3 Year Diploma Programme in
VFX (VISUAL EFFECTS)

JAGRAN INSTITUTE OF DIGITAL ANIMATION
An initiative of Jagran Group

620, W-Block, Saket Nagar, Kanpur-208014 (U.P.)

website: www.jidakanpur.com

STUDY & EVALUATION SCHEME	
Institute	Jagran Institute of Digital Animation
Programme	VFX
Duration	3 Year Full Time Diploma Programe(6 Module)
Minimum Required Attendance	80%

| ASSESSMENT			
Evaluation		**External**	**Total**
Theory		100	100
Practical/Viva-Voca		100	100
Class test-1	**class test-2**	**Assignment(s) and Attendance**	**Total**
40	40	20	100
Duration of Examination		**External**	
		Theory	*Practical*
		3 Hours	6 Hours

To qualify the course a student is required to secure a minimum of 45% marks in aggregate including the module end examination and teachers continuous evaluation. A candidate who secures less than 45% of marks in a course shall be deemed to have failed in that course. The student should have at least 45% marks in aggregate to clear the module.

PROGRAM STRUCTURE- VFX

Introduction:

VFX is a 3 year diploma program. The course covers advanced techniques in: Special Effectcs, Audio-Video Editing, Motion Graphics, Filmmaking and Photography. By the end of the course you will be able to create a range of Special Effects, Short Visual Story, Documentry, Photograpy, Video Editing for Film, Youtube Channel, Game Design, E-Learning and many more. After completing the program successfully student will be able to;

- Demonstrate techniques of VFX, Audio-Video Editing, Motion Graphic.
- Understand the production pipeline.
- Work with high end software.
- Produce work portfolio/showreel for employer engagement.
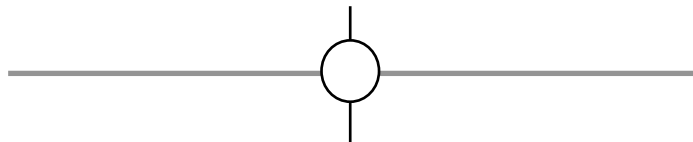
MANUL
MODULE-01

S. No.	Course Code	Course Name	Periods		Evaluation Scheme	
			T	P	Externel	Total
1	MAN-101	Introduction of Maual Art and Anatomy & Drawing	20	43	100	100
2	MAN-102	Figure Study Drawing	20	33	100	100
3	MAN-103	Prespective Drawing Study and Rhythm & Grace	25	53	100	100
4	MAN-104	Concept Development Study	21	33	100	100
5	MAN-105	Project Development	10	30	100	100
		TOTAL	96	192	500	500

Theory(T) = 1 Lecture = 1 Hour	*Practical(P)* = 1 Practical Lab = 2 Hours
Theory Paper = MAN-101	*Practical Papers* = MAN-102, MAN-103, MAN-104, MAN-105

BASICS OF GRAPHIC & VISUAL DESIGN
MODULE-02

S. No.	Course Code	Course Name	Periods		Evaluation Scheme	
			T	P	Externel	Total
1	BGVD-101	The Fundamentals of Graphic Design	10	10	100	100
2	BGVD-102	The Fundamentals of color Theory	10	10	100	100
3	BGVD-103	Introduction of Adobe Photoshop	33	65	100	100
4	BGVD-104	Introduction of Vector Graphic & Illustration	33	65	100	100
5	BGVD-105	Project Development	10	42	100	100
		TOTAL	96	192	500	500

Theory(T) = 1 Lecture = 1 Hour	*Practical(P)* = 1 Practical Lab = 2 Hours
Theory Paper = BGVD-101, BGVD-102	*Practical Papers* = BGVD-103, BGVD-104, BGVD-105

VFX
MODULE-03

S. No.	Course Code	Course Name	Periods		Evaluation Scheme	
			T	P	External	Total
1	VFX-301	Concept of Photography	20	20	100	100
2	VFX-302	Audio Post Production	18	25	100	100
3	VFX-303	Video Pre Production & Production	25	55	100	100
4	VFX-304	Video Post Production	23	42	100	100
5	VFX-305	Project Development	10	50	100	100
		TOTAL	96	192	500	500

Theory(T) = 1 Lecture = 1 Hour	**Practical(P)** = 1 Practical Lab = 2 Hours
Theory Paper = VFX-301, VFX-302, VFX-303	**Practical Papers** = VFX-301, VFX-302, VFX-303, VFX-304, VFX-305.

