



**Lok Jagruti Kendra University**  
University with a Difference

# **Diploma in Gaming & Animation**



**Course Code: 025110402**

**Character Design Tools**

<b>Programme / Branch Name</b>		Diploma in Gaming & Animation				
<b>Course Name</b>	Character Design Tools				<b>Course Code</b>	025110402
<b>Course Type</b>	HSSC	BSC	ESC	PCC	OEC	PEC

**Legends:** HSSC: Humanities and Social Sciences Courses BSC: Basic Science Courses  
ESC: Engineering Science Courses PCC: Program Core Courses  
OEC: Open Elective Courses PEC: Program Elective Courses

## 1. Teaching and Evaluation Scheme

Teaching Hours / Week / Credits				Evaluation Scheme			
L	T	P	Total Credit	CCE	SEE (Th)	SEE (Pr)	TOTAL
0	0	6	3	50	-	50	100

**Legends:** L: Lectures T: Tutorial P: Practical  
CCE: Continuous & Comprehensive Evaluation  
SEE (Th): Semester End Evaluation (Theory)  
SEE (Pr): Semester End Evaluation (Practical)

## 2. Prerequisites

- ✓ Basic knowledge of Computer.
- ✓ Basic creative drawing skills.

## 3. Rationale

Characters are one of the major pillars of animation and games. A character reflects the aura and motive it is developed for if designed properly. All the characteristics must be reflected in a character. This course is aimed to help future animator, illustrators and game designers in getting started with character designing. An individual will learn fundamentals of character designing such as how a character should be designed, what characteristics to look for, anatomy dynamics according to storyline. The course also introduces learners with digital tools for character designing, hence this course will be a stepping stone towards the journey of great character designing.

## 4. Objectives

- ✓ The concepts, case studies, principles and relevant soft skills associated with this course are to be implemented so that the learner is able to,
  - Identify the need of a specific character.
  - Identify and apply appropriate characteristics for specific need for the character.
  - Get imagination transformed into digital art form.
  - Use digital tools for character designing.

## 5. Contents

Unit No.	Unit Name	Topics	Learning Outcomes	% Weightage	Hours
1	Basics of Character Design & Graphics	1.1. Introduction 1.2. Need & Importance of Character in Animations & Games 1.3. Identifying Character Anatomy, Color Palette & Characteristics 1.4. Introduction to Graphics, Types & Image Formats 1.5. Basics of Character Design Tools	<ul style="list-style-type: none"> <li>Basics and history of animation.</li> <li>Various animation techniques.</li> <li>Knowledge about types and production stages of animation.</li> </ul>	10	4
2	Adobe Photoshop – I	2.1. Installation & Setup 2.2. Image Manipulation Tools 2.3. Transformation Tools 2.4. Retouching Components	<ul style="list-style-type: none"> <li>Knowledge of various tools for image manipulation, shape transformation and image retouching</li> </ul>	25	22
3	Adobe Photoshop – II	3.1. Colour Correction 3.2. Text Related Tools 3.3. Various Effects in Adobe Photoshop 3.4. Different Drawing Tools	<ul style="list-style-type: none"> <li>Knowledge of different colour correction, text, and effects</li> <li>Understanding of various drawing tools.</li> </ul>	25	22
4	Adobe Illustrator - I	4.1. Installation and Setup 4.2. Workspace, Artboard, Grids and Guides 4.3. Drawing Tools 4.4. Colour & Swatches	<ul style="list-style-type: none"> <li>Getting used to environment.</li> <li>Application of various tools used for character design.</li> </ul>	20	18
5	Adobe Illustrator - II	5.1. Selecting and Arranging Objects 5.2. Reshaping Objects 5.3. Text, Fonts & Effects on Text 5.4. Special Effects 5.5. Importing, Exporting, and Saving	<ul style="list-style-type: none"> <li>In-depth knowledge of object selection, reshaping and arrangements.</li> <li>Understanding various text and special effects.</li> <li>Image rendering &amp; production.</li> </ul>	20	18

**Total Hours**      **84**

## 6. List of Practicals / Exercises

The practical/exercises should be properly designed and implemented in an attempt to develop different types of skills so that students can acquire the competencies/programme outcomes. Following is the list of practical exercises for guidance.

