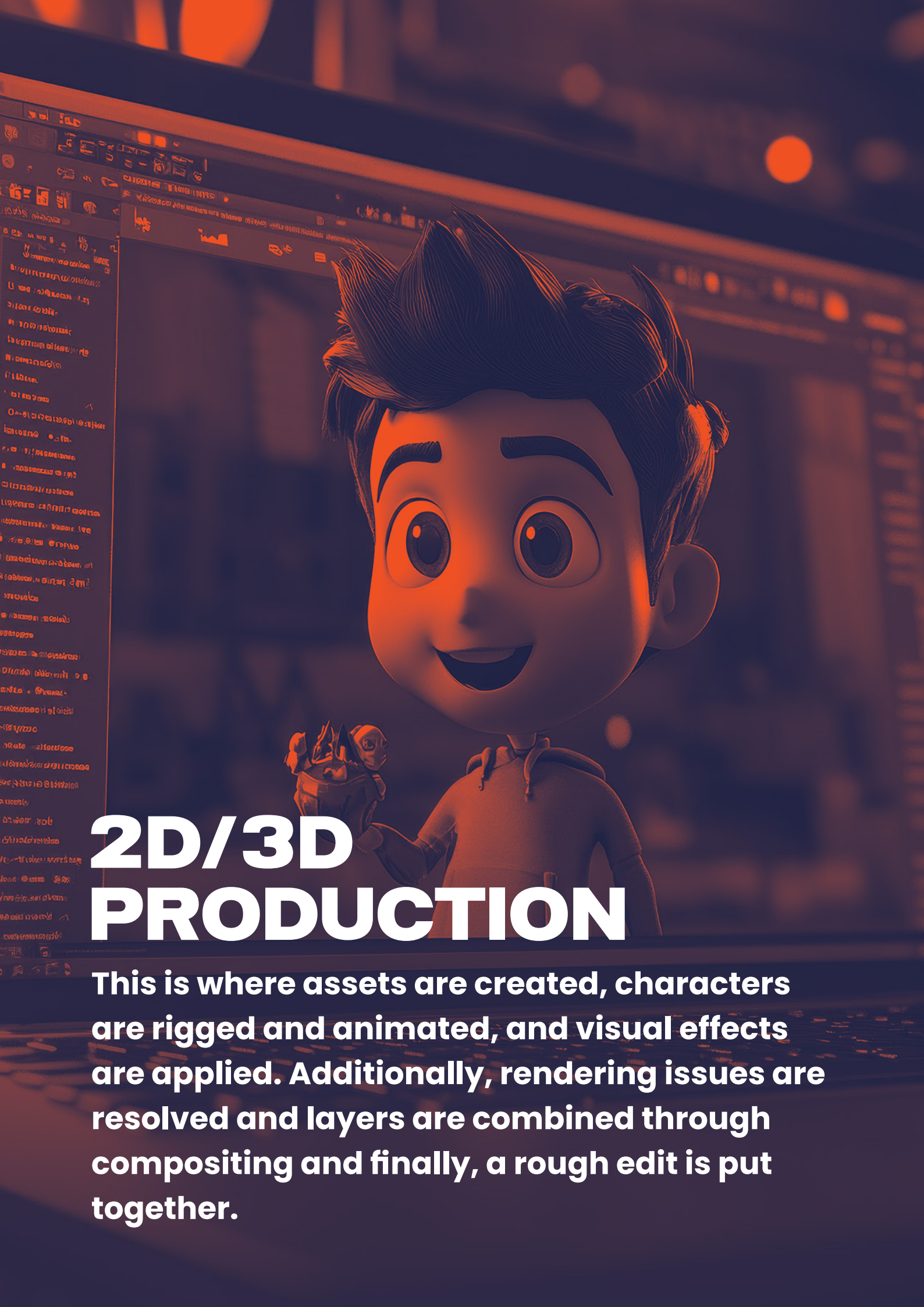
- Creativity and artistic vision.
- Strong communication and collaboration.
- Attention to detail and narrative clarity.
- Ability to adapt to feedback and revisions.
- Organisational and time management skills.

## TOOLS:

- **Storyboard Software:**
  - ◊ Storyboard Pro, Toon Boom
  - ◊ Harmony
- **Adobe Photoshop**
- **Adobe Illustrator**
- **Adobe Animate**
- **Krita**
- **Paint Tool Sai**
- **Procreate**
- **Other digital art software**

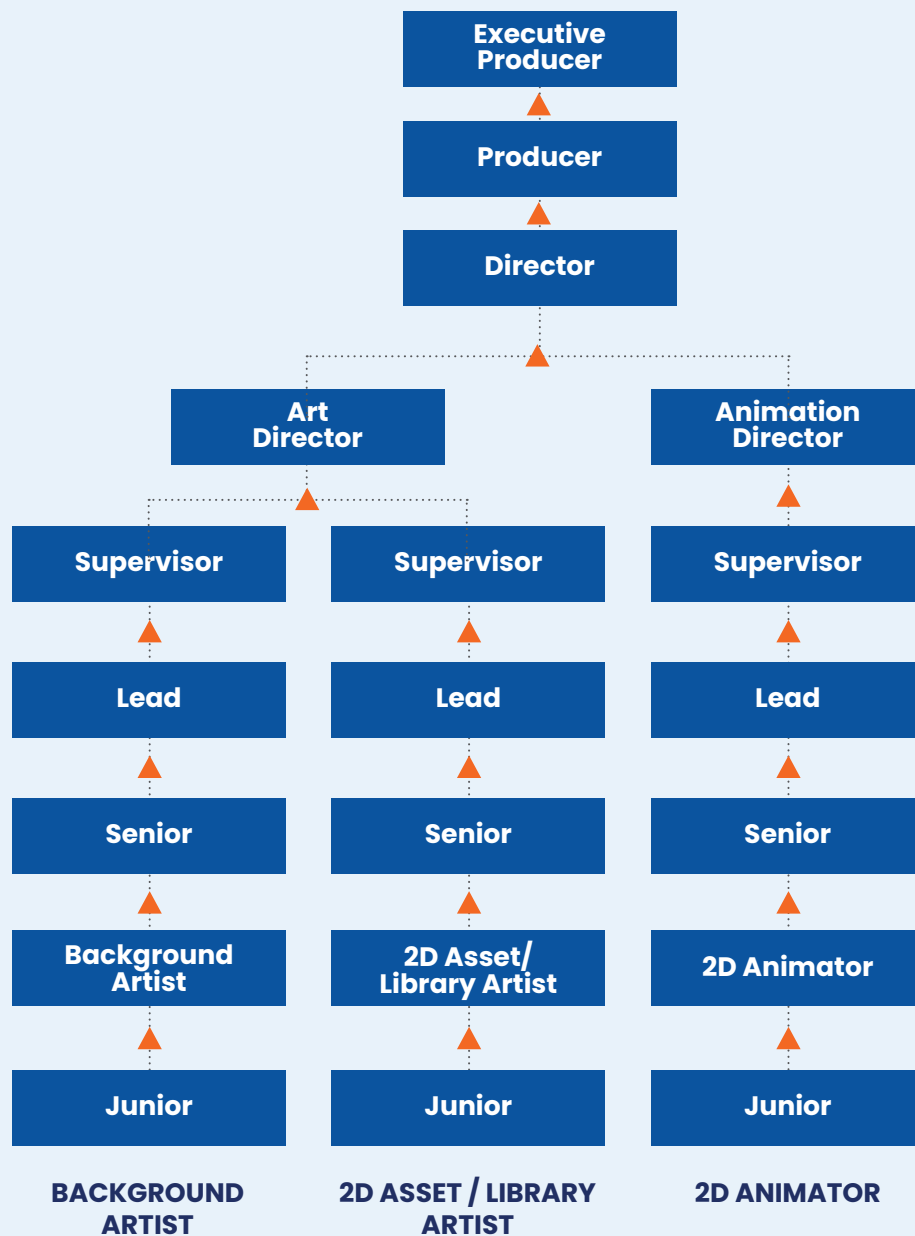
## RECOMMENDED CERTIFICATION:

- **TVET Certifications for Animation in Malaysia:**
  - ◊ Certificate in Creative Multimedia
- **Toon Boom Storyboard Pro Certification**



# 2D/3D PRODUCTION

**This is where assets are created, characters are rigged and animated, and visual effects are applied. Additionally, rendering issues are resolved and layers are combined through compositing and finally, a rough edit is put together.**

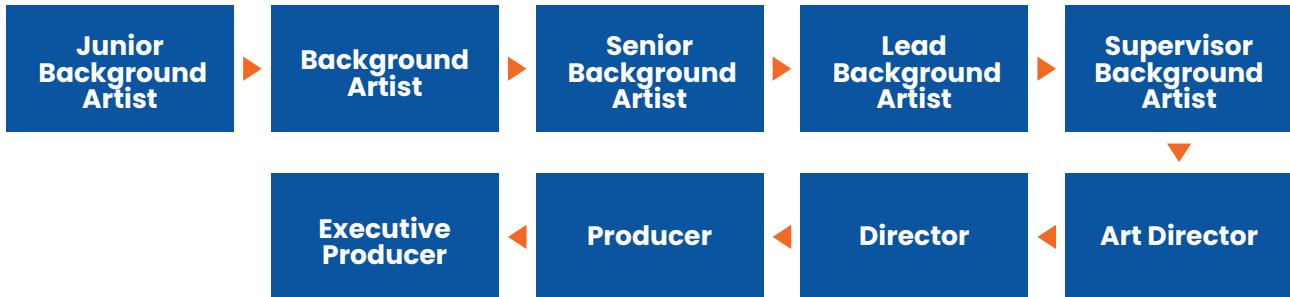




# BACKGROUND ARTIST

2D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Responsible for creating visually appealing and high-quality backgrounds that enhance the overall storytelling in animation production.