VFX
MODULE-04

S. No.	Course Code	Course Name	Periods		Evaluation Scheme	
			T	P	External	Total
1	VFX-306	Motion graphics & FX	37	60	100	100
2	VFX-307	Croma Removel & Masking	12	25	100	100
3	VFX-308	Roto Scoping & Camera Tracking	12	25	100	100
4	VFX-309	Compositing	25	42	100	100
5	VFX-310	Project Development	10	40	100	100
		TOTAL	96	192	500	500

Theory(T) = 1 Lecture, Means = 1 Hour	Practical(P) = 1 Practical Lab Means = 2 Hours
Theory Paper = VFX-306	**Practical Papers** = VFX-306, VFX-307, VFX-308, VFX-309, VFX-309

ADVANCED VFX
MODULE-05

| S. No. | Course Code | Course Name | Periods | | Evaluation Scheme | |
			T	P	External	Total
1	AVFX-311	3D Motion Graphic with Cinema 4D	24	40	100	100
2	AVFX-312	Advanced Visual Effects	20	40	100	100
3	AVFX-313	Visual Effect Techniques	22	40	100	100
4	AVFX-314	Advaned Compositing	20	30	100	100
5	AVFX-315	Project Development	10	42	100	100
		TOTAL	96	192	500	500

Theory(T) = 1 Lecture, Means = 1 Hour | *Practical(P) = 1 Practical Lab Means = 2 Hours*

Theory Paper *= AVFX-311* | **Practical Papers** *= AVFX-311, AVFX-312, AVFX-313, AVFX-314, AVFX-314*

ADVANCED VFX
MODULE-06

| S. No. | Course Code | Course Name | Periods | | Evaluation Scheme | |
			T	P	External	Total
1	AVFX-316	Production Work of Showreel Development	10	175	100	100
2	AVFX-317	Project Management and Post Production Work of Showreel Development	10	40	100	100
3	AVFX-318	Communication & Interview Skills	15	0	100	100
4	AVFX-319	Project Presentation	0	0	200	200
		TOTAL	35	215	500	500

Theory(T) = 1 Lecture, Means = 1 Hour | *Practical(P) = 1 Practical Lab Means = 2 Hours*

	COURSE-01 MANUL - MODULE-01
Course Code: **MAN-101**	**Introduction of Maual Art and Anatomy & Drawing**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding Manual Art history.
CO-02	Understanding basic principals of Drawing.
CO-03	Understanding humany Anatomy.
CO-04	understand human anatomy and methods of drawing and will be made drawing human body.
Course Content	
UNIT-01	Introduction of Manual Art, Balance, Unity, rhythm, harmoney, pattern;
UNIT-02	Balance, Proportion, Emphasis, Variety, Movement, Rhythm, Harmony;
UNIT-03	Human Anatomy proportion; Line Drawing; Basic details of human Anatomy;
UNIT-04	understand human anatomy and methods of drawing;
Course Code: **MAN-102**	COURSE-02 MANUL - MODULE-01 **Figure Study Drawing**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding gesture art method; Basics Proportion of human figure;
CO-02	Understanding volume constructions; Balance; Muscles;
CO-03	understanding lighting and shading concept;
CO-04	Developing ability to see the flow of action of the figure:

Course Content	
UNIT-01	
UNIT-02	
UNIT-03	
UNIT-04	

Course Code: **MAN-103**	**COURSE-03** **MANUL - MODULE-01** **Prespective Drawing Study and Rhythm & Grace**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Unterstanding of the eternal rhythm, which in inside on each natural object. It is only through this understanding that you can bring out the inner beauty of each creation of art.
CO-02	Understanding of the perspective projection, drawing – Its types, methods, technical terms, procedure, methods, etc.

Course Content	
UNIT-01	Fashion Figure Study; Portrait Design Method; Coloring & Shading;
UNIT-02	Principles OF Perspective Projection; Technical Terms OF Perspective Drawing ; Parallel Perspective Drawing; Angular Perspective

	COURSE-04 MANUL - MODULE-01 **Concept Development Study**
Course Code: MAN-104	
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Unterstanding of the live sketching method.
CO-02	Able to design marketing and communication design concepts.
Course Content	
UNIT-01	Unterstanding of the eternal rhythm, which in inside on each natural object. It is only through this understanding that you can bring out the inner beauty of each creation of art.
UNIT-02	Logo design; Poster Desing; Packaging Design; Label Creation etc.