Sr. No.	Practical / Exercises	Key Competency	Hours
1	Prepare a brief presentation on basics of character design, graphics, and graphics tools.	Illustration of basics of character design, graphics & graphics tools.	4
2	Manipulate an image by applying concept of marquee tool, lasso tools and magic wand tool, layers, layer selection, object selection and invert selection.	Implementation of various image manipulation tools.	4
3	Manipulate an image by applying concept of brush tool, eraser tool, fill tool, blur tool, smudge tool, sharpen tool.	In-depth knowledge of various image manipulation tools.	4
4	Manipulate an image by applying concept of dodge tool, sponge tool, darken tool.	Implementation of various image manipulation tools.	2
5	Implement image manipulation with the help of free transform, scaling, rotation tools, skew, perspective, wrap, distort concept.	Application of various image manipulation tools.	4
6	Implement image cropping. Also, practice manipulating image size, canvas size & how it affects the image.	Application of image cropping techniques.	2
7	Implement the concept of clone stamp tool, healing brush tool, patch tool, red eye tool, history brush tool on an image.	In-depth knowledge of image manipulation tools.	4
8	Implement the concept of the text tool, text editing & formatting, line & spacing, wrap text and text effects.	In-depth knowledge of different text operations.	2
9	Implement image coloration with the help of color swatches, image modes, color adjustments & selection, gradients, blending modes, styles, filters, liquefy, vanishing point.	Implementation of image coloration concepts.	4
10	Manipulate or create an image with the help of the pen tool, drawing shapes, managing paths, converting path to selection	Image creation with various tools & paths.	2
11	Implement workspace basics in Adobe Illustrator.	In-depth knowledge of workspace basics.	2
12	Implement simple lines and shape drawing. Also, create an image with the help of pen, pencil, or flare tool, editing paths, adjust path segments, live traces in Adobe Illustrator.	Image creation with tools & paths in Adobe Illustrator.	2
13	Implement the concept of perspective drawing, symbolism tools, symbols, and symbol sets in Adobe Illustrator.	In-depth knowledge of symbolism tools & symbol sets.	2

14	Implement image coloration & manipulation with the help of color selection, adjustment, swatches, painting with fills and strokes. Also, create color themes with Kuler in Adobe Illustrator.	Implementation of image coloration concepts.	4
15	Apply brushes, transparency, gradients and blending modes in Adobe Illustrator for image creation and manipulation.	Implementation of image coloration concepts.	4
16	Illustrate the object stroke, meshes and patterns in Adobe Illustrator for image creation and manipulation.	Application of object stroke, meshes & patterns.	2
17	Perform various object operations such as object selection, grouping, expanding, moving, aligning, distributing, rotating, reflecting, locking, hiding, deleting, duplicating, and stacking in Adobe Illustrator for image creation and manipulation.	Applications of various object operations.	6
18	Apply image transformation such as scaling, shearing, and distortion in Adobe Illustrator for creation & manipulation.	Illustration of image transformation techniques.	2
19	Practice the concept of object reshaping using envelopes, combining objects, cutting & dividing objects, and clipping masks in Adobe Illustrator for creation & manipulation.	Applications of various object operations & masking.	2
20	Create various shapes using shape builder tool and create 3D objects in Adobe Illustrator for image creation and manipulation.	Creation of various shapes and 3D objects.	4
21	Illustrate the concept of reshaping objects with effects in Adobe Illustrator for image creation and manipulation.	Implementation of object reshaping.	4
22	Perform text operations such as creation, importing and exporting text, creating type on a path tool, scaling, rotating type. Also, use font, character, and paragraph styles in Adobe Illustrator.	Application of different text operations & text dialogue boxes.	4
23	Perform different paragraphs and type formatting, hyphenation, line breaks, line & character spacing. Also use special characters for type & text in Adobe Illustrator.	Implementation of different paragraphs and type formatting.	6
24	Illustrate various effects, shadows, glows, and feathering on image/shape/text/object in Adobe Illustrator.	Implementation of various effects.	6
25	Render your work with concept of importing, exporting, and saving a file in Adobe Illustrator.	In-depth knowledge of rendering a file.	2

**Total Hours      84**

## 7. Textbooks

- 1) Adobe Photoshop Classroom in a Book, by Conrad Chavez & Andrew Faulkner, Latest Release, Pearson Education.
- 2) Adobe Illustrator Classroom in a Book, by Brian Wood, Latest Release, Pearson Education.

## 8. Reference Books

- 1) Adobe Photoshop CC, by Peter Bauer, Latest Edition, For Dummies.
- 2) Adobe Photoshop for Beginners, by Ernest Woodruff, Latest Edition, Independent Publisher.
- 3) Photoshop: Photoshop For Beginners - Learn The Basics Of Photoshop In Under 10 Hours, by Natallia Geisen, Latest Edition, Createspace Independent Publications.
- 4) Adobe Illustrator CC, by David Karlins, Latest Edition, For Dummies.
- 5) Adobe Illustrator for Beginners, by Hector Grant, Latest Edition, Independent Publisher.
- 6) Learn Adobe Illustrator CC for Graphic Design and Illustration, by Chad Chelius & Rob Schwartz, Latest Edition, Peachpit Press Publication.

## 9. Open Sources (Website, Video, Movie)

- 1) [https://helpx.adobe.com/pdf/photoshop\\_reference.pdf](https://helpx.adobe.com/pdf/photoshop_reference.pdf)
- 2) [https://helpx.adobe.com/pdf/illustrator\\_reference.pdf](https://helpx.adobe.com/pdf/illustrator_reference.pdf)
- 3) <https://swayamlearn.com/learn-adobe-illustrator-basic-to-professional-level-at-home-in-hindi/>
- 4) <https://swayamlearn.com/photoshop-basic-to-advanced-learning-course/>