## RESPONSIBILITIES:

- Understand scripts, storylines and concept requirements.
- Brainstorm and visualise ideas through references, sketches and concept art.
- Able to draw, colour and design high-quality background art.
- Have a strong understanding of colour theory, staging, composition and mood to achieve the required concept.
- Ensure all backgrounds are created to meet the concept, visual, style and technical standards required.
- Capable of handling constructive feedback from team members, art director and clients.
- Collaborate with the Animation Supervisor to align with the vision of the art director or clients.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Background Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Background Artist	Yes	Certificate in Animation or relevant field	>1-2 years	3	3
Senior Background Artist	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Background Artist	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Background Artist	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# BACKGROUND ARTIST

2D PRODUCTION

## CORE SKILLS:

- Good drawing and painting skills
- Fundamentals of design
- Have an artistic, creative and Imaginative mind
- Basic production pipeline knowledge

## SOFT SKILLS:

- Time management
- Attention to details
- Strong communication
- Teamwork
- Research
- Adaptability

## TOOLS:

- **Toon Boom**
- **Adobe Animate**
- **Adobe Photoshop**
- **Adobe Illustrator**
- **Krita or any drawing software**

## RECOMMENDED CERTIFICATION:

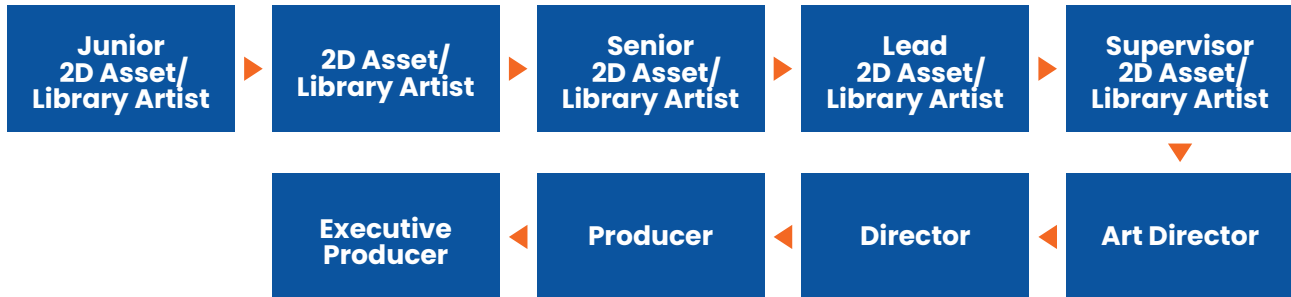
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Toon Boom Certification
- Adobe Certified professional



# 2D ASSET/LIBRARY ARTIST

2D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Responsible for design and produce high quality library of characters, props and other design assets in animation production.

## RESPONSIBILITIES:

- Understand scripts, storylines and animation requirements.
- Skilled in brainstorming ideas visually through sketches and concept art.
- Ensure all assets created meet the concept, style, visual and technical standards required.
- Work efficiently with the given scope, time, quality and resources.
- Capable of handling constructive feedback from team members, art directors and clients.
- Collaborate with the animation Supervisor and Head of Production to execute the vision of the creative director or client.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior 2D Asset/Library Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
2D Asset/Library Artist	Yes	Certificate in Animation or relevant field	>1-2 years	3	3
Senior 2D Asset/Library Artist	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead 2D Asset/Library Artist	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor 2D Asset/Library Artist	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# 2D ASSET/LIBRARY ARTIST

2D PRODUCTION

## CORE SKILLS:

- Good drawing skills
- Fundamentals of design
- Understanding principles of animation.
- Have an artistic, creative and imaginative mind.
- Basic production pipeline knowledge.

## SOFT SKILLS:

- Time management
- Attention to details
- Strong communication
- Teamwork
- Research
- Adaptability

## TOOLS:

- **Toon Boom**
- **Adobe Animate**
- **Adobe Photoshop**
- **Adobe Illustrator**
- **Krita or any drawing software**

## RECOMMENDED CERTIFICATION:

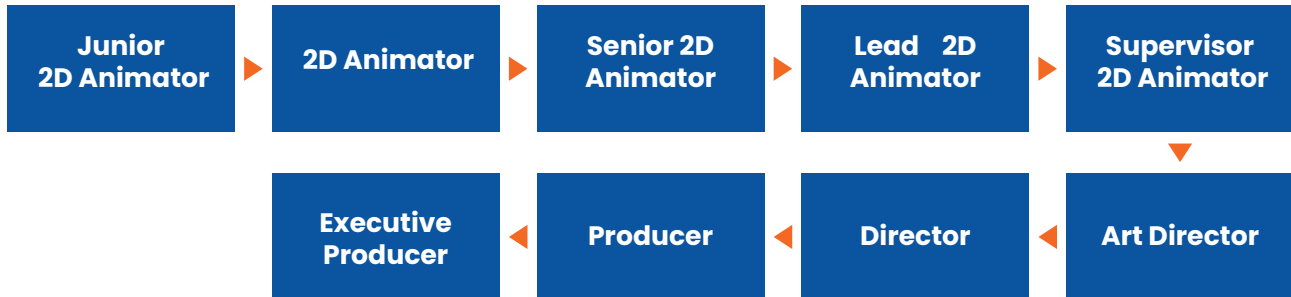
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Toon Boom Certification
- Adobe Certified professional



# 2D ANIMATOR

2D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Responsible for animating 2D models and characters. The 2D Animator will collaborate closely with other artists and designers to bring ideas to life through engaging and visually stunning animations.

## RESPONSIBILITIES:

- Understand scripts, storylines and animation requirements.
- Draw and animate sequences based on the scene.
- Create visually appealing effects such as explosions, water splashes, fire, smoke and magic.
- Design effects that match the artistic style and mood of the project.
- Ensure continuity and flow between shots and sequences.
- Ensure synchronisation of animation and audio.
- Ensure all animated shots are production ready.
- Collaborate with Animation Lead or Supervisor and Head of Production to execute the vision of the director, creative director or client.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior 2D Animator	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
2D Animator	Yes	Certificate in Animation or relevant field	>1-2 years	3	3
Senior 2D Animator	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead 2D Animator	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor 2D Animator	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# 2D ANIMATOR

2D PRODUCTION

## CORE SKILLS:

- Understanding animation principles
- Drawing skills
- Creativity and imagination
- Basic acting skills
- 2D effect animation
- Basic production pipeline knowledge.

## SOFT SKILLS:

- Time management
- Creative thinking
- Attention to details
- Software proficiency
- Strong communication
- Teamwork
- Acting and research
- Adaptability

## TOOLS:

- **Toon Boom**
- **Adobe Animate**
- **Adobe Photoshop**
- **Adobe Illustrator**
- **Adobe After Effect**
- **Adobe Premiere**

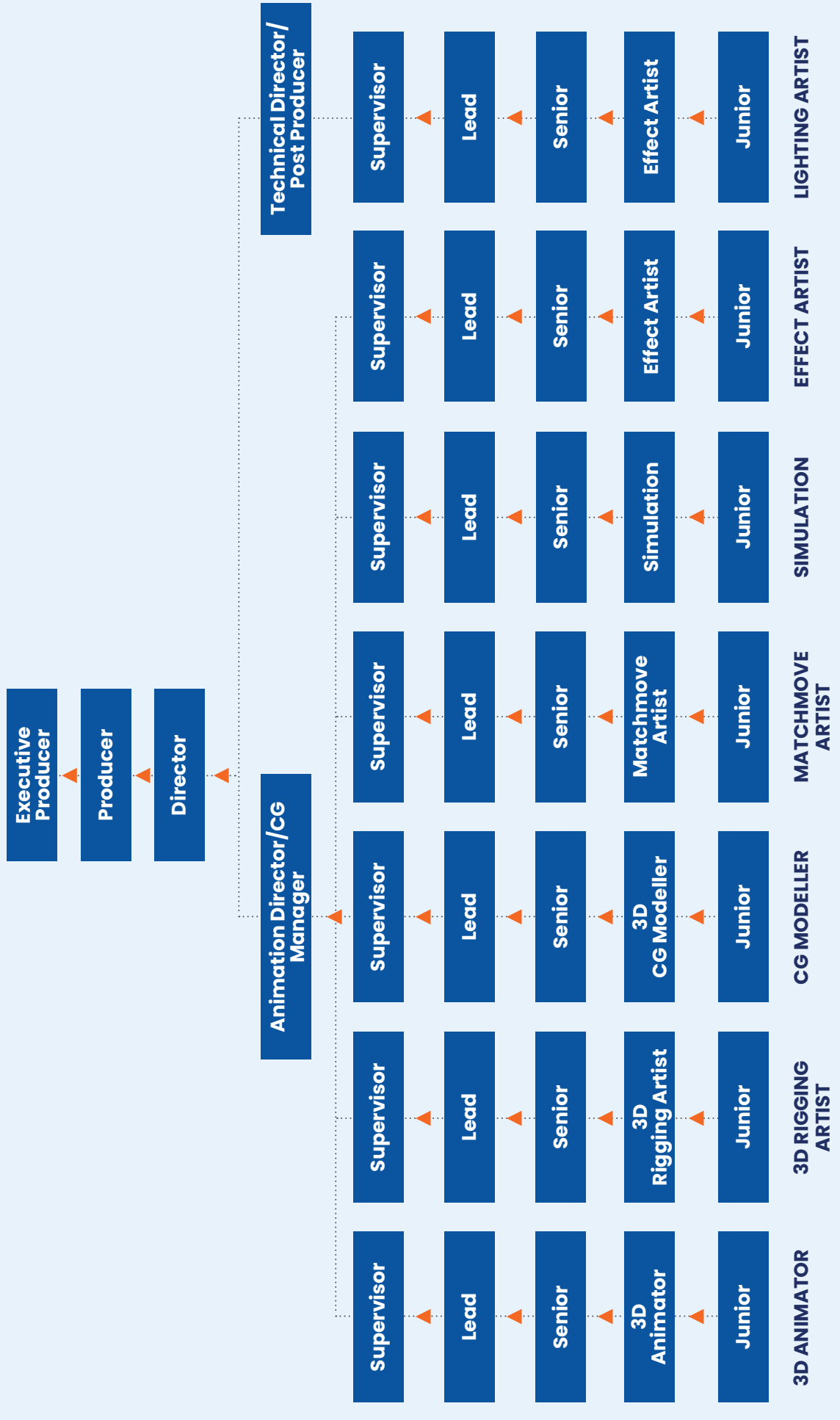
## RECOMMENDED CERTIFICATION:

- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Toon Boom Certification
- Adobe Certified professional

# CAREER PATHWAYS

## IndSF DIGITAL TECHNOLOGY ANIMATION

### 3D PRODUCTION

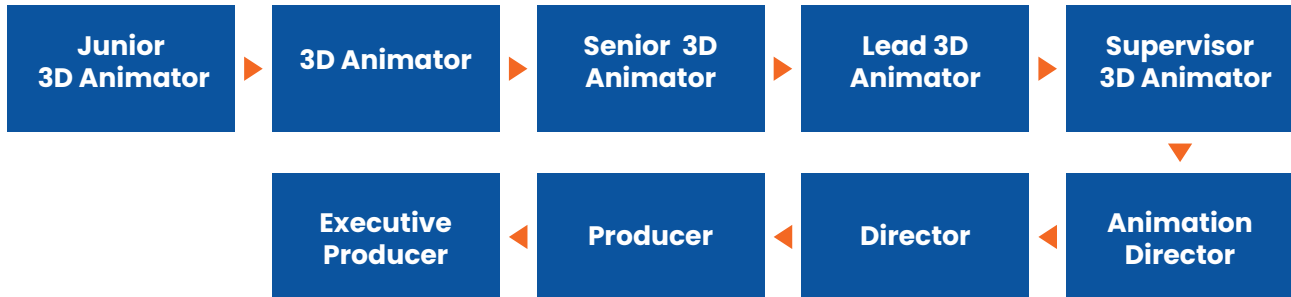




# 3D ANIMATOR

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Responsible for animating 3D models and characters. The 3D Animator/layout artist will collaborate closely with other artists and designers to bring ideas to life through engaging and visually stunning animations.

## RESPONSIBILITIES:

- Create and animate 3D characters and objects.
- Develop and implement movement and expressions based on scripts and storyboards.
- Collaborate with directors and artists to ensure animations align with the project's vision.
- Refine and adjust animations based on feedback and testing.
- Ensure smooth, realistic, and engaging animation sequences.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior 3D Animator	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
3D Animator	Yes	Certificate in Animation or relevant field	>1-2 years	3	3
Senior 3D Animator	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead 3D Animator	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor 3D Animator	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## **CORE SKILLS:**

- Expertise in 3D animation principles and techniques.
- Understanding of character rigging.
- Acting skills
- Strong understanding of movement, timing, and weight.
- Ability to create realistic and stylized animations.
- Knowledge of animation software and tools.
- Basic acting skills

## **SOFT SKILLS:**

- Time management
- Creative thinking
- Attention to details
- Software proficiency
- Strong communication
- Teamwork
- Acting and research
- Adaptability

## **TOOLS:**

- **Maya**
- **Blender**
- **3ds Max**
- **Unreal**
- **Unity**

## **RECOMMENDED CERTIFICATION:**

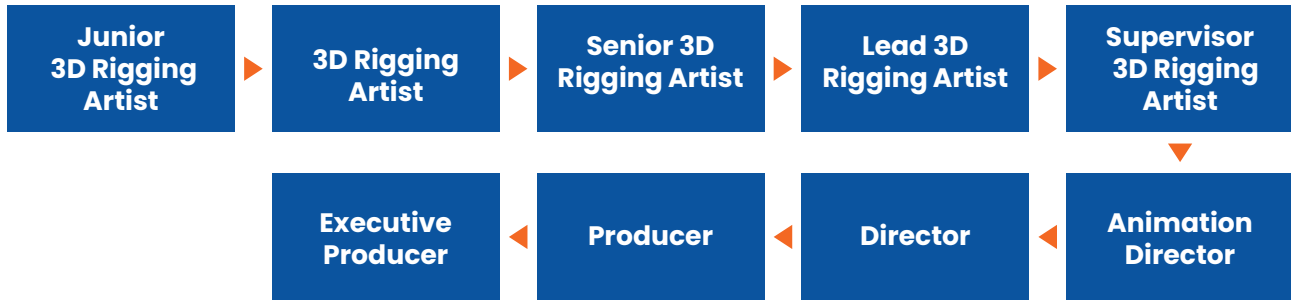
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Maya Certified User Autodesk
- Maya Certified Professional Autodesk
- Blender Foundation Certified Trainer
- 3ds Max Certified User Autodesk
- 3ds Max Certified Professional Autodesk
- Unity certified user/ Certified Associate and professional
- Unreal engine essential training



# 3D RIGGING ARTIST

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

3D Rigging Artist prepares 3D models for animation by creating skeletal frameworks that define how models move and deform.

## RESPONSIBILITIES:

- Develop skeletal rigs and control systems for a variety of characters, creatures and props.
- Ensure rigs are intuitive, user-friendly and optimised for animation.
- Bind 3D models to the rig skeleton using skinning techniques.
- Apply and adjust weight painting to ensure smooth and realistic deformations during animation.
- Troubleshoot and resolve rigging issues that arise during the animation process.
- Develop innovative solutions to achieve complex deformations and motion requirements.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior 3D Rigging Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2,3	3
3D Rigging Artist	Yes	Certificate in Animation or relevant field	Cert with >1-2 Years	3	4
Senior 3D Rigging Artist	Yes	Diploma in Animation or relevant field	Diploma with >3-5 years	4	4,5
Lead 3D Rigging Artist	Yes	Advanced Diploma in Animation or relevant field	Diploma with >5 years	4,5	5,6
Supervisor 3D Rigging Artist	Yes	Degree in Animation or relevant field	>5-7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## **CORE SKILLS:**

- Facial rigging and advanced deformation techniques.
- Knowledge of physics-based rigging and dynamics.
- Familiarity with animation principles and techniques.
- Experience with muscle simulation and skin sliding.

## **SOFT SKILLS:**

- Excellent problem-solving skills
- Attention to detail
- Strong communication and collaboration abilities
- Ability to work under tight deadlines
- Ability to manage multiple tasks simultaneously
- Adaptability
- Willingness to learn new techniques and tools

## **TOOLS:**

- **Autodesk Maya**
- **Autodesk 3D Studio Max**
- **Blender**
- **Python / MEL**
- **Unreal Engine**
- **Unity**

## **RECOMMENDED CERTIFICATION:**

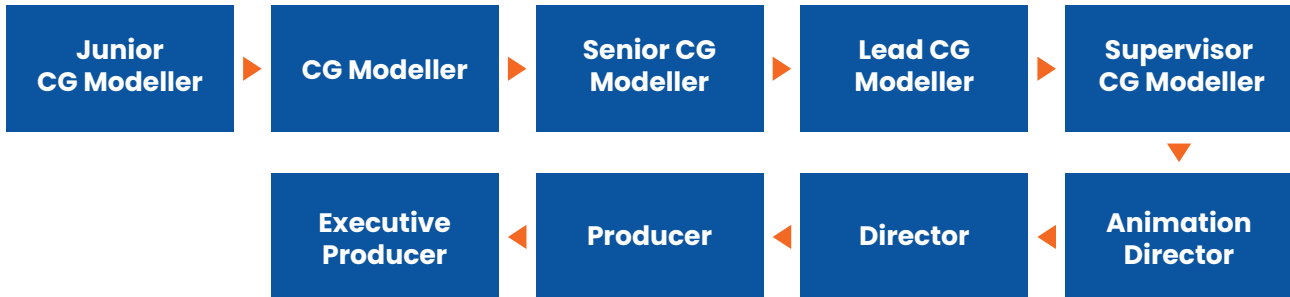
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Autodesk Certified Professional (Maya), Blender Certification, 3D Max or other equivalent certification



# CG MODELLER

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

CG Modellers transform creative concepts and design references into high-quality 3D assets, ensuring they meet the artistic vision and technical needs of animation and production projects.

## RESPONSIBILITIES:

- Create 3D models of characters, environments, props and other assets based on concept art and design specifications.
- Ensure models are optimised for animation, rigging and rendering.
- Apply textures and shaders to models to achieve the desired look and feel.
- Collaborate with the texture and lighting artists to ensure consistency and realism.
- Work closely with animators, riggers, and other departments to ensure models meet the technical and aesthetic requirements.
- Experiment with new tools and methods to enhance the modelling process and final output.
- Ensure models are compatible with the production pipeline and meet performance requirements.
- Review and refine models to ensure they meet the company's quality standards.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior CG Modeller	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
CG Modeller	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior CG Modeller	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead CG Modeller	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor CG Modeller	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- 3D Modeling
- Digital Sculpting
- Texturing and Shading
- UV Mapping
- Retopology
- Basic Rigging
- Familiarity with various 3D modeling and texturing software

## SOFT SKILLS:

- Excellent problem-solving skills
- Ability to work under tight deadlines
- Ability to manage multiple tasks simultaneously
- Adaptability
- Willingness to learn new techniques and tool
- Strong communication and interpersonal skills.

