

# Introduction to 2D Digital Animation, Imaging, and Media Production

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| Length of course:<br>3 Months (12 Weeks) | Schedule:<br>2 evenings per week, 2 hours per session | Level:<br>Beginner (Basic computer literacy required) |
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## Course Description:

This course is aimed at learners who are wishing to enter the digital media industries. The course aims to introduce learners to the latest in digital technology using programmes like Photoshop, Animate, After Effects, etc, in order to fuse the learners artistic persona with the latest in digital software.

## Why Animation?

Animation or the concept of animation involves all the components needed for learners to create pathways into many different carrier opportunities open to them within the creative industries. Animation allows the learner to explore ideas in imaging, editing, special effects and sound management.

Making use of powerful software learners will have an impact on the film, TV, print, web, 3D and gaming industries respectively.

Whilst all learners will be guided through the learning step by step, it will be helpful if they have basic computer literacy. The course will be taught in manageable stages, and will seek to engage the learner at every step of the way. All students will leave with a small digital portfolio of work that demonstrates their understanding and engagement with the processes involved in producing a short animation.

## Aims:

- The main aim of the course is to introduce learners to how animation is produced.
- Empower the learner, by giving them the tools necessary to hit the ground running confidently in the media industry.
- Introduce learners to scripts and storyboards.
- Introduce the learner to the interface and main operating features of all software.
- Introduce learners to the main ways to animate.
- To give clear and concise instruction that promotes understanding and builds confidence.
- To promote good positive working relations between students and their peers.
- Allow learners to work from and interpret a brief whilst working under a time constraint.
- Introduce learners to previous students who are industry professionals to share experiences.
- To leave the course with a strong portfolio that demonstrates understanding and competency.
- To encourage the learner to do their own research.
- To have fun!

## Objectives:

- Learners will understand how to deconstruct the software's main components
- Learners will be taught how to script and storyboard ideas in preparation for production.
- Learners will be guided by a tutor through all software.
- Learners will be taught how to motion and shape tween, as well as frame-by-frame animation.
- Tutor will have learning aids such as handouts, online tutorials, as well as one-on-one learning.
- Students will sometimes be asked to work in groups in order to understand the idea of teamwork and to prepare them for future mentorship and training roles.
- Tutor will guide learners in how to construct, document, and realize their ideas right through production.
- Previous students will be invited to share their experiences and give tutorials via an online platform.
- Learners will be encouraged to produce work in a variety of mediums, such as hand-drawn, photography, sketchbooks, etc.
- Learners will be given access to various learning resources and forums.
- Learners will have fun exploring and creating work.

## Basic course outline:

Week 1: Introduction to course contents, software interface, and cut and paste.

Week 2: Introduction to the three main methods of animation (motion tweening, shape tweening, and frame-by-frame animation).

Week 3: Working with backgrounds. Animating and placing background images for animation.

Week 4: Basic character animation. A simple method of animating characters.

Week 5: Introduction to sound and editing sounds.

Week 6-12: Learners will produce a basic animation, scripting and storyboarding ideas along with the appropriate sounds. Students will edit all animation with sounds and prepare a small portfolio of work for presentation.

## Students will learn how to:

- Cut and paste images
- Manipulate images on screen
- Multi-task seamlessly between differing software
- Save images, controlling their size and memory
- Create tweens and frame-by-frame animation
- Create and control key frames
- Create realistic textures
- Save and produce work in a variety of formats
- Draw and shade digitally
- Key frame sounds
- Edit and add special effects in post production
- Create and understand storyboards
- Use the software main functions confidently
- Plus much more...

# Advanced 2D Animation and Introduction to Stop-Motion Animation

Length of course:  
3 Months (12 Weeks)

Schedule:  
2 evenings per week, 2 hours per session

Level:  
Intermediate

## Course Description:

This course is designed for learners who have completed our introductory animation course and wish to delve deeper into the art of 2D and Stop-Motion. Learners will explore a variety of stop-motion techniques and gain a comprehensive understanding of the twelve principles of animation. The curriculum focuses on hands-on experience with fundamental techniques of stage, prop, and character design, utilizing rigs, winders, and set design. The course will also integrate the use of industry-standard digital software, encouraging learners to blend traditional and modern animation techniques.

## Why Stop-Motion Animation?

Stop-motion animation provides a unique opportunity for learners to explore their animation skills in greater depth. The frame-by-frame nature of this technique promotes a profound understanding of animation principles and concepts, particularly the twelve principles of animation. While a tutor will be available for guidance, learners are expected to take significant responsibility for their own learning and research.

## Aims:

- Promote a deep understanding of the twelve principles of animation.
- Teach proper referencing techniques for all character animations.
- Foster a deeper understanding of character animation.
- Develop skills in working with cameras for animation.
- Improve understanding of timing in animation.

## Objectives:

- All learners' test animations will be based on one or more of the twelve principles taught in the course. Students will learn how to apply these principles as needed.
- All animations must be supported by student-researched reference materials. Students will be shown how to find and create appropriate reference materials.
- Students will create a series of walk cycles, head turns, eye blinks, and other animations that incorporate character and emotion.
- Students will learn how to work with and rig cameras to improve and explore their shots.

## Basic Course Outline:

Weeks 1-2: Introduction to course contents, software interface, and walk cycles. Continuation of walk cycles with a focus on character and expression. Students must produce a variety of walk cycles with distinct character and emotion.

Weeks 3-4: Introduction to head turns, eye blinks, and secondary animation using the principle of arc motion. Continuation of head turns, eye blinks, and secondary animation using the principle of arc motion.

