

Module 1: Introduction to Animation

- History and evolution of animation
- Types of animation (2D, 3D, stop-motion, motion graphics)
- Principles of animation (squash & stretch, anticipation, timing, exaggeration, etc.)
- Careers in animation

Module 2: Drawing & Design Fundamentals

- Basics of sketching and storyboarding
- Character design and anatomy basics
- Backgrounds and environment design
- Color theory and composition

Module 3: 2D Animation

- Introduction to 2D animation software (Adobe Animate, Toon Boom, Krita)
- Frame-by-frame animation
- Tweening and motion paths
- Lip-sync and facial expressions
- Creating short 2D animated clips

Module 4: 3D Animation

- Introduction to 3D software (Autodesk Maya, Blender, 3ds Max)
- Modeling basics (characters, props, environments)
- Texturing and materials
- Rigging and skinning characters
- Keyframe animation and motion capture basics
- Lighting and rendering

Module 5: Visual Effects (VFX) & Motion Graphics

- Introduction to VFX software (Adobe After Effects, Nuke)
- Compositing and green screen techniques
- Particle effects (smoke, fire, rain)
- Motion graphics for titles and infographics

Module 6: Sound & Editing

- Basics of sound design for animation
- Syncing audio with visuals
- Editing animated sequences
- Exporting animations for different platforms

Module 7: Advanced Topics

- Game animation basics (Unity/Unreal Engine)
- Stop-motion animation techniques
- Experimental animation styles
- Industry workflows and pipelines

Module 8: Practical Projects & Portfolio

- Create a storyboard and animatic
- Produce a 2D animated short film
- Develop a 3D character animation project
- Design a motion graphics sequence
- Final project: Complete animated short with sound, effects, and rendering
- Portfolio preparation for industry jobs

Learning Outcomes

By the end of this course, students will:

- Understand the **principles of animation** and apply them in projects
- Create **2D and 3D animations** using industry-standard software
- Design characters, environments, and motion graphics
- Apply **VFX and sound design** to enhance animations
- Build a professional **portfolio** for careers in animation, gaming, or film