## TOOLS:

- **Autodesk 3D Studio Max**
- **Autodesk Maya**
- **Nomad Sculpt**
- **Blender**
- **Zbrush**
- **Mudbox**
- **Adobe Photoshop**
- **Substance Painter**
- **Substance Designer**
- **Unreal Engine**
- **Unity**

## RECOMMENDED CERTIFICATION:

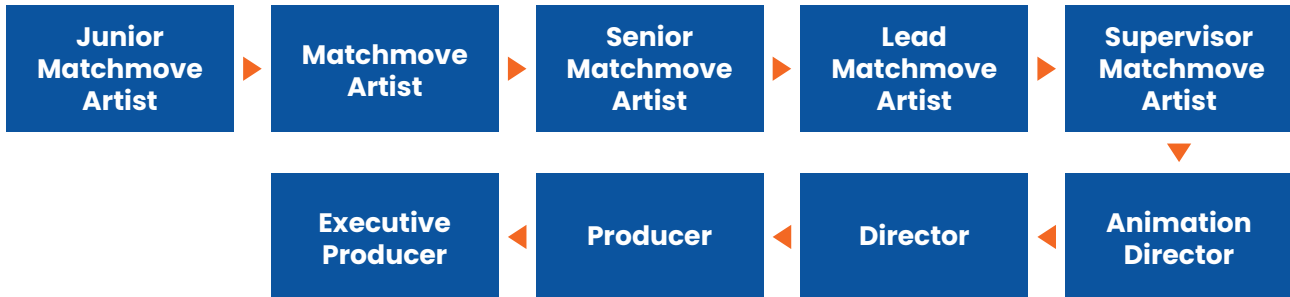
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Maya Certified User Autodesk
- Maya Certified Professional Autodesk
- Blender Foundation Certified Trainer
- 3ds Max Certified User Autodesk
- 3ds Max Certified Professional Autodesk
- Unity certified user/ Certified Associate and Professional
- Unreal engine essential training



# MATCHMOVE ARTIST

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A Matchmove Artist, also known as a Motion Tracking Artist, is a specialist in the visual effects (VFX) industry. Their primary responsibility is to ensure that the live-action footage and computer-generated (CG) elements align seamlessly. This role is crucial in post-production, particularly in films, television shows, commercials and video games that require the integration of CG elements into live-action shots.

## RESPONSIBILITIES:

- Analyse and track the motion of objects or characters within live-action footage to enable accurate reconstruction of the camera's movement in a 3D environment or CG elements.
- Match the movement and positioning of the CG camera with the live-action camera.
- Set up scenes for animators and other departments, ensuring proper scale, alignment and continuity.
- Create proxy geometry for environments and objects to assist in the animation and rendering process.
- Ensure that CG elements are seamlessly integrated into the live-action footage.
- Address and resolve issues related to matchmoving, such as tracking errors, lens distortion and integration challenges.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Matchmove Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Matchmove Artist	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Matchmove Artist	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Matchmove Artist	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Matchmove Artist	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## **CORE SKILLS:**

- Camera tracking and matchmoving
- Object tracking of CG elements
- Scene layout and setup
- 3D Modelling
- 3D Animation
- Image editing
- 3D software
- CG camera

## **SOFT SKILLS:**

- Time management
- Portfolio development
- Creativity
- Attention to detail
- Technical adaptability
- Effective communication
- Problem-solving skills
- Storytelling skills
- Teamwork/working with others

## **TOOLS:**

- **PTrack**
- **3DEqualizer**
- **Boujou**
- **SynthEyes**
- **Autodesk Maya**
- **Blender**
- **Nuke**
- **OptiTrack**
- **Photogrammetry**

## **RECOMMENDED CERTIFICATION:**

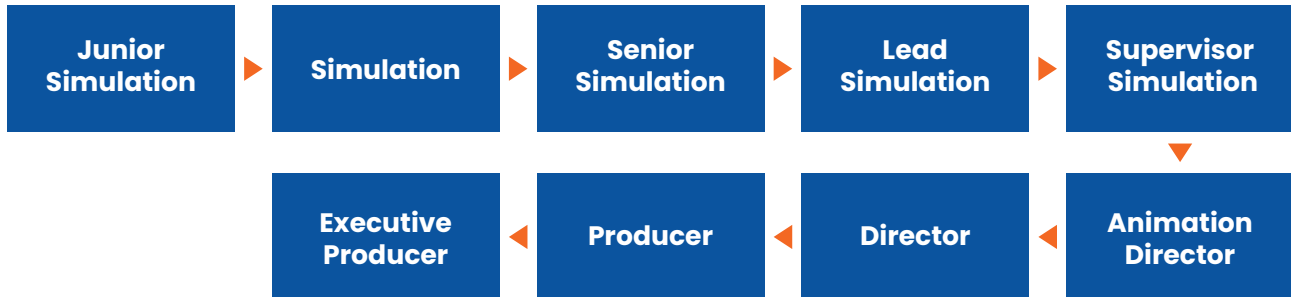
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- PTrack Training and Certification
- 3DEqualizer Training
- FXPHD Courses



# SIMULATION

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Simulation Artist uses simulate realistic and natural movement of the character's cloth & hair using scientific visualisation, or training simulations.

## RESPONSIBILITIES:

- Develop and produce high-quality cloth and hair simulations that appear natural and realistic.
- Collaborate closely with animation and lighting teams to ensure proper movement of cloth and hair.
- Prepare simulation setups using rigs and tools such as Houdini Vellum, meeting technical requirements.
- Incorporate feedback from team members and clients to refine simulations.
- Troubleshoot and resolve technical issues, including cloth penetration problems.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Simulation	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Simulation	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Simulation	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Simulation	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Simulation	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- 3D modeling for creating simulation meshes from character models.
- 3D animation to adjust character poses and positions before simulation.
- Knowledge of cloth and hair simulation tools (e.g., nCloth, nHair).
- Experience preparing simulation setups tailored to specific preferences.
- Proficiency with hair tools like XGen, pfxHair, and others.

## SOFT SKILLS:

- Time management
- Portfolio development
- Creativity
- Attention to detail
- Technical adaptability
- Ability to manage multiple tasks simultaneously
- Problem-solving skills
- Able to work under tight deadlines
- Teamwork or ability to work with others

## TOOLS:

- **Autodesk Maya - nCloth, nHair, Xgen Description, Xgen Interactive, Qualoth, Yeti**
- **Autodesk 3d Max - MassFX**
- **Python/MEL**
- **Blender**
- **Unity**
- **Unreal Engine**
- **Houdini**

## RECOMMENDED CERTIFICATION:

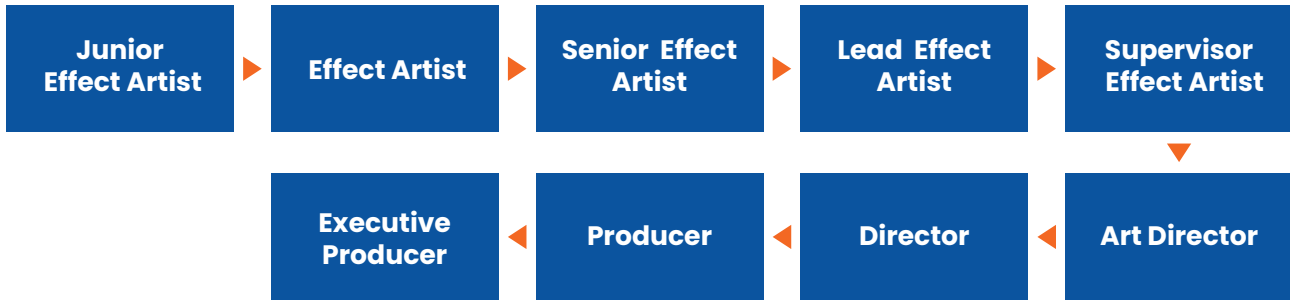
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Maya Certified Professional Autodesk
- 3ds Max Certified User Autodesk
- Maya Certified User Autodesk



# EFFECT ARTIST

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

The Effects Artist is responsible for creating and integrating high-quality visual effects within vfx projects. This role involves working closely with vfx artists and directors to develop effects that enhance the storytelling and visual appeal of animations.

## RESPONSIBILITIES:

- Design and create dynamic visual effects for animated sequences, including simulations of fire, water, smoke, explosions and other special effects.
- Collaborate with animators and directors to understand the artistic vision and requirements for each project.
- Be proficient in utilising industry-standard software (e.g., Adobe After Effects, Houdini, Blender) to produce effects that are both visually compelling and technically accurate.
- Implement and refine effects within the animation pipeline, ensuring they integrate seamlessly with other elements.
- Implement feedback from team members and clients to refine and improve animations.
- Troubleshoot and resolve technical issues related to effects and their integration.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Effect Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Effect Artist	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Effect Artist	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Effect Artist	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Effect Artist	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Particle systems
- Fluid dynamics
- Rigidbody dynamics
- Color correction and grading
- 3D modelling and texturing
- 2D/3D animation
- Render engines

## SOFT SKILLS:

- Time management
- Task delegations
- Portfolio development
- Creativity
- Attention to detail
- Technical adaptability
- Effective communication
- Problem-solving skills
- Storytelling skills
- Teamwork

## TOOLS:

- **2D Animation:**
  - ◊ Adobe After Effects, Toon Boom Harmony, Adobe Animate.
- **3D Animation:**
  - ◊ Blender, Autodesk Maya, Cinema 4D.
- **Game Engines:**
  - ◊ Unity, Unreal Engine.

## RECOMMENDED CERTIFICATION:

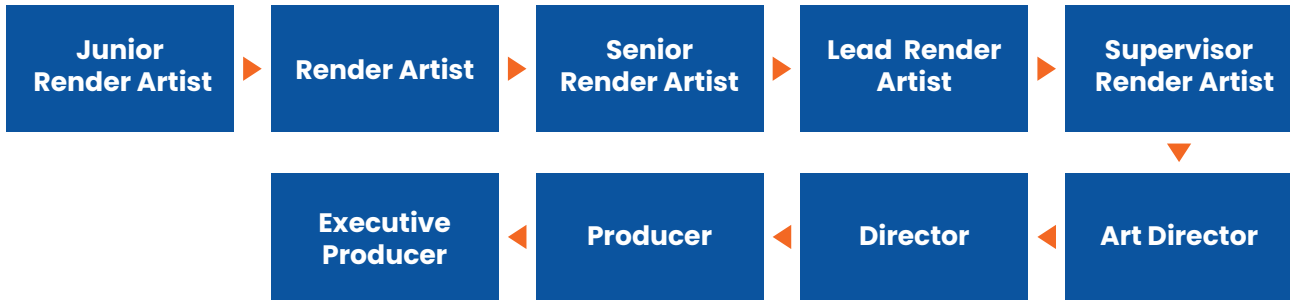
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- 3ds Max Certified Professional Autodesk
- Maya Certified Professional Autodesk
- 3ds Max Certified User Autodesk
- Maya Certified User Autodesk
- Adobe Certified Expert (ACE)
- Toon Boom Harmony Certification
- Adobe XD Certification



# RENDER ARTIST

3D PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A render artist designs and implements lighting setups and renders scenes, enhancing visual aesthetics and ensuring realistic output.