	COURSE-05 MANUL - MODULE-01 **Project Development**
Course Code: MAN-105	
Course Outcomes:	

- ◼ Interior Concept Design with Color & Shading;
- ◼ Exterior Design Concept with Color & Shading;
- ◼ Portrait Design Concept with Color & Shading;
- ◼ Fashion Figure Design Concept Color & Shading;

Course Code: BGVD-101	COURSE-01 BASICS OF GRAPHIC & VISUAL DESIGN - MODULE-02 **The Fundamentals of Graphic Design**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the Elements of design.
CO-02	Understanding the principles of graphic design.
CO-03	Understanding the Composition Graphic design
Course Content	
UNIT-01	The Line; The Shape; Color; Value; Space;
UNIT-02	Balance; Proportion; Contrast; Rhythm; Harmony and Unity;
UNIT-03	Single Visual; The Golden Ratio; Focal Point; Grid Design; Gestalt Laws; The "Z" and "F" Layout;
Course Code: BGVD-102	COURSE-02 BASICS OF GRAPHIC & VISUAL DESIGN - MODULE-02 **The Fundamentals of color Theory**
Course Outcome:	**On completion of the course, the students will be :**
CO-01	Understanding the Elements of design.
Course Content	
UNIT-01	RGB: the additive color mixing model; CMYK: the subtractive color mixing model; Color wheel basics; Hue, shade, tint and tone; Color schemes: Complementary colors, Analogous colors, Triadic colors;

Course Code: BGVD-103	COURSE-03 BASICS OF GRAPHIC & VISUAL DESIGN - MODULE-02 **Introduction of Adobe Photoshop**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the basic concepts of graphics and image editing in Adobe Photoshop;
CO-02	Understanding the basics of print media design and digital typography in Adobe Photoshop;
CO-03	Understanding the techniques of digital painting, matte painting and image retouching in Adobe Photoshop;
CO-04	Applying the techniques and tools in Adobe Photoshop;
CO-05	Creating the elements of Web page template design in Adobe Photoshop;
Course Content	
UNIT-01	Introduction: Photoshop and its interface, Navigation and All tools, Layer concept, working with basic selections, advanced, transform ,selection transform, Selections-1(on the basis of channels, colour range, extract, filter etc), Exercises on marquee tools etc.
UNIT-02	Pen tool ,Shapes ,Path, path selection, Text tool, types of text tools, digital typography, print designs, blending options, gradient tool, blending modes, RGB channels.
UNIT-03	Perspective drawing Lights and shadows day night scenes, Concept of layers, Back ground, stage, foreground elements, Layout designs.
UNIT-04	Color theory, basic of color, fill type, layer style, adjustment layer, group layer, Layer menu, Color adjustment, Image menu. Convert a B&W image into color (Use variation), Choose a theme (Music, Festivals, Sports, Dance) and Design 5-8 graphics based on it, Color Modes, Color Corrections, Advanced color correction techniques (levels, Curves, Hue, Saturation etc), Design an graphical Ad from your own style and imagination.
UNIT-05	Filters, vector Mask, layer mask, clipping path mask, Concepts of matte painting, Creation of digital matte painting. Action, creation of panorama image. Camera raw tools. tribal art, create an animal character, "Plan a story of that character & Make its backgrounds in three/four frames", Make posters on nature/earth, Matte Painting, Composition, Creating images for the web: Exporting images from Photoshop.

