3D Media and Virtual Reality – VFX

Multimedia - Digital Filmmaking – MDF

Annexure-II

Parvatibai Chowgule College of Arts and Science
(Autonomous)

Department of Applied and Professional Studies

Course Structure
Three year B.Voc Degree Programme in 3D Media and Virtual Reality – VFX

Semester	General Education Component			Skill Component		
I	VFX-G1 Language Paper 1	Theory Credits 4	Practicals Credits 0	VFX-SK1 Drawing & Painting	Theory Credits 2	Practicals Credits 4
	VFX-G2 Introduction to Creative Writing	Theory Credits 4	Practicals Credits 0	VFX-SK2 3D Animation - I	Theory Credits 2	Practicals Credits 4
	VFX-G3 History of Indian Art	Theory Credits 4	Practicals Credits 0	VFX-SK3 Vector Graphics - Illustrator	Theory Credits 2	Practicals Credits 4
II	VFX-G4 Language Paper 2	Theory Credits 4	Practicals Credits 0	VFX-SK4 Creative Design & 2D Animation	Theory Credits 2	Practicals Credits 4
	VFX-G5 Introduction to Digital Mass Media	Theory Credits 4	Practicals Credits 0	VFX-SK5 3D Animation - II	Theory Credits 2	Practicals Credits 4
	VFX-G6 History of Western Art	Theory Credits 4	Practicals Credits 0	VFX-SK6 Project - First Year End	Theory Credits 0	Practicals Credits 6
Outcome	1) Art Setter 2) Graphic Designer 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	VFX-G7 Environmental Studies-I	Theory Credits 2	Practicals Credits 0	VFX-SK7 Visual Effects 1	Theory Credits 2	Practicals Credits 4
	VFX-G8 Art Appreciation-I	Theory Credits 2	Practicals Credits 0	VFX-SK8 Video Editing	Theory Credits 2	Practicals Credits 4
	VFX-G9 Business Communications	Theory Credits 4	Practicals Credits 0	VFX-SK9 Audio Editing	Theory Credits 2	Practicals Credits 4
	VFX-G10 Fundamentals of Sociology	Theory Credits 4	Practicals Credits 0			
IV	VFX-G11 Environmental Studies-II	Theory Credits 2	Practicals Credits 0	VFX-SK10 Visual Effects 2	Theory Credits 2	Practicals Credits 4
	VFX-G12 Art Appreciation-II	Theory Credits 2	Practicals Credits 0	VFX-SK11 Advanced Video Production (Animation)	Theory Credits 2	Practicals Credits 4
	VFX-G13 Cyber Security	Theory Credits 4	Practicals Credits 0	VFX-SK12 Project - Second Year End	Theory Credits 0	Practicals Credits 6
	VFX-G14 Hindi Street Play	Theory Credits 4	Practicals Credits 0			
Outcome	1) Video Editor 2) Studio Coordinator 3) Studio Recordist 4) Sound Designer 5) Audio - Visual Supervisor 6) VFX/SFX Engineer 7) CG Operator					

Semester	General Education Component			Skill Component		
V	VFX-G15 Organizational Behaviors	Theory Credits 4	Practicals Credits 0	VFX-SK13 Visual Effects in Foundry Nuke	Theory Credits 2	Practicals Credits 4
	VFX-G16 Film Studies	Theory Credits 4	Practicals Credits 0	VFX-SK14 Rotoscopy Techniques (Silhouette Fx)	Theory Credits 2	Practicals Credits 4
	VFX-G17 Digital Marketing	Theory Credits 4	Practicals Credits 0	VFX-SK15 Broadcast Design (Cinema 4D)	Theory Credits 2	Practicals Credits 4
VI	VFX-G18 E - Learning	Theory Credits 4	Practicals Credits 0	VFX-SK16 Virtual Reality	Theory Credits 2	Practicals Credits 4
	VFX-G19 Human Values and Professional Ethics	Theory Credits 4	Practicals Credits 0	VFX-SK17 Particle Illusion	Theory Credits 2	Practicals Credits 4
	VFX-G20 Entrepreneurship	Theory Credits 4	Practicals Credits 0	VFX-SK18 #Internship	Theory Credits 0	Practicals Credits 6
Outcome	1) Roto artist 2) Production Designer 3) VFX Supervisor 4) Animator 5) Game modeling artist 6) Graphic animators					

Internship to be undertaken during end semester breaks. (End of 4th Semester onwards)

