

## Curriculum for 1-year Short Term Course on

# **Animation and Multimedia**

### **Mission**

The mission of the Animation and Multimedia course is to equip students with the creative skills, technical knowledge, and practical experience needed to thrive in the animation and multimedia industry. By fostering proficiency in visual storytelling, design principles, and digital tools, we aim to develop versatile creators who can produce impactful multimedia content. Through hands-on projects, industry-relevant training, and a focus on personal expression, we strive to inspire students to excel as innovative artists and skilled professionals.

### **Vision**

Our vision is to become a leading program that shapes the future of animation and multimedia by cultivating the next generation of creative thinkers and digital storytellers. We envision our graduates driving innovation in diverse media fields, influencing global audiences, and setting new standards in animation, 3D design, and multimedia production. This course aspires to build a community of passionate creators who contribute meaningfully to the art and media landscape, empowered by a strong foundation in both traditional and emerging digital techniques.

# Semester 1: Fundamentals of Animation and Multimedia

**Goal:** Establish a foundational understanding of animation principles, visual storytelling, design basics, and multimedia software.

## Subject 1: Principles of Animation

### 1. Module 1: History and Evolution of Animation

- Overview of animation techniques (traditional, stop-motion, computer-generated)
- Key milestones in animation history

### 2. Module 2: Animation Fundamentals

- Introduction to the 12 principles of animation (e.g., squash and stretch, anticipation, timing)
- Basic motion studies and exercises

### 3. Module 3: Keyframing and Inbetweens

- Understanding keyframes, extremes, and breakdowns
- Inbetweens for smooth motion

### 4. Module 4: Timing and Spacing

- Concepts of timing and rhythm in animation
- Exercises in different motion pacing (fast, slow, weight, and balance)

### 5. Module 5: Walk Cycles and Basic Character Animation

- Anatomy of a walk cycle
- Basic character movement and expression

### 6. Module 6: Animation Planning and Storyboarding

- Storyboarding techniques and tools
- Planning animation sequences with storyboards

## Subject 2: Design Fundamentals and Digital Art

### 1. Module 1: Elements of Art and Design Principles

- Line, shape, color, texture, space, balance, contrast, unity

### 2. Module 2: Color Theory and Composition

- Color wheel, harmony, temperature, color psychology
- Rule of thirds, leading lines, and framing

### 3. Module 3: Introduction to Digital Art Software (e.g., Adobe Photoshop, Illustrator)

- Basic tools and interface navigation
- Layers, brushes, selection tools

#### **4. Module 4: Vector vs Raster Graphics**

- Differences, strengths, and use cases
- Vector illustrations and manipulations in Illustrator

#### **5. Module 5: Concept Art and Character Design Basics**

- Developing character concepts
- Expressions, poses, and personality through design

#### **6. Module 6: Environment and Prop Design**

- Basics of setting scenes and creating props
- Designing environments for animation

### **Subject 3: Introduction to Multimedia and Storytelling**

#### **1. Module 1: Multimedia Basics**

- Overview of multimedia types (video, audio, interactive, animation)
- Understanding multimedia project workflow

#### **2. Module 2: Scriptwriting and Story Development**

- Basics of storytelling, narrative structures, and plot devices
- Writing scripts for animation

#### **3. Module 3: Storyboarding for Multimedia**

- Storyboard design for multimedia projects
- Translating script to visuals

#### **4. Module 4: Sound in Multimedia**

- Introduction to sound design
- Audio basics: sound effects, music, voice

#### **5. Module 5: Visual Language and Cinematography**

- Camera angles, framing, and movement
- Visual storytelling techniques

#### **6. Module 6: Project Planning and Management**

- Fundamentals of project management for multimedia
- Planning, scheduling, and time management

### **Subject 4: Software Tools for Animation and Multimedia**

#### **1. Module 1: Introduction to Animation Software (e.g., Adobe Animate, Blender)**

- Navigating the workspace, tools, and timeline

## **2. Module 2: Basic Tools and Functions**

- Drawing tools, frames, layers, and symbols

## **3. Module 3: Creating Simple Animations**

- Frame-by-frame animation, looping animations, basic transitions

## **4. Module 4: Introduction to Video Editing Software (e.g., Adobe Premiere Pro)**

- Basic editing, timeline usage, and transitions

## **5. Module 5: Importing and Exporting Media**

- Optimizing files for different media platforms
- Exporting animations for web and video

## **6. Module 6: Introduction to 3D Animation Software (e.g., Blender)**

- Basics of the 3D workspace
- Simple 3D object modeling and rendering basics

## **Semester 2: Intermediate Animation, Multimedia Production, and Specialization**

**Goal:** Expand on first-semester concepts, focusing on advanced techniques in animation, multimedia production, compositing, and 3D basics.

### **Subject 1: Advanced 2D Animation Techniques**

1. **Module 1: Character Animation and Acting**
  - Character expressions, lip-sync, and body language
2. **Module 2: Advanced Animation Cycles**
  - Running, jumping, and complex movement cycles
3. **Module 3: Effects Animation (FX)**
  - Adding effects like smoke, fire, water, and particle effects
4. **Module 4: Background Animation and Depth**
  - Parallax scrolling, multi-plane backgrounds
5. **Module 5: Lip Sync and Facial Animation**
  - Matching dialogue with mouth movements
  - Facial expression techniques
6. **Module 6: Final 2D Animation Project**
  - A short animated sequence applying learned techniques

### **Subject 2: 3D Modeling and Animation Basics**

1. **Module 1: 3D Modeling Basics**
  - Simple object modeling, shapes, and extrusion techniques
2. **Module 2: Lighting and Texturing in 3D**
  - Basic lighting setup, adding materials and textures
3. **Module 3: Introduction to Rigging and Skinning**
  - Basic rigging concepts for character animation
4. **Module 4: 3D Animation Basics**
  - Moving, rotating, and scaling objects over time
5. **Module 5: Rendering and Exporting 3D Scenes**
  - Final render settings, exporting for use in multimedia
6. **Module 6: Short 3D Animation Project**
  - Create a simple 3D animated scene

## **Subject 3: Video Editing and Compositing**

- 1. Module 1: Advanced Video Editing Techniques**
  - Editing for story, pacing, and rhythm
- 2. Module 2: Visual Effects and Compositing (e.g., After Effects)**
  - Compositing basics, green screen effects, layer blending
- 3. Module 3: Motion Graphics and Typography**
  - Creating titles, kinetic typography, and transitions
- 4. Module 4: Color Grading and Correction**
  - Enhancing video quality and mood through color
- 5. Module 5: Audio Editing and Mixing for Animation**
  - Syncing sound with animation, adding effects and voice-over
- 6. Module 6: Final Editing and Compositing Project**
  - Complete a short, composited multimedia project

## **Subject 4: Portfolio Development and Industry Preparation**

- 1. Module 1: Creating a Portfolio**
  - Selecting work, organizing, and presenting projects
- 2. Module 2: Creating a Demo Reel**
  - Assembling animated sequences for a professional reel
- 3. Module 3: Personal Branding and Networking**
  - Creating an online presence, networking skills, LinkedIn
- 4. Module 4: Industry Standard Practices**
  - Intellectual property, ethics, and industry standards
- 5. Module 5: Preparing for Job Interviews and Freelancing**
  - Resume, interviews, freelance basics, project proposals
- 6. Module 6: Final Capstone Project**
  - Complete a portfolio-ready animation or multimedia project