

## **AIT 314 E-CONTENT DEVELOPMENT USING ADVANCE MULTIMEDIA 3(1+2)**

### **Objective(s)**

After completing the course the student shall be able to create advance e-content creation for different field and devices as per industries/organization needs using Vector Graphics, Logo, Icon in 2D and 3D, controlling a puppet, typographic portrait and cartoon character, video compositing, motion graphics design, 3D animation, green screen composition, Create high-quality visual effects(VFX), Creating Interior Visualizations, Modeling Lighting and Rendering, Create virtual studio and virtual product workflow, Learn the creative aspects and finer nuances of animation and video production, starting from pre-production to post production, including storyboarding and character animation.

### **UNIT I**

Adobe Illustrator CC/ Inkscape - Workspace basics, Properties panel, Tools, Drawing basics, Draw simple lines and shapes, Perspective drawing, Symbols, Create 3D objects, Edit artwork using Image Trace, Select colors, About painting, Select and arrange objects, Reshape objects, Import, export, and save.

Character Animator Workspace – Start, Rig, Record, stream, Character Animator workflow - Create Character Animator project, Create your first character, Control the puppet using webcam, microphone, and mouse, Adjust the behaviour of your puppet, Record and refine your performance, Export the recorded scene, Use your scene in other applications

### **UNIT II**

After Effects Planning and setup, General user interface items, Working other applications, Workspaces, panels, and viewers, Projects and compositions basic, Precomposing, nesting, and pre-rendering, Importing footage - Working with footage items, Layers and properties - 3D layers, Cameras, lights, and points of interest, Animation and keyframes - Compositing tools for VR/360 videos, Apply immersive video effects, Create Motion Graphics templates in After Effects, Speed, Time-stretching and time-remapping, Tracking 3D camera movement, Animating with Puppet tools, Tracking and stabilizing motion.

### **UNIT III**

Drawing, painting, and paths, Creating shapes and masks, Managing and animating shape paths and masks, Mask Tracking, Creating and editing text layers, Animating text, Compositing and transparency, Alpha channels, masks, and mattes, Keying, Roto Brush, Refine Edge, Expression basics, Working with expressions, expression reference, Expression example, Basics of rendering and exporting still images and still-image sequences, Export an After Effects project as an Adobe Premiere Pro project.

### **UNIT IV**

Intro to 3D Software, The Workspace - User-Interface Elements, Viewports, ViewCube, Mouse Buttons, Quad Menus, Display of Objects in a viewport, Viewport Navigation, Transforming Objects using Gizmos, Graphite Modeling Tools set, Command Panel, Time Slider and Track Bar, Setting Up a Project Workflow, Architectural Model – creating walls, doors, window, floor, ceiling, furniture, Character poly modelling

## **UNIT V**

Introduction to Materials: Interiors and Furniture, The Slate Material Editor, Material Types, Creating a Multi/Sub-Object Material, Textures and UV Workflow- UV Unwrapping, Applying the Color and bump Map, Character Studio: Rigging, Creating and Modifying the Biped with modifier, Character Studio: Animation - Adding a Run-and-Jump Sequence, Adding Freeform Animation, Introduction to Lighting - Standard Lights, Target Spotlight, Target Direct Light, Free Spot or Free Direct Light, Omni Light, Rendering - Rendering Setup, Render Processing, Creating a Camera, Using Cameras, Animating a Camera.

### **Reference Book(s)**

1. Adobe Illustrator CC Classroom in a Book (2018 release) , Author : Brain Wood by Adobe press
2. Adobe After Effects CC Classroom in a Book (2018 release), Author : Lisa Fridsma by Adobe press
3. Adobe After Effect CC Help, Reference PDF by adobe Creative Team
4. Adobe Illustrator CC Help, Reference PDF by adobe Creative Team
5. Autodesk 3ds Max 2015 Essentials: Autodesk Official Press
6. Autodesk 3ds Max 2014 Essentials: Autodesk Official Press by Randi L. Derakhshani.

### **Practical(s)**

#### **Adobe illustrator/Inkscape and Character Animator**

1. Create a logo for an organization/Company
2. Create a typographic portrait and cartoon character or animate character
3. Create an icon for something – experiment with different styles (3d, web2.0, simple, etc)
4. Create your first character, control puppet with your webcam, mic and mouse, adjust the behavior of your puppet, record and refine your performance, export your recorded scene and use your scene in other application.

#### **After Effects**

1. Create a Photo slideshow animation in After Effects.
2. Create Kinetic Typography motion graphics.
3. Create Motion Graphics templates and Cinematic Title Animation.
4. Create 3d scene from still picture using Camera Mapping and 3D Environment.
5. Create a Lower Third in After Effects & use it in Premiere Pro with Live Text Templates.
6. Create green screen composition for video footage.
7. Create a video clip using Motion Tracking and Rotoscoping.

#### **3Ds MAX / BLENDER**

1. Create Architectural Model - Creating Interior Visualizations, Modeling Lighting and Rendering
2. Animating Text - Using Modifiers, particles
3. Design 3D company logo
4. Create Character Poly Modeling
5. Create virtual studio and virtual product
6. Create Product Presentation Workflow
7. Create environments to build the scenes for your movie or visualization