Three year B.Voc Degree Programme in Multimedia - Digital Filmmaking

Semester	General Education Component			Skill Component		
I	MDF-G1 Language Paper 1	Theory Credits 4	Practicals Credits 0	MDF-SK1 Drawing & Painting	Theory Credits 2	Practicals Credits 4
	MDF-G2 Introduction to Creative Writing	Theory Credits 4	Practicals Credits 0	MDF-SK2 3D Animation - I	Theory Credits 2	Practicals Credits 4
	MDF-G3 History of Indian Art	Theory Credits 4	Practicals Credits 0	MDF-SK3 Vector Graphics - Illustration	Theory Credits 2	Practicals Credits 4
II	MDF-G4 Language Paper 2	Theory Credits 4	Practicals Credits 0	MDF-SK4 Creative Design & 2D Animation	Theory Credits 2	Practicals Credits 4
	MDF-G5 Introduction to Digital Mass Media	Theory Credits 4	Practicals Credits 0	MDF-SK5 3D Animation - II	Theory Credits 2	Practicals Credits 4
	MDF-G6 History of Western Art	Theory Credits 4	Practicals Credits 0	MDF-SK6 Project - First Year End	Theory Credits 0	Practicals Credits 6
Outcome	1) Artist 2) Graphic Designer 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	MDF-G7 Environmental Studies-I	Theory Credits 2	Practicals Credits 0	MDF-SK7 Digital Photography	Theory Credits 2	Practicals Credits 4
	MDF-G8 Art Appreciation-I	Theory Credits 2	Practicals Credits 0	MDF-SK8 Digital Cinematography - I	Theory Credits 2	Practicals Credits 4
	MDF-G9 Business Communications	Theory Credits 4	Practicals Credits 0	MDF-SK9 Video Editing	Theory Credits 2	Practicals Credits 4
	MDF-G10 Fundamentals of Sociology	Theory Credits 4	Practicals Credits 0			
IV	MDF-G11 Environmental Studies-II	Theory Credits 2	Practicals Credits 0	MDF-SK10 Digital Cinematography- II	Theory Credits 2	Practicals Credits 4
	MDF-G12 Art Appreciation-II	Theory Credits 2	Practicals Credits 0	MDF-SK11 Audio Editing	Theory Credits 2	Practicals Credits 4
	MDF-G13 Cyber Security	Theory Credits 4	Practicals Credits 0	VI.MDF-SK12 Project - Second Year End	Theory Credits 0	Practicals Credits 6
	MDF-G14 Hindi Street Play	Theory Credits 4	Practicals Credits 0			
Outcome	1) Graffer 2) Focus Puller 3) Assistant Cameraman 4) Video Editor 5) Studio Coordinator 6) Studio Recordist 7) Sound Designer 8) Audio - Visual Supervisor					

Semester	General Education Component			Skill Component		
V	MDF-G15 Organizational Behaviors	Theory Credits 4	Practicals Credits 0	MDF-SK13 Motion Graphics - I	Theory Credits 2	Practicals Credits 4
	MDF-G16 Film Studies	Theory Credits 4	Practicals Credits 0	MDF-SK14 Advanced Video Production	Theory Credits 2	Practicals Credits 4
	MDF-G17 Digital Marketing	Theory Credits 4	Practicals Credits 0	MDF-SK15 Pre-production	Theory Credits 2	Practicals Credits 4
VI	MDF-G18 E - Learning	Theory Credits 4	Practicals Credits 0	MDF-SK16 Motion Graphics - II	Theory Credits 2	Practicals Credits 4
	MDF-G19 Human Values and Professional Ethics	Theory Credits 4	Practicals Credits 0	MDF-SK17 Production & Distribution	Theory Credits 2	Practicals Credits 4
	MDF-G20 Entrepreneurship	Theory Credits 4	Practicals Credits 0	MDF-SK18 Internship	Theory Credits 0	Practicals Credits 6
Outcome	1) Junior Compositor 2) Roto Artist 3) Junior 3D Compositor 4) Motion Graphics Designer 5) Script/story writer 6) Screenplay Artist 7) Story Board Artist 8) Production Artist 9) Film Maker					

Internship to be undertaken during end semester breaks. (End of 4th Semester onwards)

Annexure-III

Parvatibai Chowgule College of Arts and Science (Autonomous)

DEPARTMENT OF APPLIED AND PROFESSIONAL STUDIES

SYLLABUS

THREE YEAR B.VOC. DEGREE PROGRAMME IN 3D MEDIA AND VIRTUAL REALITY – VFX

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THREE YEAR B.VOC. DEGREE PROGRAMME IN MULTIMEDIA – DIGITAL FILMMAKING

THREE YEAR B.VOC. DEGREE PROGRAMME IN 3D MEDIA AND VIRTUAL REALITY – VFX

SEMESTER-I

Course Title: Drawing & Painting
Course Code: VFX-SK1
Marks: 50
Credits: 02
Total Hours: 30
Course Prerequisites: Nil

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into personal forms of pictorial expression and representation.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Learning Outcome: At the end of this course, students will be able to

- Identify the various techniques used and elements required in drawing.
- Sketch virtual art using computer graphics software program.
- Compose layouts as per their own creative visualizations.