## RESPONSIBILITIES:

- Design and implement lighting setups for 3D scenes and characters.
- Adjust and fine-tune lighting to achieve desired visual effects and mood.
- Render scenes, optimising for quality and performance.
- Collaborate with modellers and animators to ensure proper lighting integration.
- Troubleshoot and resolve issues related to lighting and rendering.
- Refine camera positioning and setting, such as adjusting focal length and choosing type of lenses.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Render Artist	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Render Artist	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Render Artist	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Render Artist	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Render Artist	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Expertise in lighting, compositing techniques and principles.
- Proficiency in rendering, shading, and optimisation techniques.
- Strong understanding of color theory, mood creation and visual storytelling.
- Experience optimising render settings for various performance and quality requirements.
- Ability to adapt and implement different lighting styles and effects.
- Skill in diagnosing and troubleshooting CG lighting and rendering issues.

## SOFT SKILLS:

- Creativity and artistic vision.
- Strong problem-solving abilities.
- Effective communication and collaboration.
- Attention to detail and precision.
- Ability to manage time and meet deadlines.
- Art sense and aestheticism
- Photography knowledge

## TOOLS:

- **Lighting and Rendering Software:**
  - ◊ Autodesk Maya, Blender, 3ds Max, Houdini
- **Rendering Engines:**
  - ◊ Arnold, Redshift, V-Ray, Renderman, Mantra
- **Shading Software:**
  - ◊ Substance Painter, Adobe Photoshop.
- **Compositing Software:**
  - ◊ Nuke, Adobe After Effects.

## RECOMMENDED CERTIFICATION:

- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Autodesk Certified Professional (Maya, 3ds Max).
- Blender Certification.
- Arnold or Redshift Rendering Certification.
- Unity certified user/ Certified Associate and professional
- Unreal engine essential training

A man is shown in profile, focused on his work in a post-production studio. He is seated at a desk with multiple computer monitors. The monitors display various stages of animation, including character models and scene renders. The room is dimly lit, with a warm, orange-red glow emanating from the screens and ambient lighting. The man has dark hair and a beard, and is wearing a dark shirt. The overall atmosphere is one of intense concentration and creative technical work.

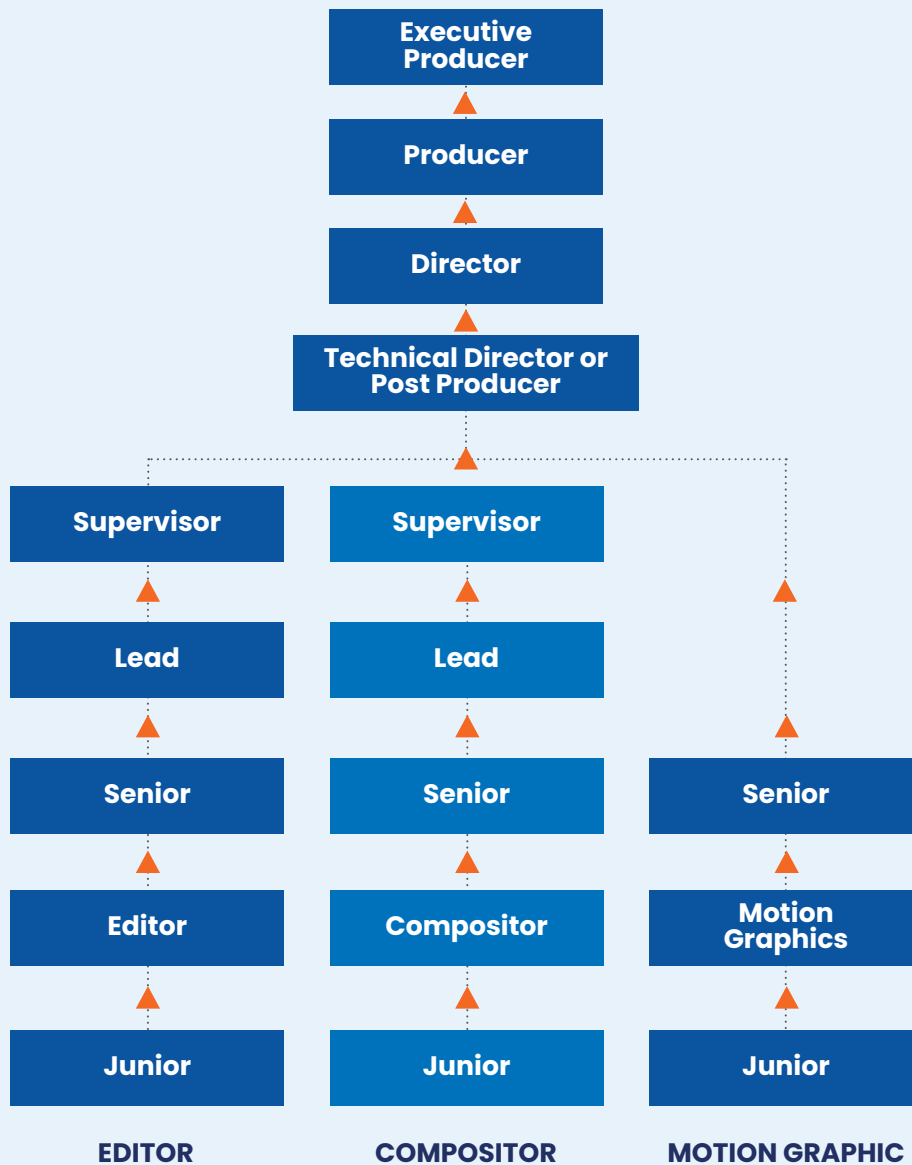
# POST- PRODUCTION

During post-production, the animation undergoes its final edits. Music is added and the entire piece is rendered, colour-corrected (graded) and subjected to quality control. Various versions of the production are created. If the animation is intended for broadcast, it is delivered to the broadcaster at this stage.



## CAREER PATHWAYS

### ► IndSF DIGITAL TECHNOLOGY ANIMATION

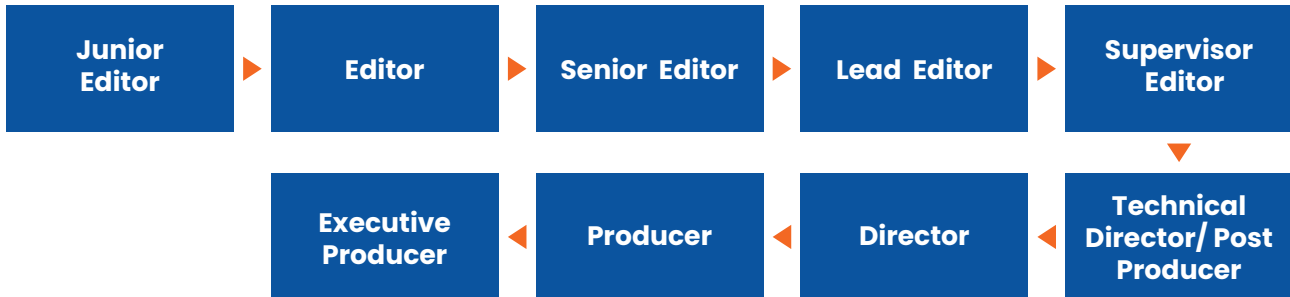




# EDITOR

POST-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

Responsible for assembling animation sequences into a finished product. This role requires a keen eye for detail, a strong understanding of storytelling and proficiency with editing software. The Animation Editor will collaborate closely with directors, storyboard artist and other production staff to ensure the final product meets the desired vision and standards.

## RESPONSIBILITIES:

- Assemble animatic footage from storyboard, ensuring a seamless flow and coherence in the storyline.
- Edit and assemble animation sequences to create the final product.
- Work closely with directors, storyboard artist and other team members to understand the project's vision and requirements.
- Incorporate special effects, sound effects, music and dialogue to enhance the overall quality and impact of the animation.
- Quality assurance by maintaining consistency in style, tone, and visual quality throughout the project.
- Meet project deadlines and manage multiple editing tasks simultaneously, ensuring timely delivery of the final product.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Editor	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Editor	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Editor	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Editor	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Editor	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Digital compositing
- Strong understanding of timing and pacing
- Keying, rotoscoping and tracking skills
- Ensure visual and color consistency and quality
- Color grading and correction
- Color theory and lighting expertise.
- Photorealism
- Knowledge of motion graphics and typography
- Attention to detail and visual accuracy.

## SOFT SKILLS:

- Creative thinking and storytelling
- Problem solving
- Attention to details
- Time management
- Resilience
- Strong communication
- Teamwork
- Adaptability to new tools and techniques.