Course Code: **BGVD-104**	**COURSE-04** **BASICS OF GRAPHIC & VISUAL DESIGN - MODULE-02** **Introduction of Vector Graphic & Illustration**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the concepts of Graphic Design &vector illustration in Adobe illustrator and its application using various tool.
CO-02	Understanding the knowledge drawing & colors to create the 2D animation background in Adobe illustrator.
CO-03	Understanding the uses of advance tools of Adobe illustrator in creation of advertisement and infographics.
CO-04	Analyzing the elements used for graphics designing and print media in adobe illustrator.
CO-05	Applying the techniques and tools in Adobe illustrator.
Course Content
UNIT-01	Introduction to Adobe Illustrator: Introduction to Adobe Illustrator, work area, workspaces and tools. Opening files, importing art work, viewing art work, rulers and grids.
UNIT-02	Drawing in Illustrator, drawing lines and shapes, pencil tool, pen tool, editing drawing, tracing, symbols, colouring, applying colours, swatches, adjusting colour and colour settings.
UNIT-03	Painting with Illustrator, fills, strokes, brushes, transparency, blending, gradient, meshes and colour blending. Selecting, Transformation, Scaling, Grouping, Reshaping, Cutting, Blending of objects.
UNIT-04	Creating 3D object, text and typing, special effects, filters, shadows, glow, feathering graphic styles.
UNIT-05	Clipping mask, Create outlines, templates, graphic style, file formats, Export illustrator Files in Other Formats.
Course Code: **MAN-105**	**COURSE-05** **MANUL - MODULE-01** **Project Development**
Course Outcomes:

Course Code: VFX-301	**COURSE-06** VFX & MOTION GRAPHICS - MODULE-03 **Concept of Photography**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the history and technical evolution of Professional cameras;
CO-02	Understanding the component of camera's and functionalities; Understanding the rules of composition for photography;
CO-04	Applying the techniques of lighting and application of tripods and other camera accessories to capture a good composition in Photography;

Course Content

UNIT-01	History of camera , camera obscura, parts of camera, analog and digital cameras, pixel, raster and vector, resolution, functions of camera, viewfinder. SLR, DSLR cameras, Focus, aperture, white balance, Depth of Field, shutter speed, ISO, exposure, F-Stop.
UNIT-02	Lenses, Type of lenses(prime, zoom ,micro), Focal length, camera settings, setting white balance, sunny 16 rule, metering , tripod , speed light, reflectors. Camera equipments, types of photography (wedding, wild, portrait, street, architecture, product.
UNIT-03	Camera moves, types of shots(extreme long shot, long shot, medium shot ,medium close up shot, close up shot) and angles (low angle, high angle, tilt POV, Birds eye view).180 degree rule.

Course Code: VFX-301	**COURSE-07** VFX & MOTION GRAPHICS - MODULE-03 **Audio Post Production**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the Audio Frequency Range in Audio Design
CO-02	Understanding the Audio System for Film and Production.
CO-03	Understanding the Audio Recording Process for Film, E-Learing and Production.
CO-04	Understanding voiceovers production technique through which recorded voices are used in media.Think about narration in movies, audio and radio ads,any presentation where recorded voices are used.

Course Content

UNIT-01	Types of sound, Audio range, Concept of Sound
UNIT-02	Know your equipments (Acoustic, Microphone, Recorder, Audio Mixer, Cables & connectors)
UNIT-03	Pre-Planning,Setup, Recording Work Session, Post Capture etc.
UNIT-04	Audio Editing, Dubbing & voiceover

Course Code: VFX-302	COURSE-08 VFX & MOTION GRAPHICS - MODULE-03 **Video Pre Production and Production**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	
CO-02	
CO-03	
CO-04	
CO-05	
CO-06	
CO-07	
CO-08	

Course Content	
UNIT-01	Concept, What is pre-production, Concept/visualization
UNIT-02	Research, Screen play writing, Storyboard making, Shooting script writing
UNIT-03	Set making, Copyright, Budgeting
UNIT-04	Production Design, Location hunting, Hiring of equipment & crew members
UNIT-05	Know your equipment, Camera & accessories
UNIT-06	Lights & camera support
UNIT-07	Clapboard , Sound equipment, Field Monitor
UNIT-08	Blocking, Rehearsal, Lighting, Shooting

Course Code: VFX-304	COURSE-10 VFX & MOTION GRAPHICS - MODULE-03 **Video Post Production**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding Compiling the concept and Shooting material to final stage

CO-02	Analyzing the video editing software & edit videos for movie / presentation
CO-03	Applying the editing techniques to the video in Adobe premiere.
CO-04	Applying the of special effect on audio in Adobe Audition.