SYLLABUS:

Module - I - Fundamentals of Art **(12 Hrs.)**

This module involves a series of exercises designed to introduce the basics and give a grounding in various types of drawings.

The sections covered are:

Fundamentals of Art- The fundamentals of art are the building blocks for successful art-making. Artwork can also be analyzed according to the use of the elements in a work of art.

Elements of Art-The elements of art are the basic components of art-marking. It is impossible to create a work of art without using at least one of the seven elements of art.

Principles of Art-Balance, emphasis, movement, proportion, rhythm, unity, and variety; the means an artist uses to organize elements within a work of art. By the careful placement of repeated elements in a work of art to cause a visual tempo or beat. Equilibrium or stability to a work of art.

Content- Refers to the message or meaning within an artwork.

Aesthetics - Refers to the artwork's visual attraction or beauty**.**

Art Criticism - An organized approach to evaluating artwork.

Symbolism - Using visual objects or arrangements to represent an alternate meaning.

Module - II - Fundamentals of Drawing **(12 Hrs.)**

Introduction with Basic Line Drawing - This includes drawing straight lines, circles & half circles to give the student a basic exercise of free hand drawing.

Different Technique of Drawing - This includes techniques of holding pencils, brushes and use of other mediums and drawing materials which help the student understand the different techniques of drawing.

Object Drawing – This section involves drawing basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres, this will help the students get an understanding of the dimensions of different objects.

Pictorial Design – This is a 2d design which will help students to gain an understanding of composition, color & balance in a design.

Nature Drawing – Involves the drawing of natural objects such as leaves, flowers, fruits, vegetables in a still life composition.

Perspective – Various methods of perspective will be looked where students will learn the rules of perspective and learn how to effectively use them in their drawings & compositions

Composition – Composition is the most important part of art work as it helps an artist to create visual harmony and balance in a painting. Students will learn the rules of composition in any given space.

Color Theory- practical guidance to color mixing and the visual effects of a specific color combination. Definitions (or categories) of colors based on the color wheel: primary color, secondary color and tertiary color.

Module - III - Digital Painting **(6 Hrs.)**

Digital painting is a method of creating an art object (painting) digitally. It is a technique for making digital art on the computer. As a technique, it refers to a computer graphics software program that uses a virtual canvas and virtual painting box of brushes, colors and other resources. The virtual box contains many instruments that do not exist outside the computer. This helps to give digital artwork a different look and feel from an artwork that is made the traditional way.

Digital Drawing – Introduction of digital format as a canvas for drawing and painting. Students will learn different digital media techniques and professional digital painting software.

Textbook:

1. Barrington Barber, The Fundamentals of Drawing, Arcturus publishing Limited, 2009.
2. Victor Perard, Anatomy and Drawing, Grace Prakashan, 2011.

References:

1. 3D Total Team, Gilles Beloeil, Andrei Riabovitchev, Roberto F. Castro, Publishing 3D Total; Art Fundamentals: Color, Light, Composition, Antomy, Perception and Depth, 3D Total Publishing, 2013.
2. https://www.craftsy.com/art
3. https://www.youtube.com/watch?v=8xdchD4lUXI

Lab: Drawing & Painting
Marks: 100
Credits: 4
Total Hours: 60

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1. Drawing of straight lines, curve lines, horizontal lines, vertical lines, thick lines, thin lines, diagonal lines, dotted lines.
2. Drawing of basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres.
3. Drawing of two objects by observation.
4. Drawing of illustrative design.
5. Drawing of objects from nature.
6. Drawing using the rules of perspective.
7. Drawing using the rules of composition.
8. Using the different color combinations to create visual art.
9. Using the color wheel: primary color, secondary color and tertiary color to create visual art.
10. Creating digital art object using Wacom Intuos.

Hardware

- Wacom Intuos

Course Title: 3D Animation – I
Course Code: VFX-SK2
Marks: 50
Credits: 02
Total Hours: 30
Course Prerequisites: Nil

Course Objectives:

- To give an introduction to basic animation tools and techniques.
- To prepare the student for the advanced level course in the next semester.