## TOOLS:

- **Editing software:**
  - ◊ Adobe Premiere, Final Cut Pro
- **Compositing Software:**
  - ◊ Nuke, Adobe After Effects
- **Color Grading:**
  - ◊ DaVinci Resolve
- **3D Software:**
  - ◊ Blender, Maya, Cinema 4D
- **2D Software:**
  - ◊ Adobe Animate, Toonboom

## RECOMMENDED CERTIFICATION:

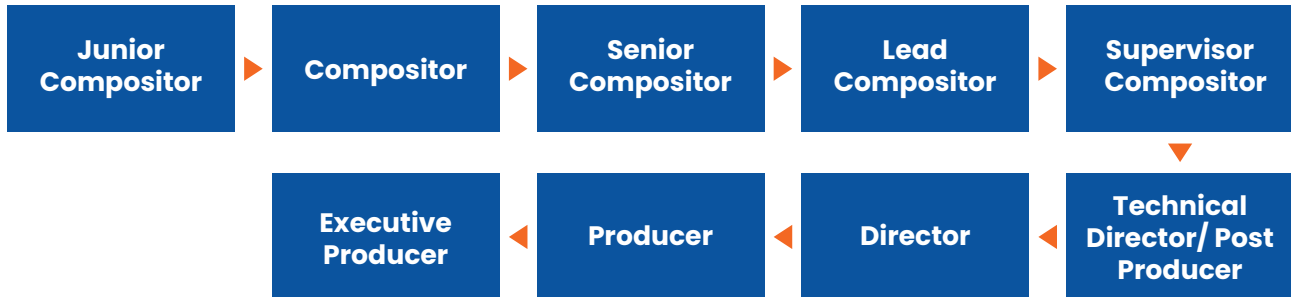
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Professional Certificate in film/animation editing
- Adobe Certified Professional



# COMPOSITOR

POST-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A compositor blends visual elements and effects into scenes, ensuring seamless integration of motion graphics, animation, CGI and live-action footage.

## RESPONSIBILITIES:

- Edit and blend different source images, whether from live-action footage or computer-generated images to create a cohesive final look
- Collaborate and communicate with other departments within the pipeline to ensure all elements work well together as the final step in the post-production stage.
- Work together with artists across the department to ensure consistency between shots for a project
- Creative and technical knowledge to solve any issues in a project.
- Review work and receive feedback either internally or directly from the client.
- Ensure visual consistency and quality.
- Manage time and resources to ensure project deadlines are met.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Compositor	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Compositor	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Compositor	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Compositor	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Compositor	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Digital compositing
- Strong understanding of timing and pacing
- Keying, rotoscoping and tracking skills.
- Ensure visual and color consistency and quality
- Color grading and correction
- Color theory and lighting expertise
- Photorealism
- Attention to detail and visual accuracy

## SOFT SKILLS:

- Creative thinking
- Problem solving
- Attention to details
- Time management
- Resilience
- Strong communication
- Teamwork
- Adaptability to new tools and techniques.

## TOOLS:

- **Compositing Software:**
  - ◊ Nuke, Adobe After Effects
- **Color Grading:**
  - ◊ DaVinci Resolve
- **Additional tools:**
  - ◊ 3D Software: Blender, Maya, Cinema 4D
  - ◊ 2D Software: Adobe Animate, Toonboom

## RECOMMENDED CERTIFICATION:

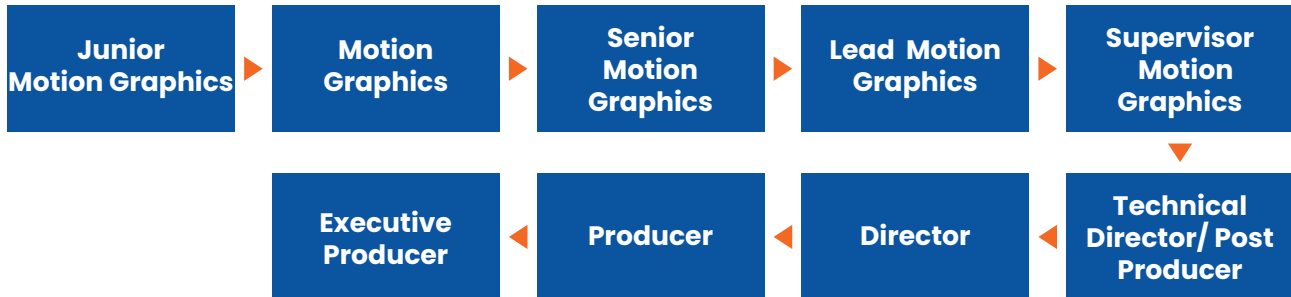
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Professional Certificate in film/animation editing
- Nuke Certification
- Adobe Certified Professional



# MOTION GRAPHICS

POST-PRODUCTION

## CAREER PATHWAY:



## JOB DESCRIPTION:

A motion graphic artist creates dynamic animations, integrates visual effects and collaborates with teams to deliver engaging content.

## RESPONSIBILITIES:

- To design and animate graphics for intros, transitions, lower-thirds, title sequences, and end credits.
- To create 2D VFX for animations.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Motion Graphics	Yes	Certificate in Animation or relevant field	Fresh entry	2	2
Motion Graphics	Yes	Certificate in Animation or relevant field	>1-2 Years	3	3
Senior Motion Graphics	Yes	Diploma in Animation or relevant field	>3-5 years	4	4
Lead Motion Graphics	Yes	Advanced Diploma in Animation or relevant field	>5 years	4,5	5
Supervisor Motion Graphics	Yes	Degree in Animation or relevant field	>7 years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Animation principles and techniques
- Strong understanding of composition, colour theory, layout and design fundamentals.
- Visual storytelling and narrative development
- Visual Effects (VFX)

## SOFT SKILLS:

- Creative thinking and storytelling
- Strong time management
- Team collaboration
- Effective communication skills
- Attention to details
- Adaptability

## TOOLS:

- **Adobe Creative Suite:**
  - ◊ Adobe Photoshop, Adobe Illustrator, Adobe After Effects, Adobe Premier, and Adobe animate
- **3D/2D Software :**
  - ◊ Toon Boom , CINEMA 4D, Houdini,
  - ◊ Blender

## RECOMMENDED CERTIFICATION:

- Professional Certificate in film/animation graphic composition
- TVET Certifications for Animation in Malaysia:
  - ◊ Certificate in Creative Multimedia
- Adobe Certified Professional
- Toon Boom Certification



# **SOUND & AUDIO**

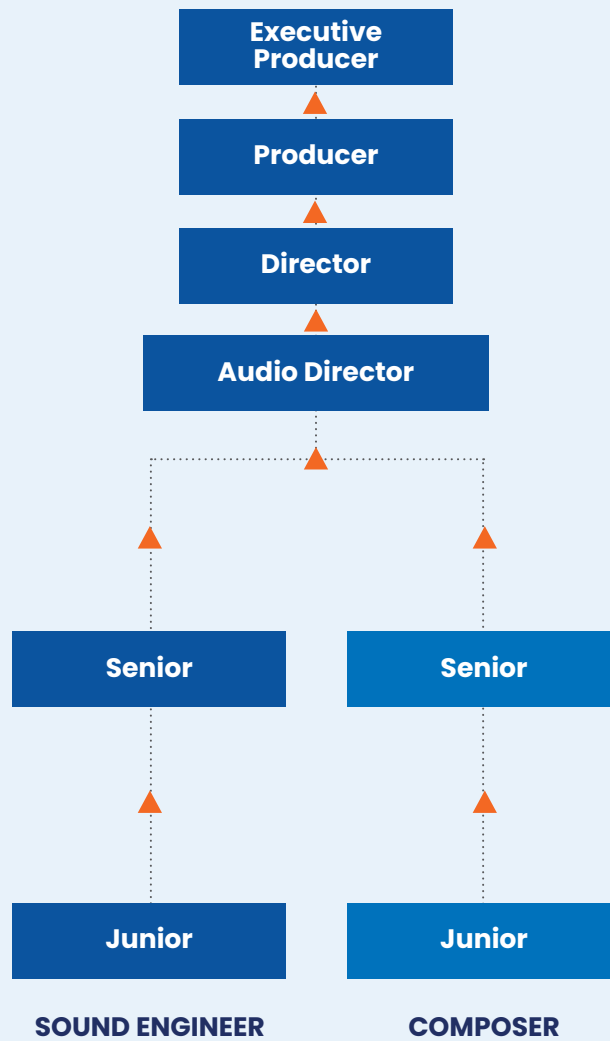
**Craft audio landscape for animations and generate sounds entirely from scratch. This can involve recording real-world noises or composing them digitally, requiring significant creativity, particularly for fantastical creatures or environments. Additionally, original music is created to capture the atmosphere, evoke emotions and enhance storytelling.**



**SOUND & AUDIO**

## CAREER PATHWAYS

### ► IndSF DIGITAL TECHNOLOGY ANIMATION





# SOUND ENGINEERING

SOUND & AUDIO

## CAREER PATHWAY:



## JOB DESCRIPTION:

A Sound Engineer is responsible for managing and operating audio equipment to achieve high-quality sound in various settings, including recording studios, live events and broadcast environments. The role will involve setting up, operating and maintaining audio systems, as well as mixing and mastering audio recordings to ensure the best possible sound is formed.

