

Complete Blender 3D Character Creation and Animation Course

Create 3D characters and animations from scratch using Blender. Five hands-on projects from beginner to portfolio-ready.

Design Instructor: Daniel Mercer • 5 sections • 49 lessons • 18.25h total

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About this course

This course takes you from never opening Blender to creating animated 3D characters, using the free Blender software. It is built for aspiring game developers, animation students, and creative professionals who want to add 3D to their skill set.

You will start with Blender's interface and navigation, then work through five animation projects that grow in complexity. Each project builds on the last, covering modeling, texturing, rigging, materials, shape keys, particle systems, lighting, sound, and advanced animation techniques. By the end, you will have a portfolio of animations including talking characters, full human characters, and dynamic scenes. The course includes video tutorials, downloadable project files, and techniques used by working animators.

Course curriculum

Blender Fundamentals and Getting Started

- **Navigating the Blender Interface: Your First Steps (12m)**
Learn the essential navigation controls, viewport management, and interface customization to feel comfortable working in Blender from day one.
- **Essential Tools: Selecting, Moving, and Transforming Objects (18m)**
Master object manipulation including selection techniques, transformation tools, and precision controls that form the foundation of all 3D work.
- **Viewport Controls and Working Efficiently in 3D Space (10m)**
Discover viewport navigation shortcuts, camera controls, and workspace organization to speed up your workflow and reduce frustration.
- **Basic Modeling Tools: Creating Your First 3D Objects (15m)**
Learn fundamental modeling techniques including extrusion, loop cuts, and basic mesh editing to start creating 3D forms.
- **Materials and Shading Basics: Adding Color and Texture (14m)**
Understand the material system and create your first materials using the shader editor to add realism to your objects.
- **Setting Up Your Workspace for Animation Projects (8m)**
Configure Blender's interface layout and preferences specifically for character animation work, saving time on future projects.
- **Understanding the Timeline and Animation Basics (11m)**
Learn keyframe animation fundamentals, timeline navigation, and playback controls to prepare for your first animation project.

First Animation Project: Simple Character Creation

- **Planning Your First Character: Design and Concept (9m)**
Learn professional character design workflow from concept to 3D model, including reference gathering and planning your modeling approach.
- **Modeling Your Character's Body: Step-by-Step Guide (25m)**
Build your character's body from basic shapes, learning proper topology and edge flow techniques for animation-ready models.
- **Creating Facial Features and Expressions (20m)**
Model detailed facial features and learn shape key creation for facial animation, including eye and mouth controls.
- **Understanding Shape Keys for Facial Animation (16m)**
Master shape key creation and manipulation to create realistic facial expressions and prepare for lip sync animation later.
- **Basic Rigging: Making Your Character Moveable (22m)**
Learn bone creation, weight painting basics, and simple rig setup to make your character ready for animation.

- **Applying Materials and Textures to Your Character (18m)**
Create and apply materials using the shader editor, add textures, and make your character visually appealing.
- **Creating Your First Animation: Walk Cycle Basics (28m)**
Animate a simple walk cycle learning timing, spacing, and the principles of character movement in 3D space.
- **Rendering and Exporting Your First Animation (12m)**
Set up camera angles, lighting, and render settings to create your final animation output, ready to share.

Advanced Animation: Curves, Particles, and Dynamic Scenes

- **Animating Along Curves: Path Animation Techniques (19m)**
Master curve-based animation for smooth camera movements and object paths, essential for professional-looking animations.
- **Introduction to Particle Systems: Creating Dynamic Effects (24m)**
Learn particle system basics to create effects like dust, sparks, or magical elements that enhance your animations.
- **Advanced Modeling Techniques for Complex Objects (21m)**
Learn boolean operations, modifiers, and advanced modeling tools to create detailed props and environment elements.
- **Texture Painting and UV Mapping Fundamentals (27m)**
Understand UV unwrapping and texture painting to create custom textures that make your models unique and professional.
- **Creating a Complete Scene: Environment Design (32m)**
Build a complete animated scene with multiple elements, learning composition and storytelling through environment design.
- **Advanced Lighting Techniques for Mood and Atmosphere (18m)**
Master three-point lighting, HDRI environments, and advanced lighting setups to create cinematic-quality scenes.
- **Camera Animation and Cinematography Basics (15m)**
Learn camera movement techniques, focal length choices, and cinematography principles for engaging animations.
- **Putting It All Together: Completing Your Second Animation (35m)**
Combine all learned techniques to create a polished animation with multiple elements, effects, and professional presentation.