Learning Outcome: At the end of this course, students will be able to

- Explore the basic tools and interfaces used to model a 3D animation character.
- Positioning 3D objects.
- Create 3D object using splines tools and splines modifier.
- Manipulate and segregate 3D objects.

SYLLABUS

Module – I - Fundamentals of 3D Animation **(12 Hrs.)**

In this module, we teach how to plan the production and interact with 3D studio max software.

Introduction with 3D Studio Max CC - Learn to get around with 3d studio max, from ground up, providing overview of the entire package as well as essential workflows that require to create professional models and animations.

Exploring Interface - Complete overview of the 3Ds Max interface, navigation, configure major parts of the interface, including the viewports, the timeline, the outliner, and the various other parts of the 3Ds Max UI.

Controlling of Viewports - Creating and manipulating standard 3ds Max primitives such as spheres, cubes, cones, and cylinders, then moves on to extended primitives such as the capsule and the oil tank. Exploring modifiers and use them as the basis for modeling.

Working with Files & Hierarchy - Exploring the different 3d file extension and assembly. Discover various file association, referencing and grouping techniques. Learn industry standard file types like FBX and alembic.

Module - II- Modeling in 3D **(9 Hrs.)**

Creating and positioning 3D Object, running a mass Fx simulation and animating object with key frames.

Creating and Modeling, Editing Primitive - Overview of graphite modeling tools. Exploring functionality of connect tool, weld tool, extrude tool and various component tool that help in modeling and topology techniques.

Selecting Objects and Using Layers - Overview of modeling interface and modifier stacks. Procedural way of modifying objects, parameters and adjusting the workflow of modeling techniques. Preparing and understanding assets through poly modeling.

Transformation Tools – Learning rich tool set to view and manipulate vertex editing, edge and border editing. Zoom in and out workflows with controlling distance with clipping planes.

Cloning and Array - Overview of breaking edit mesh and poly mesh models into different files for sub tool modeling techniques. Explore isolated, hidden, freeze, wire frame and adaptive degradation technique with proxy file assembly.

Module – III - Shapes and Splines **(9 Hrs.)**

Working with layer and creating 3D object using splines tools and splines modifier.

Creating and Modeling, Editing Primitive - Creating common nurms and spline shapes primitive that allow to create 3d objects from 2d shapes. Shapes comprises of basic line, circle, and curved shapes, with their own set of parameters that can be further edited

Selecting Objects and Using Layers - Learn to renaming and segregate objects. Using selection sets and compile them to layer distribution for non-linear edits and modifying objects. Discover layer base modeling and animatics with layer properties and parameters.

Transformation Tools - Explore the manipulation tools translate, rotate and scale. In-depth parameters on manipulation gizmo and co-ordinate. Discover how manipulation axis order in global, local, view and normal contribute to the workflow of developing professional 3d objects.

Textbooks:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012.

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Richard E. Williams, The Animator's Survival Kit, Faber, 2009.
3. https://www.autodesk.com/education/home
4. https://www.youtube.com/watch?v=kqQmwXCH6w8

Lab: 3D Animation – I
Marks: 100
Credits: 04
Total Hours: 60
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1. Introduction to 3ds Max, opening and saving the files, adjusting workspace, exploring the menus.
2. Creating and manipulating objects, adjusting the pivot, aligning, snapping, and adjusting the gizmos.
3. Manipulating object using vertexes, lines, and faces. Create a crusher using polygon tools.
4. Modelling of coke bottle and detailing with extrude.
5. Modelling interior furniture using connect and weld tool.
6. Modelling interior using chamfer tool.
7. Modelling a ship using boolean modifier.
8. Modelling shrine using duplicate option and array.
9. Modelling a bicycle using spline.
10. Create chess pieces using revolve modifier.

Softwares

- Autodesk 3ds Max
- Blender (Open Source)

Course Title: Vector Graphics - Illustrator
Course Code: VFX-SK3
Marks: 50
Credits: 02
Total Hours: 30
Course Prerequisites: Nil

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into digital forms.
- To train students to create small file size vector graphics.

Learning Outcome: At the end of this course, students will be able to

- Sketch virtual art using computer graphics software program.

- Create vector images using Adobe Illustrator.

SYLLABUS

Module - I – Introduction to Adobe Illustrator **(10 Hrs.)**

Adobe Illustrator is a program used by both artists and graphic designers to create vector images. These images will then be used for company logos, promotional uses or even personal art work, both in print and digital form.

Introduction to Adobe Illustrator - