



2D & 3D Animation

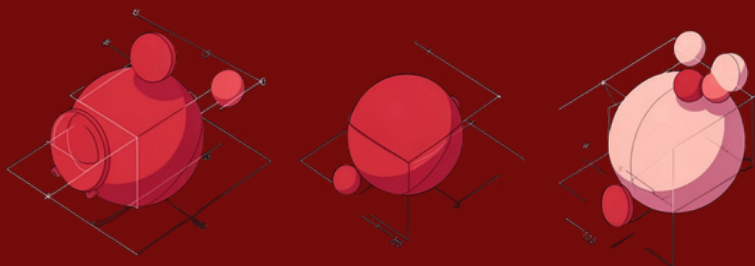
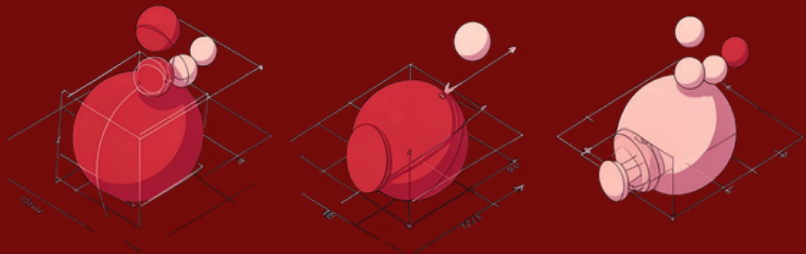
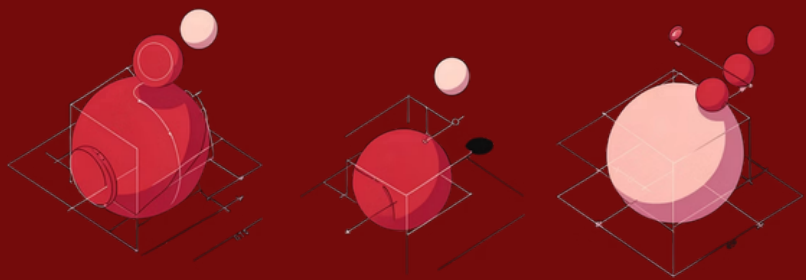
A Comprehensive 45-Hour Course for Third-Year Students
St. Bede's College, Shimla

Course Overview

What Students Will Learn

- **Animation Fundamentals**
- **Storyboarding & Character Design**
- **Whiteboard Animation**
- **2D Animation in Adobe Animate**
- **Basic 3D Modeling & Animation**
- **Lighting, Rendering & Final Project**





Animation Fundamentals

MODULE 1 | 5 HOURS

Key Topics

- Introduction to Animation
- 2D vs 3D Animation
- Animation Workflow
- 12 Principles of Animation
- Timing & Spacing
- Storytelling Basics

Practical Activities

- Bouncing Ball Animation
- Moving Object Animation
- Simple Character Movement



Outcome: Understand the basic principles behind animation.

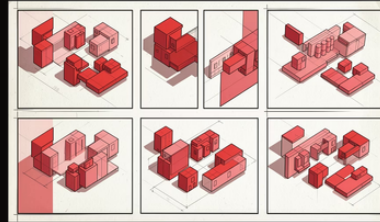
Storyboarding & Character Design

MODULE 2 | 5 HOURS



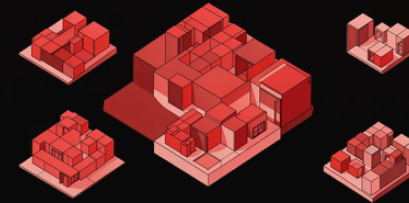
Story & Character

- Story Development
- Character Design
- Facial Expressions
- Character Poses



Scene Planning

- Scene Planning
- Storyboarding
- Create a Simple Character
- Design Character Expressions



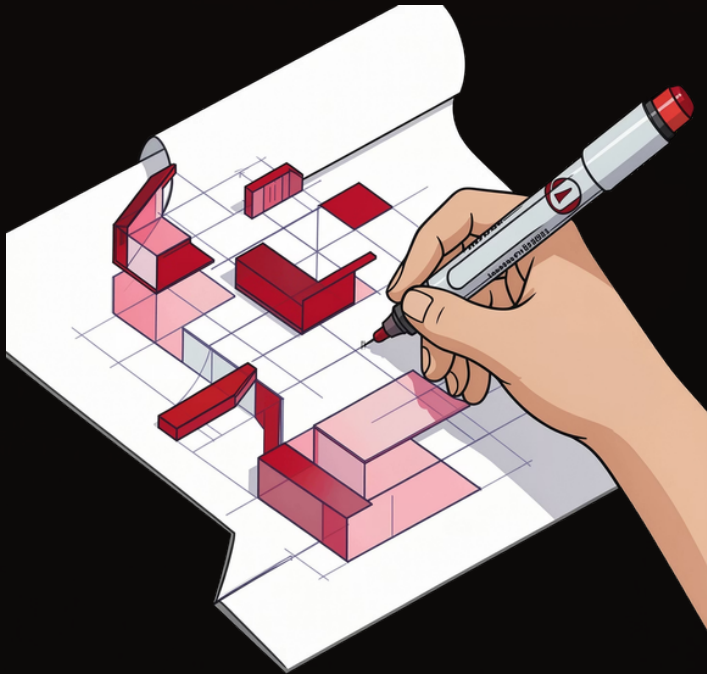
Practical Output

- Create a 30-Second Storyboard

Outcome: Plan and visualize an animation before production.