Weeks 5-6: Introduction to set design and working with backgrounds. Continuation of set design and working with backgrounds.

Week 7: Introduction to rigging cameras and setting up camera shots. Continuation of rigging cameras and setting up camera shots.

Week 8: Designing wireframe characters for animation.

Week 9: Working with mouth shapes for lip-sync.

Weeks 10-12: Animation production and presentation.

## Students will learn how to:

- Navigate and work within the animation software interface
- Create walk cycles with distinct character, personality, expression, and emotion
- Animate head turns and eye blinks
- Apply secondary animation using the principle of arc motion
- Design sets and work effectively with backgrounds
- Rig cameras and set up camera shots
- Design wireframe characters for animation
- Create and use mouth shapes for lip-sync
- Develop animation projects through production
- Prepare and present completed animation work

# Introduction to 3D Modeling

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| Length of course:<br>3 Months (12 Weeks) | Schedule:<br>2 evenings per week, 2 hours per session | Level:<br>Advanced |
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## Course Description:

This three-month course introduces students to the principles and practice of 3D modeling using Blender. Through a structured combination of technical exercises students develop skills in modeling, materials, texturing, lighting, cameras, and rendering. By the end of the course, students will create and present a 3D scene.

## Why 3D Modeling?

3D modeling is an essential creative skill used across film, games, advertising, architecture, product design, visual effects, and digital media. Learning 3D develops both technical and creative thinking, allowing students to transform ideas into engaging visual experiences. Blender provides a powerful, industry-relevant platform through which students can explore the 3D production process.

## Aims:

The course aims to develop students' foundational and practical knowledge of 3D modeling, while encouraging creativity, problem-solving, visual communication, and independent project development.

Students will learn to approach a 3D project from concept and planning through modeling, texturing, lighting, rendering, and presentation.

## Objectives:

- By the end of the course, students should be able to use Blender confidently and navigate its core tools and workflows.
- Create, edit, and refine 3D models using appropriate modeling techniques.
- Apply materials, textures, lighting, and camera composition to create effective scenes.
- Plan, produce, render, and present a 3D project.
- Evaluate their own work and respond constructively to feedback.

## Basic Course Outline:

Week 1: Introduction to 3D & Blender. Understand what 3D modeling is and how 3D is used in film, games, design and visualization. Introduction to Blender's interface, viewport navigation, Object Mode and Edit Mode. Practice selecting, moving, rotating and scaling objects. Learn how to save and organise Blender files.

Week 2: Basic Objects & Modeling. Create and manipulate basic mesh primitives. Introduction to vertices, edges and faces. Practice basic Edit Mode tools including extrude, inset and loop cut. Build a simple object using primitive shapes and develop an understanding of scale and proportion.

Week 3: Modeling from Reference. Learn how to import and work from reference images. Understand basic proportions and shape construction. Model a simple object from reference, such as a chair, table, container or other

everyday object. Practice refining forms and correcting basic modeling errors.

Week 4: Introduction to Modeling Workflows & Modifiers. Develop cleaner and more efficient modeling habits. Introduction to basic topology, quads and simple edge flow. Learn to use essential modifiers including Mirror, Subdivision Surface and Solidify. Apply these tools to improve and refine a simple model.

Week 5: Materials, Colour & Basic Texturing. Introduction to Blender's Material Editor. Understand base colour, roughness, metallic properties and simple surface appearance. Create and apply materials to existing models. Introduction to image textures and basic UV mapping.

Week 6: Lighting, Cameras & Still Rendering. Introduction to Point, Sun, Area and Spot lights. Explore how lighting affects mood, form and visibility. Learn basic camera placement, composition and framing. Introduction to Eevee and Cycles. Set up and render a simple still image.

Week 7: Modeling Practice. Develop and refine 3D models using the modeling tools and workflows introduced during the course.

Week 8: Modeling Practice & Refinement. Continue developing models with a focus on proportion, form, topology and clean modeling practices.

Week 9: Simple Scene Creation. Combine modeled objects, materials, lighting and cameras within a small 3D scene. Develop an understanding of scene layout, scale, depth and composition. Begin planning a short final exercise using skills developed during the course.

Week 10: Final Exercise Modelling & Scene Setup. Create or refine the simple assets required for the final exercise. Apply materials, arrange the scene, establish lighting and position the camera. Prepare the scene for rendering.

Week 11: Final Exercise Refinement & Rendering. Refine models, materials, lighting and composition within the final scene. Prepare render settings, create test renders and troubleshoot basic problems.

Week 12: Final Render, Presentation & Review. Complete and render a 3D scene. Present completed work for feedback. Review the core skills developed during the course and discuss possible next steps in 3D modeling.

## Students will learn how to:

- Navigate Blender's interface and viewport.
- Work in Object Mode and Edit Mode.
- Select, move, rotate and scale 3D objects.
- Create and modify basic mesh objects using vertices, edges and faces.
- Use basic modeling tools including extrude, inset and loop cut.
- Model simple objects using primitive shapes and reference images.
- Apply basic modeling workflows and modifiers, including Mirror, Subdivision Surface and Solidify.
- Create and apply simple materials, colours and basic textures.
- Use basic UV mapping.
- Set up simple lighting using Point, Sun, Area and Spot lights.
- Position cameras and compose simple 3D scenes.
- Render still images using basic Eevee and Cycles settings.
- Build a simple 3D scene using modeled objects, materials, lighting and cameras.
- Prepare basic render settings and create test renders.
- Complete, render and present a 3D scene.