## RESPONSIBILITIES:

- Set up and test audio equipment, including microphones, mixers, amplifiers and speakers, for recording sessions, live performances and broadcasts.
- Capture and mix audio recordings, ensuring clarity and balance of sounds by adjusting levels and effects as needed.
- Maintain and repair audio equipment to ensure optimal performance by troubleshooting technical issues promptly.
- Provide technical support and guidance.
- Monitor and adjust audio during live events or recordings to ensure consistent quality.
- Perform post-production tasks, such as editing and mastering audio tracks.
- Proficiency with Audio Equipment - multitrack record, overdub, edit, and mix both live ensemble and electronically-produced sources, using complex analogue and digital audio systems while demonstrating professional best practices.
- Demonstrate a high-level understanding of the underlying technology and use of microphones, recording consoles, signal processing, signal flows and DAW workflows, and the ability to adapt to diverse and changing technology environments.
- Work closely with directors, sound designers and editors to understand the tone and mood of the production and ensure the effects fit seamlessly.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Sound Engineer	Yes	Diploma of Music in Music Production and Engineering or equivalent	Fresh entry	3	3
Senior Sound Engineer	Yes	Degree of Music in Music Production and Engineering or equivalent	>3-5 Years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Audio encoding formats and their applications
- Audio Mixing and Mastering
- Live Sound Engineering
- Sound Design
- Broadcast Engineering
- Acoustic Treatment

## SOFT SKILLS:

- Time Management
- Creative thinking
- Attention to details
- Critical Thinking
- Strong Communication
- Teamwork
- Curiosity and Passion
- Adaptability

## TOOLS:

- **Digital Audio Workstations (DAWs):**
  - ◊ Pro Tools, Logic Pro, Ableton Live, FL Studio, Cubase.
- **Audio Interfaces:**
  - ◊ Focusrite Scarlett, Universal Audio Apollo, PreSonus AudioBox.
- **Audio Mixers:**
  - ◊ Yamaha MG Series, Behringer X32, Allen & Heath QU Series

## RECOMMENDED CERTIFICATION:

- Certified Audio Engineer (CEA)
- Pro Tools Certification
- Sound Reinforcement Certifications
- Certified Technology Specialist (CTS)
- Certified Mastering Engineer (CME)



# COMPOSER

SOUND & AUDIO

## CAREER PATHWAY:



## JOB DESCRIPTION:

A music composer for animation creates original scores and soundtracks specifically tailored to animated projects such as films, TV shows, or web series.

## RESPONSIBILITIES:

- Create original musical pieces that enhance the emotional and narrative aspects of animated scenes.
- Develop themes and motifs that reflect characters, settings and storylines.
- Work closely with animators, directors and producers to understand the visual and emotional tone of the animation.
- Incorporate feedback to ensure that the music aligns with the creative vision of the project.
- Ensure that music complements the timing and pacing of animation, including dialogue, sound effects and visual actions.
- Synchronise musical cues with key moments and transitions in the animation.
- Arrange music for different instrumentations and styles that fit the animation's needs, whether it's orchestral, electronic, or a hybrid.
- Adapt compositions for different scenes, characters and moods within the animation.
- Oversee recording sessions, including hiring musicians and working with recording engineers.
- Edit and mix tracks to achieve the desired sound quality, ensuring the music integrates seamlessly with other audio elements.
- Revise compositions based on director and producer feedback.
- Make adjustments to fit changes in the animation or narrative direction.
- Utilise music software and technology for composing, arranging, and producing music.
- Apply advanced knowledge of music theory to create complex and emotionally impactful scores.
- Manage project timelines and deliverables, coordinating with other team members to meet deadlines.
- Keep organised records of compositions, revisions and communication with stakeholder.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Junior Composer	Yes	<ul style="list-style-type: none"> <li>Member of Music Authors Copyright Protection (MACP) Berhad as writer</li> <li>Diploma of Music in Music Production and Engineering or equivalent</li> </ul>	Fresh entry	3,4	4
Senior Composer	Yes	<ul style="list-style-type: none"> <li>Member of Music Authors Copyright Protection (MACP) Berhad as writer</li> <li>Diploma of Music in Music Production and Engineering or equivalent</li> </ul>	>3-5 Years	5	6

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

### SOFT SKILLS:

- Time management
- Creative thinking
- Attention to details
- Critical thinking
- Strong communication
- Teamwork
- Curiosity and passion
- Adaptability

### CORE SKILLS:

- Audio equipment operation
- Digital Audio Workstations (DAWs)
- Sound design
- Composing

### TOOLS:

- **Digital Audio Workstations (DAWs):**
  - ◊ Pro Tools, Logic Pro, Ableton Live, FL Studio, Cubase.
- **Audio Interfaces:**
  - ◊ Focusrite Scarlett, Universal Audio Apollo, PreSonus AudioBox.
- **Audio Mixers:**
  - ◊ Yamaha MG Series, Behringer X32, Allen & Heath QU Series

### RECOMMENDED CERTIFICATION:

- Certified Audio Engineer (CEA)
- Pro Tools Certification
- Sound Reinforcement Certifications
- Certified Technology Specialist (CTS)



# **C-LEVEL**

**C-level executives, commonly referred to as C-suite executives, are the highest-ranking individuals within an organisation. They are responsible for making strategic decisions and driving the overall direction of the company. The 'C' in their titles stands for 'Chief'. These executives play a crucial role in shaping the organisation's culture, direction and success by making high-impact decisions and aligning resources to achieve strategic objectives.**



# ART DIRECTOR

C – LEVEL

## JOB DESCRIPTION:

An art director shapes the overall visual style and guides the artistic direction, ensuring consistency and alignment with the project's vision.

## RESPONSIBILITIES:

- Develop and oversee the artistic vision for animation projects.
- Lead, coordinate, review and provide feedback on design elements to the art team, including concept artists, storyboard artists, library/asset artists and background artists.
- Collaborate with directors and other departments to align visuals with the narrative.
- Ensure consistent visual style and quality across animation projects.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Art Director	Yes	Degree in Creative Art or relevant field from any educational/ recognised institution.	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Leadership and team management capabilities.
- Proficiency in art and design workflows.
- Knowledge of animation production pipelines.
- Strong understanding of visual storytelling, composition and colour theory.
- Expertise in character design, environment design and animation aesthetics.

## SOFT SKILLS:

- Strong leadership and communication skills.
- Creative vision and the ability to convey ideas effectively.
- Attention to detail and quality control.
- Problem-solving and decision-making abilities.
- Adaptability to feedback and changing production needs.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# ANIMATION DIRECTOR

C – LEVEL

## JOB DESCRIPTION:

An animation director oversees the creative and technical aspects of animation, ensuring visual storytelling aligns with the project's vision.

## RESPONSIBILITIES:

- Provide creative direction for timing, motion and performance in animation sequences.
- Lead, coordinate, review and provide feedback on design elements to the animation team, including animators, riggers, CG Modeller, Macchmove artist, stimulation and lighting artist.
- Supervise the overall animation process, ensuring quality and consistency.
- Collaborate with directors and other departments to bring scenes and characters to life.
- Review and refine animation to meet project standards.
- Manage and guide animation teams through production milestone.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Animation Director	Yes	Degree in Animation or relevant field from any educational/recognized institution.	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Leadership and team management capabilities.
- Proficiency in 2D or 3D animation workflows and pipelines.
- Strong understanding of animation principles and storytelling.
- Expertise in character performance, motion, and timing.
- Ability to critique and improve animation quality.

## SOFT SKILLS:

- Strong leadership and communication skills.
- Creative vision and the ability to convey ideas effectively.
- Attention to detail and quality control.
- Problem-solving and decision-making abilities.
- Adaptability to feedback and changing production needs.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# CG MANAGER

C - LEVEL

## JOB DESCRIPTION:

The CG Manager is responsible for overseeing the creation and execution of all computer-generated elements in an animation or visual effects (VFX) production. This role requires a deep understanding of the technical and artistic aspects of computer graphics, as well as strong leadership and problem-solving skills. The CG Manager collaborates closely with various departments, including modeling, texturing, lighting, rigging, and effects, ensuring that all CG assets meet the project's creative vision and technical requirements.

## RESPONSIBILITIES:

- Lead and manage the CG team, including animators, riggers, CG Modeller, Matchmove artist, stimulation and lighting artist.
- Ensure the quality and consistency of all CG elements throughout the production pipeline.
- Provide technical and artistic guidance to the CG team, ensuring that assets align with the project's creative goals.
- Collaborate with directors, VFX supervisors and producers to understand the creative and technical needs of the project.
- Work closely with other departments, such as compositing and production, to ensure seamless integration of CG elements into the final product.
- Maintain clear and regular communication with the production team regarding deadlines, challenges and progress.
- Oversee the creation of CG assets, from modelling to final rendering, ensuring that they meet the technical requirements of the project.
- Ensure that all CG assets are optimised for performance and meet the necessary standards for rendering and compositing.
- Troubleshoot technical issues that arise during production and provide solutions to maintain the quality and integrity of the work.
- Work closely with the pipeline team to establish and maintain an efficient production pipeline for CG elements.
- Ensure that the CG pipeline is optimized and that all assets are compatible with the overall production workflow.
- Monitor and manage the performance of the pipeline to ensure it meets the demands of the project.
- Stay up-to-date with the latest trends and technologies in CG and VFX production.
- Evaluate new software, tools, and techniques to improve efficiency and quality in the CG production process.
- Collaborate with technical directors and R&D teams to implement new tools and technologies into the production pipeline.
- Review all CG work to ensure it meets the artistic and technical standards of the project.
- Provide detailed feedback to artists and make revisions as necessary to achieve the desired quality.
- Ensure that all CG elements are completed on time and within the allocated budget.



# CG MANAGER

C - LEVEL

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
CG Manager	Yes	Degree in Animation or relevant field from any educational/recognised institution.	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Artistic and creative Skills
- Strong understanding of visual design
- Modeling and texturing expertise
- Animation and rigging knowledge
- Lighting and shading knowledge
- Scripting and automation
- Pipeline, workflow management and R&D

## SOFT SKILLS:

- Strong leadership and communication skills.
- Creative vision, analytical thinking and the ability to convey ideas and solutions effectively.
- Attention to detail and quality control.
- Problem-solving and decision-making abilities.
- Adaptability to feedback and changing production needs.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# TECHNICAL DIRECTOR

C - LEVEL

## JOB DESCRIPTION:

A technical director manages the technical aspects of animation production, ensuring efficient workflows, problem-solving and software integration.

## RESPONSIBILITIES:

- Advise the director and other departments in the technical aspects to meet project standards.
- Oversee technical processes and workflows in animation production.
- Lead and coordinate the post-production department and collaborate with the animation department regarding technical aspects of production.
- Develop and maintain custom tools, scripts, and pipelines to streamline production.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Technical Director	Yes	Degree in Animation or relevant field from any educational/recognized institution.	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Leadership and team management capabilities.
- Expert in animation pipelines and software integration.
- Strong understanding of rendering, lighting, and simulation techniques.
- Problem-solving and troubleshooting abilities.
- Proficiency in tool development and scripting.
- Knowledge in programming languages like Python or C++.

