

Blender Essentials: A 10-Week Intensive Course

Course Objective

Gain a comprehensive understanding of Blender for general-purpose 3D graphics creation.

Duration

10 Weeks

Study Days

Monday, Wednesday, Thursday

Assignments

Weekly, due every Sunday

Week 1: Introduction to Blender

- Monday: Introduction to Blender Interface
 - The BEST Way To Learn Blender in 2023!!
- Wednesday: Basic Navigation in 3D Space
 - Blender 3.4 tutorial for absolute beginner 2023 - Introduction
- Thursday: Object Mode vs. Edit Mode
 - Learn Blender 3D in 20 Minutes! Blender Tutorial for Absolute Beginners (2023)
- Assignment: Create a simple 3D scene using basic shapes.

Week 2: Modeling Basics

- Monday: Creating and Modifying Basic Shapes
 - Super simple shapes in Blender (Tutorial)
- Wednesday: Introduction to Mesh Editing
 - Beginners Blender 3D: Tutorial 4 - Creating and Modifying Objects
- Thursday: Extruding and Insetting Faces
 - Blender 3D for Beginners - Ep03 - Basic shapes, Edit Mode and Transforming Objects
- Assignment: Model a simple object (like a table or chair).

Week 3: Advanced Modeling Techniques

- **Monday:** Using Modifiers for Non-Destructive Editing
 - Blender: All you need to know about modifiers in general
- **Wednesday:** Sculpting Basics
 - Introduction to Modifiers in Blender
- **Thursday:** Introduction to Texturing
 - Simple, Non-Destructive 3D Modeling for Efficiency- Blender Beginner Tutorial
- **Assignment:** Model and texture a more complex object.

Week 4: Materials and Texturing

- **Monday:** Basics of Material and Textures
 - The Ultimate Guide to MATERIALS in Blender Part 1 - Materials for Beginners!
- **Wednesday:** UV Mapping for Texture Application
 - MATERIALS For Absolute Beginners - Blender Tutorial
- **Thursday:** Procedural Textures and Nodes
 - Blender - Basic Materials and Textures
- **Assignment:** Apply textures and materials to a 3D model.

Week 5: Lighting and Rendering

- **Monday:** Introduction to Lighting in Blender
 - Blender 3.0 Beginner Tutorial Part 13: Lighting
- **Wednesday:** Camera Angles and Composition
 - Complete Guide to Blender LIGHTING | Step by Step Tutorial
- **Thursday:** Basics of Rendering
 - Blender Lighting Tutorial for 3D Beginners - Learn how to Light
- **Assignment:** Create a rendered scene with proper lighting and camera setup.

Week 6: Animation Basics

- **Monday:** Keyframe Animation
 - Blender-Keyframing & Animation
- **Wednesday:** Animating Movement and Rotation
 - Blender 3D - Keyframe Animation for Beginners
- **Thursday:** Introduction to the Graph Editor
 - Blender Animation Tutorial - Beginner Basics - Keyframes
- **Assignment:** Animate a simple object moving along a path.

Week 7: Advanced Animation

- **Monday:** Rigging and Skinning
 - QUICK RIGGING AND SKINNING IN BLENDER
- **Wednesday:** Character Animation Basics
 - Blender 3D Tutorial - Rigging (pt. 3) Skinning Characters for Posing & Animations
- **Thursday:** Non-Linear Animation and the NLA Editor
 - Tutorial: My New Rigging Workflow in Blender
- **Assignment:** Animate a basic character walking.

Week 8: Simulation and Effects

- **Monday:** Physics Simulations Basics
 - [2.92] Blender Tutorial: Quick Physics Simulation for Beginners
- **Wednesday:** Particle Systems
 - See the Blender Physics Simulation Tutorials playlist
- **Thursday:** Introduction to Smoke and Fire Simulation
 - Blender Tutorial: Physics Simulation
- **Assignment:** Create a scene with a basic physics simulation or particle effect.

Week 9: Compositing and Post-Processing

- **Monday (Basics of Compositing in Blender):**
 - Blender 3.0 Beginner Tutorial Part 14: Compositing - Introduction to compositing in Blender.
- **Wednesday (Nodes for Compositing):**
 - Introduction to Compositing in Blender - Using nodes for compositing.
- **Thursday (Introduction to Post-Processing Effects):**
 - Compositing in Blender for Beginners (Tutorial) - Learning about post-processing effects.
- **Assignment:** Enhance a rendered scene using compositing and post-processing techniques.

Week 10: Final Project

- **Monday-Thursday:** Work on Final Project.
- **Final Project:** Create a short animation or a detailed 3D scene, incorporating skills learned throughout the course.
- **Due Date:** End of Week 10 (Sunday).