Creating Realistic Human Characters

- **Human Anatomy Basics for 3D Character Artists (13m)**
Learn fundamental human proportions and anatomy principles to create believable human characters in 3D.
- **Modeling the Human Head: Structure and Proportions (38m)**
Create a detailed human head with proper facial structure, learning edge flow techniques optimized for animation and expression.

- **Building the Human Body: Torso and Limbs (42m)**
Model the complete human body with correct muscle structure and topology suitable for realistic movement and deformation.
- **Creating Realistic Hands and Feet (25m)**
Learn specialized techniques for modeling detailed hands and feet, crucial for believable human characters.
- **Advanced Character Rigging: Full Body Control Setup (45m)**
Build a professional character rig with IK/FK switching, custom controls, and advanced features for natural movement.
- **Weight Painting for Natural Deformation (28m)**
Master weight painting techniques to ensure your character deforms naturally when animated, avoiding common rigging problems.
- **Creating Realistic Eye Materials and Shaders (20m)**
Use the shader editor to create convincing eye materials with reflections, wetness, and realistic light interaction.
- **Developing a Believable Skin Shader (24m)**
Create advanced skin materials using subsurface scattering and texture blending for realistic human skin appearance.
- **Clothing and Fabric Material Creation (19m)**
Learn fabric material creation techniques for clothing, including different types of cloth textures and how they interact with light.
- **Hair Creation Using Particle Systems (22m)**
Master hair and fur creation using particle systems, including styling, dynamics, and realistic hair material creation.
- **Advanced Human Animation: Walking and Running (34m)**
Create realistic human walk and run cycles, learning weight shifts, timing, and natural body mechanics.
- **Creating Custom Sound Effects for Your Animations (16m)**
Learn to create and integrate custom sound effects that enhance your animations and bring characters to life.

Lip Sync and Character Performance Animation

- **Designing and Modeling an Alien Character (30m)**
Create a unique alien character from concept to final model, learning creative design principles and efficient modeling workflows.
- **Advanced Rigging for Facial Performance (35m)**
Build a detailed facial rig with shape keys and bone controls optimized for lip sync and emotional expression.
- **Understanding Phonemes and Mouth Shapes (18m)**
Learn the fundamentals of speech animation including phoneme recognition and corresponding mouth shapes for different sounds.

- **Lip Sync Animation Techniques and Workflow (40m)**
Master the process of matching character mouth movements to audio dialogue, creating believable speaking animations.
- **Animating Emotional Expressions and Body Language (28m)**
Learn to convey emotion through facial expressions and body language, making your characters feel alive and believable.
- **Creating Character Personality Through Movement (22m)**
Develop unique movement styles that reflect character personality, adding depth and memorability to your animations.
- **Scene Planning and Storyboarding for Animation (20m)**
Learn professional pre-production techniques including storyboarding and animatic creation to plan successful animations.
- **Advanced Camera Techniques for Character Scenes (25m)**
Master camera placement, movement, and cutting techniques that enhance character performance and storytelling.
- **Lighting for Character Performance and Mood (21m)**
Use advanced lighting techniques to enhance character performance, create mood, and direct viewer attention.
- **Audio Integration and Sound Design (19m)**
Learn professional audio integration techniques, including dialogue editing, sound effects placement, and music timing.
- **Polishing and Finalizing Your Character Animation (32m)**
Apply professional finishing touches including render optimization, color correction, and final output formatting.
- **Building Your Animation Portfolio and Next Steps (15m)**
Learn how to showcase your work effectively, continue improving your skills, and explore career opportunities in animation.
- **Troubleshooting Common Animation Challenges (17m)**
Solve common problems in character animation including rig issues, timing problems, and rendering challenges.
- **Developing Your Own Animation Style and Workflow (14m)**
Discover how to develop your unique animation style and create efficient workflows for future projects.

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