## SOFT SKILLS:

- Strong leadership and communication skills.
- Creative vision and the ability to convey ideas effectively.
- Attention to detail and quality control.
- Problem-solving and decision-making abilities.
- Adaptability to feedback and changing production needs.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# POST PRODUCER

C - LEVEL

## JOB DESCRIPTION:

A Post-production manages the post-production aspects of animation including editing, motion graphics, colour grading music and compositing.

## RESPONSIBILITIES:

- Lead, coordinate, review and provide feedback on post-production elements, ensuring quality and consistency.
- Collaborate with directors and other departments to facilitate smooth delivery and integration of final assets.
- Conduct thorough reviews of final animation outputs to identify and resolve any technical or artistic issues.
- Prepare final animation files for delivery, ensuring that all technical specifications, formats, and resolutions are met.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Post Producer	Yes	Degree in Animation or relevant field from any educational/recognized institution.	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Leadership and team management capabilities.
- Creative, artistic, and technical skills.
- Attention to detail and quality control.
- Pipeline and workflow management

## SOFT SKILLS:

- Strong leadership and communication skills.
- Creative vision and the ability to convey ideas effectively.
- Attention to detail and quality control.
- Problem-solving and decision-making abilities.
- Adaptability to feedback and changing production needs.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# AUDIO DIRECTOR

C - LEVEL

## JOB DESCRIPTION:

The Audio Director manages audio production for projects, ensuring high-quality sound design. This role involves leading a team of sound designers, composers, and engineers while collaborating with other departments to create an immersive auditory experience. The Audio Director oversees workflow, mentors team members and maintains a consistent audio vision across projects.

## RESPONSIBILITIES:

- Lead and manage the audio team, including sound designers, engineers, and external contractors.
- Set the audio vision and ensure it aligns with project goals.
- Oversee planning, scheduling, and execution of audio tasks within budget.
- Develop high-quality sound design and audio assets.
- Collaborate with directors, producers, and designers to enhance overall experience.
- Supervise the creation of sound effects, music, dialogue, and ambient sounds.
- Optimise audio assets for performance across platforms.
- Manage audio middleware and troubleshoot issues with the technical team.
- Guide the team in audio style, quality standards, and best practices.
- Provide feedback during audio asset reviews and oversee final mixing and mastering.
- Mentor and foster a collaborative environment within the team.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Audio Director	Yes	<ul style="list-style-type: none"><li>• Member of Music Authors Copyright Protection (MACP) organisation.</li><li>• Relevant degree or certification in audio technology/ engineering or other relevant field from any educational/ recognized institution.</li></ul>	>5-10 Years	6	6,7

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.



# AUDIO DIRECTOR

C - LEVEL

## CORE SKILLS:

- Proficiency with audio equipment
- Audio mixing and mastering
- Live sound engineering
- Sound design
- Broadcast engineering
- Acoustic treatment

## SOFT SKILLS:

- Leadership
- Time management
- Creative thinking
- Attention to details
- Critical thinking
- Strong communication
- Teamwork
- Curiosity and passion
- Adaptability

## TOOLS:

- **Digital Audio Workstations (DAWs):**
  - ◊ Pro Tools, Logic Pro, Ableton Live, FL Studio, Cubase.
- **Audio Interfaces:**
  - ◊ Focusrite Scarlett, Universal Audio Apollo, PreSonus AudioBox.
- **Audio Mixers:**
  - ◊ Yamaha MG Series, Behringer X32, Allen & Heath QU Series

## RECOMMENDED CERTIFICATION:

- Certified Audio Engineer (CEA)
- Pro Tools Certification
- Sound Reinforcement Certifications
- Certified Technology Specialist (CTS)
- Certified Mastering Engineer (CME)"



# DIRECTOR

C - LEVEL

## JOB DESCRIPTION:

The director leads the creative vision, overseeing all aspects of production to ensure storytelling and animation meet project goals.

## RESPONSIBILITIES:

- Develop and manage the creative vision for the entire animation project.
- Collaborate with writers, artists and other department heads to align the story, visuals, animation and music.
- Provide feedback and direction on storyboards, animations and post-production.
- Review and approve animation tests, dailies, and final sequences to ensure they meet quality standards and align with the creative vision.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Director	Yes	<ul style="list-style-type: none"><li>• Degree in film directing or other relevant field from any educational/ recognized institution.</li><li>• Having a Master's or a PhD degree in film directing or other relevant field is an added advantage</li></ul>	>5-10 Years	6,7	7,8

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Leadership and decision-making abilities.
- Strong understanding of storytelling and character development.
- Knowledge of animation workflows and production pipelines.
- Ability to guide teams through creative and technical challenges.

## SOFT SKILLS:

- Excellent communication and collaboration skills.
- Creativity and ability to visualise concepts.
- Strong decision-making and problem-solving abilities.
- Time management and ability to work under pressure.

## TOOLS:

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Design and Animation software**



# PRODUCER

C - LEVEL

## JOB DESCRIPTION:

An animation producer manages the overall production process, handling budgets, schedules, and coordination between creative and technical teams.

## RESPONSIBILITIES:

- Oversee all aspects of animation production, from pre-production to final delivery.
- Manage budgets, schedules, and resources to ensure timely and cost-effective project completion.
- Coordinate communication between departments (creative, technical, and administrative).
- Negotiate contracts and manage relationships with clients and stakeholders.
- Solve production issues and ensure quality control.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Producer	Yes	<ul style="list-style-type: none"><li>• Degree in film directing or other relevant field from any educational/ recognized institution.</li><li>• Having a Master's or a PhD degree in film directing or other relevant field is an added advantage</li></ul>	>5-10 Years	6,7	7,8

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Project management expertise, including documentation, resource allocation, budgeting and scheduling.
- Strong understanding of the animation production pipeline.
- Leadership and team coordination.
- Negotiation and contract management skills.
- Problem-solving and conflict resolution.
- Stakeholder engagement and management.

## **SOFT SKILLS:**

- Leadership and decision-making.
- Strong communication and negotiation skills.
- Excellent organisational and multitasking abilities.
- Ability to manage stress and work under tight deadlines.
- Flexibility and adaptability to production changes.
- Financial management

## **TOOLS:**

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Communication Tools:**
  - ◊ Slack, Zoom, email clients.



# EXECUTIVE PRODUCER

C - LEVEL

## JOB DESCRIPTION:

An executive producer secures funding, oversees high-level decisions, and ensures the project aligns with financial and creative goals.

## RESPONSIBILITIES:

- Secure financing and funding for animation projects.
- Oversee and approve the overall creative and financial direction of the production.
- Develop and implement strategic plans including scope, budget, timelines, resource allocation and monetisation of the project.
- Collaborate with producers and directors to ensure the project meets objectives.
- Manage relationships with investors, studios and key stakeholders.

## PRE-REQUISITES:

Job role	Portfolio	Minimum qualification	Work experience (in relevant field)	SFIA-level	MQF-level
Executive Producer	Yes	<ul style="list-style-type: none"><li>• Degree in Animation or other relevant field from any educational/ recognised institution.</li><li>• Having a Master's or a PhD degree in film directing or other relevant field is an added advantage</li></ul>	>5-10 Years	6,7	7,8

**Note:** Information on SFIA & MQF LEVEL can be found in Appendix A and B on page 68 and 69 respectively.

## CORE SKILLS:

- Strong financial management and budgeting expertise.
- Deep understanding of animation production workflows.
- Ability to negotiate and manage high-level contracts and deals.
- Expertise in managing relationships with investors and stakeholders.
- Business development and marketing skills.

## **SOFT SKILLS:**

- Strong leadership and decision-making abilities.
- Excellent communication and negotiation skills.
- Strategic thinking, planning and problem-solving.
- Excellent organisational and multitasking abilities.
- Relationship-building and networking abilities.
- Ability to manage high-pressure environments.

## **TOOLS:**

- **Project Management Tools:**
  - ◊ Microsoft Project, Trello, Asana
- **Productivity Tools:**
  - ◊ Microsoft Suite, Google Workplace
- **Communication Tools:**
  - ◊ Slack, Zoom, email clients.
- **Financial management System**

# APPENDIX

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## APPENDIX A

Skills Framework for the Information Age (SFIA) is a widely used framework for describing skills and competencies within the IT and digital professions. SFIA defines seven levels of responsibility, ranging from the lowest level (Level 1) to the highest (Level 7) as can be seen in Table 1. Further information on SFIA can be found at: <https://sfia-online.org/>

Level	Responsibility
1	Follow
2	Assist
3	Apply
4	Enable
5	Ensure and Advise
6	Initiate and Influence
7	Set Strategy, Inspire and Mobilise

**Table 1:** SFIA Responsibility Levels

## APPENDIX B

Skills Framework for the Information Age (SFIA) is a widely used framework for describing skills and competencies within the IT and digital professions. SFIA defines seven levels of responsibility, ranging from the lowest level (Level 1) to the highest (Level 7) as can be seen in Table 1. Further information on SFIA can be found at: <https://sfia-online.org/>

Level	Qualification
1	Level 1 Certificate
2	Level 2 Certification
3	Level 3 Certification
4	Diploma
5	Advance Diploma
6	Bachelor's Degree
7	Master's Degree / Post-Graduate Diploma / Post-Graduate Certificate
8	Doctoral Degree

**Table 2:** MQF Qualification Levels



**PEMBANGUNAN SUMBER MANUSIA BERHAD**  
**Wisma HRD Corp**

Jalan Beringin, Damansara Heights  
50490 Kuala Lumpur

Phone: 1300-88-4800

Website: [www.hrdcorp.gov.my](http://www.hrdcorp.gov.my)



Scan this QR code to access the digital version of the Industrial Skills Framework (IndSF) Animation.