Whiteboard Animation

MODULE 3 | 6 HOURS



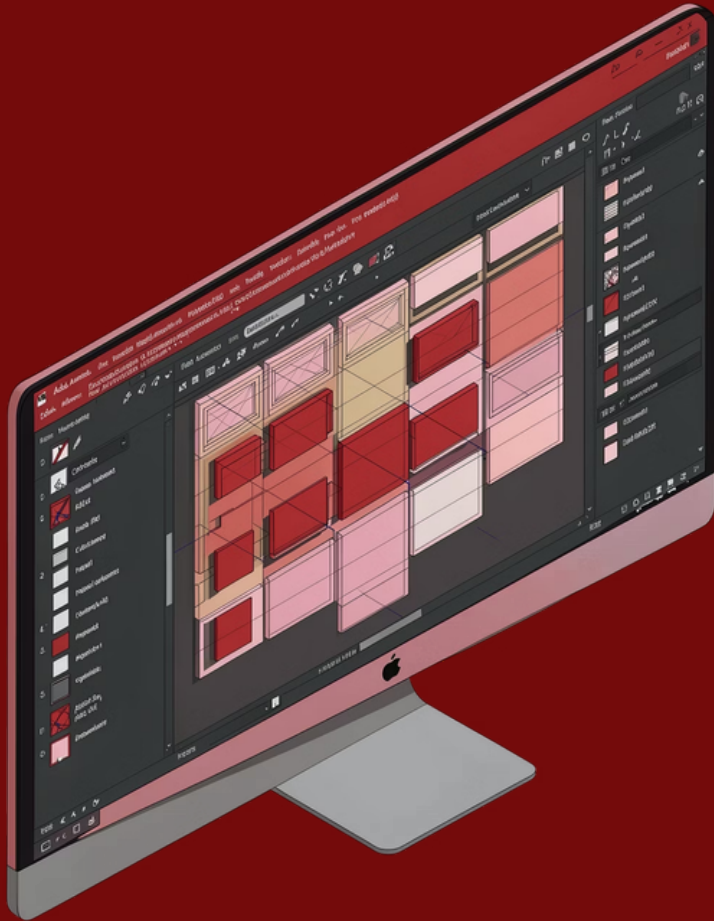
Key Topics

- Whiteboard Animation Concepts
- Visual Storytelling
- Hand-Drawing Effect
- Text & Image Animation
- Scene-by-Scene Animation
- Voice-over & Background Music

Practical Activities

- Educational Explainer Video
- Social Awareness Video
- College/Event Explainer

TOOL: - WHITEBOARD ANIMATION TOOL



2D Animation with Adobe Animate

MODULE 4 | 9 HOURS

Interface & Tools

- Adobe Animate Interface
- Drawing & Shape Tools
- Layers & Frames

Animation Techniques

- Keyframes
- Motion Tween
- Frame-by-Frame Animation
- Basic Character Animation

Practical Activities

- Bouncing Ball
- Moving Car
- Character Walk
- Short Cartoon Scene

2D Character & Motion Animation

MODULE 5 | 5 HOURS

Key Topics

**Character
Movement**

**Facial
Expressions**

**Object
Animation**

**Background
& Scene
Design**

**Basic Lip-
Sync
Concept**

Practical Activities

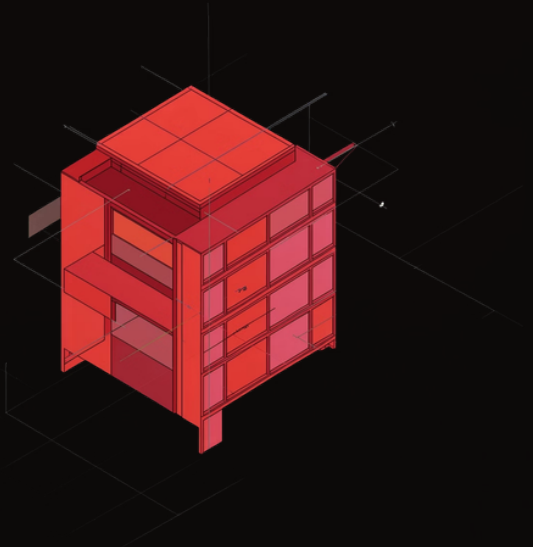
- Character Action Scene
- Animated Advertisement
- 15–20 Second Cartoon Animation

✓ **Outcome:** Create a complete short 2D animation.



3D Animation with Blender

MODULE 6 | 7 HOURS



Key Topics

- Blender Interface & Navigation
- 3D Objects — Move, Rotate & Scale
- Basic 3D Modeling
- Materials & Colors
- Camera Setup
- Basic Lighting

Practical Activities

Create a 3D Room/Object

Simple Product Model

Camera Setup

TOOL: BLENDER

3D Animation & Rendering

MODULE 7 | 4 HOURS

Keyframe Animation

Animate object movement and product rotation



Basic Lighting

Setscene illumination and mood



Camera Movement

Create dynamic shots and adjust angles



Rendering & Export

Finalize render settings and export output



Students apply these steps in three hands-on activities: a 3D Product Rotation, a Simple Camera Animation, and a Short 3D Scene — culminating in a fully rendered and exported animation.

✓ **Outcome:** Create and render a basic 3D animation.

Final Project & Assessment

- Whiteboard Educational Video
- 2D Cartoon Animation
- 2D Advertisement
- 3D Product Animation
- College Event Animation
- Social Awareness Animation

Course Outcomes

- Create Whiteboard Animations
- Develop 2D Animations in Adobe Animate
- Create Basic 3D Models in Blender
- Animate Objects & Characters
- Apply Lighting & Rendering
- Build a Basic Animation Portfolio