Course Content

UNIT-01	Compiling the concept and Shooting material to final stage and studetns involved in Post-production, Know your equipment.
UNIT-02	Editing, Color grading, Publicity, Transmission, Distribution and Rating
UNIT-03	Adobe premiere Interface the basics of editing: Creating Rough cut edit Overview; Linear and non linear editing, Concept of non linear editing; Importing and Exporting: various audio, video and graphics in various formats; Appling transitions,video effects and creating key frames color correction, Multicam Editing, keying techniques on green screen, Blue screen etc.
UNIT-04	Track mixing using Mixer, Pitch shifter and reverb effects, noise reduction, cross fading audio tracks, balancing sound levels etc.
Course Code: VFX-305	**COURSE-11** VFX & MOTION GRAPHICS - MODULE-03 **Project Development**

Course Outcomes:

- Photography using focus, aperture, white balance, ISO, exposure and composition rules;
- Creating a short film using cinematography rules and techniques;
- Types of photography exercise and creating a Photo album various techniques;
- Budget Making & Script writing 05 minutes program;
- Shooting for 15 minutes program (News / Documentary/Feature/Chat show / Discussion);
- Editing of 05 minutes video program;

Course Code: VFX-301	**COURSE-12** VFX & MOTION GRAPHICS - MODULE-04 **Motion graphics & VFX**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the basics of motion graphics
CO-02	Understanding the Text tool and Masking using Adboe after effects.
CO-03	Understanding the basic of advance visual effects using Adobe after effects.
CO-04	Understanding the particles and effects using Adobe after effects.

Course Content

UNIT-01	An introduction to motion graphics, Pal and NTSC formats, Frame rate, Adobe After effect interface, Panels ,composition, composition setting, nested composition, pre composition, preferences, importing files, transform properties, key farming, basic animation using transform properties, motion blur etc.

UNIT-02	Case study of motion graphics video, Text tool, Parenting, Masking, types of masking tool, stroke application of masking, creation of motion graphics video(explainer video),etc.
UNIT-03	Introduction to Camera, 3D layers, Light layers, application of camera and light layers, Animation of matte painting arranging in 3D space, Filters, transition, application of filters and transition, sequencing layers etc.
UNIT-04	Particles, canon and grid, layer explode, application of particles, Particle world, shatter effect, glow etc.

Course Code: VFX-301	**COURSE-13** VFX & MOTION GRAPHICS - MODULE-04 **Rotoscopy,Paint & Wire Removal**
Course Outcome:	**On completion of the course, the students will be :**
CO-01	Understanding Rotoscopy, Paint & Wire Removal Techniques.
Course Content	
UNIT-01	Introduction to rotoscopy, rotoscopy exercise, stereoscopic rotoscopy workflow, paint , wire removal techniques using paint.

Course Code: VFX-301	**COURSE-14** VFX & MOTION GRAPHICS - MODULE-04 **Croma Removal & Tracking**
Course Outcome:	**On completion of the course, the students will be :**
CO-01	Understanding Croma Removal & Tracking Techniques.
Course Content	
UNIT-01	light wrap and merging with BG, Luma key, shadow extraction , Tracking , 2D tracking in after effect, types of tracking, Application of tracking, Stabilization. Color correction tools, color correction exercise. Set extension exercise.

Course Code: VFX-301	**COURSE-15** VFX & MOTION GRAPHICS - MODULE-04 **Compositing**
Course Outcome:	**On completion of the course, the students will be :**
CO-01	Applying the process of VFX in Adobe After effects.
Course Content	
UNIT-01	Understanding layer passes , Compositing layer passes, exercise on layer pass compositing, introduction to scripting , Advanced effects, Application and exercise based on scripting, creating project using all above the tools in after effect.

Course Code: VFX-305	COURSE-16 VFX & MOTION GRAPHICS - MODULE-04 **Project Development**

Course Outcomes:	

- Making Basic animation using keyfarme
- Creating rotoscopy video
- Creating cinematic effects
- Creating tracking video
- Creating a set extension using keying , tracking, stabilization , etc
- Creating SFX using particle and filters, compositing layer passes.

- Creating Basic motion graphics video
- Creating explainer video
- Creting chroma video

Course Code: AVFX-311	COURSE-17 ADVANCED VFX - MODULE-05 **3D Motion Graphic with Cinema 4D**
Course Outcome:	**On completion of the course, the students will be :**
CO-01	Understanding the knowledge about cinema 4D software
CO-02	Understanding the Knowledge about modeling & 3D motion graphics element
CO-03	Applying different techniques using Cinema 4D to create 3D motion graphics
CO-04	Applying the various Techniques and tools in cinema4D.

Course Content	
UNIT-01	The Cinema 4D workflow, Differences between 2D and 3D,Navigating the viewports, Navigating using a three-button mouse and keyboard shortcuts, Exploring the interface, Configuring project settings, Application preferences, exploring object hierarchy, Creating, selecting, and transforming objects, Object categories – active and passive objects, Comparing object types etc.
UNIT-02	Working with Splines: Creating and working with splines, Nurb types, Manipulating paths from Adobe Illustrator; Polygonal Modeling Tools: Points, edges, Modeling with the Extrude tool, Extrude Inner tool, The Create Polygon and Bridge tools, Creating a simple model; Using Deformers; Materials and Texturing; Working with Lights;
UNIT-03	Keyframes and Animation: Understanding keyframe animation, Animating in the Timeline, The F-Curve Manager, Create an animated pause; Camera Movement and Control: Differences between the Editor Camera and a camera object, Exploring field of view and aspect ratio, Explaining parallax in camera movement, Creating a dynamic camera movement etc.
UNIT-04	Output and Rendering: The render engine, Render settings, Rendering still images vs. animation, Setting up multi-pass rendering for still images, Batch-rendering multiple files, Compositing in After Effects: The 3D animation workflow, Setting up a multi-pass render, Importing elements into After Effects, Manipulating 3D renders in After Effects, Fine-tuning a composition in After Effects.

Course Code: VFX-301	COURSE-18 ADVANCED VFX - MODULE-05 **Advanced Visual Effects**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the concept of dynamics in Maya.
CO-02	Applying special effects using Maya dynamics such as water, fire, smoke etc.
CO-03	Understanding with liquid simulation using Realflow.

Course Content	
UNIT-01	Introduction to n-Cloth, Use of mesh as n-Cloth, Optimizing geometry for n-Cloth, Setting n Cloth collisions and constrains, n-cloth and external dynamic forces. Various n-cloth simulations, n-cloth caches creating and editing, nCloth caches attributes Optimizing n-cloth, n-Cloth examples.
UNIT-02	Introduction to n-Particles and particles in Maya, different kind of emitters, particles attribute, collision of particles with other objects, various fields, particle shapes and dynamic, particle instance, particle collision event editor, effects. Soft and rigid bodies, active and passive rigid bodies, dynamic attributes of soft and rigid bodies, pin constraint, hinge constraint, spring constraint, paint soft body weight tool.
UNIT-03	Interface of realFlow, Creating splash, Making the splash flow back on to the bottle ,creating blood and honey, setup a stormy ocean and simulate a mesh in preparation form Maya tiling.

Course Code: VFX-301	COURSE-19 ADVANCED VFX - MODULE-05 **Visual Effect Techniques**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding the node based compositing systems
CO-02	Understanding to use open poly support feature to enhance the rotoscopy skills.

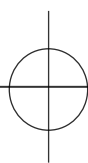| **Course Content**	
UNIT-01	Introduction to node based compositing system, fusion interface, flow, console, timeline, spline, setting up timeline, I/o nodes, merge nodes, basic animations. Mask tools (bitmap, polygon, wand, bspline, etc),application of mask tool, rotoscopy, stereoscopic rotoscopy workflow, matte control etc.
UNIT-02	Keying nodes, chroma keyer, ultra keyer, luma keyer, exercise on green/blue screen removal using keyers tool, compositing with green screen/blue screen footage. Tracking node, stabilization , set extension using tracking and chroma footage. 3D nodes: creating basic models , texturing, shading, creating 3D motion graphics, Import and export fbx . 3D camera, camera projection, projector 3D, deep pixel effects, render passes, re-lighting, light node, 3D particle nodes, exercise on 3D particle nodes, creating snowfall, water fall, forest using 3D particles, creating macro. Use of macro nodes. 3D tracking,

Course Code: **VFX-301**	**COURSE-19** ADVANCED VFX - MODULE-05 **Advaned Compositing**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding to get 3D compositing techniques such as camera projection, 3D particles
CO-02	Applying the different 3D compositing techniques such as camera projection, 3D particles to create a vfx shot.
Course Content
UNIT-01	Navigating the interface ,Building Node Graphs , Creating key frames ,The Curve Editor, Key frame animation , Math expressions and linking , Creating animated elements ,Correcting for lens distortion.Color and Rotoscoping ,Nuke's color management ,Color correcting composites ,Rotoscoping ,Masking operations Compositing CGI and Channels ,Mastering Nuke's channels system , Multi-pass CG compositing , Adding motion blur ,Adding depth of field, Keying , Lumakeys ,All four of Nuke's chromakeyers , Proper use of Addmix and Keymix nodes , How to merge multiple keys ,Tracking, Warping and Retiming , The Tracker node , How to do a match move , Spline warp and Grid warp .
UNIT-02	Camera Tracking ,How to do camera tracking ,Converting point clouds to meshes , Compensating for lens distortion , Getting 3D information to the 2D composite, Planar Tracker and Particles , How to do planar tracking , How to use planar tracking results ,Using Nuke's 3D particle system , Creating your own particles ,Advanced 3D Nodes , Deep compositing , Alembic geometry , Modeling 3D geometry from a 2D scene , Creating point clouds from CG renders.

Course Code: **VFX-305**	**COURSE-20** ADVANCED VFX - MODULE-05 **Project Development**
Course Outcomes:

- Merging foreground with background, rotoscopy
- Keying and color correction, Set extension
- Create tracking scene
- Create a scene using 3D nodes
- Create a scene using camera projection techniques
- Create a scene using 3D particle.
- Compositing layer passes
- Merging foreground with background, rotoscopy
- Keying and color correction, Set extension
- Creating scene from 2D to 3D
- 3D tracking.

	COURSE-20
Course Code: **ARAA-216**	3D ADVANCED RIGGING AND ANIMATION - MODULE-06 **Production Work of Showreel Development**
Course Outcomes:	**On completion of the course, the students will be :**

CO-01	Creating a motion teaser/short film/documentaries.
	
	    - Motion teaser *(Video Duration: 30 Second)*
	    - *Short Film (Video Duration: 5 Minute)*
	    - *Documentry (Video Duration: 15 Minutes)*

CO-02	Create a 3D Motion Graphic Video. *(Video Duration: 30 Second)*
CO-03	Create an Advertisment Video with Voice Over. *(Video Duration: 30 Second)*
CO-04	Create an Explainer Video with Voice Over. *(Video Duration: 1 Minute)*
CO-05	Create a Digital Marketing Video with Voice Over. *(Video Duration: 30 Second)*
CO-06	Create a Croma, Rotoscopy, 3D Paint and Traking Sece with Special Effect.
CO-07	Create a 3D Composite special effects scene.

	COURSE-21
Course Code: **ARAA-217**	3D ADVANCED RIGGING AND ANIMATION - MODULE-06 **Project Management and Post Production Work of Showreel Development**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Understanding to Project Management Workflow.
CO-02	Understanding to Post Production work flow using Adobe Premiere Pro, After Effect, Fusion and Nuke Software.
Course Content	
UNIT-01	Folder Management, Naming Convention etc.
UNIT-02	Composite Render Passes in Adobe After Effect, Fusion and Nuke for Video Output. Render final output in .MP4 format using Adobe Premiere with Sound Effect and Background Music.

COURSE-22	
Course Code: **ARAA-218**	3D ADVANCED RIGGING AND ANIMATION - MODULE-06 **Communication & Interview Skills**
Course Outcomes:	**On completion of the course, the students will be :**
CO-01	Utilizing effective verbal and non-verbal communication techniques in formal and informal settings.
CO-02	Understanding and analyzing self and devising a strategy for self growth and development.
CO-03	Adapting a positive mindset conducive for growth through optimism and constructive thinking.
Course Content	
UNIT-01	Personal Development: Personal growth and improvement in personality, Perception, Positive attitude, Values and Morals, High self motivation and confidence, Grooming;
UNIT-02	Professional Development: Goal setting and action planning, Effective and assertive communication, Decision making, Time management, Presentation Skills, Happiness, Risk taking and facing unknown;
UNIT-03	Career Development: Resume Building, Occupational Research, Group discussion (GD) and Personal Interviews;

JAGRAN INSTITUTE OF DIGITAL ANIMATION
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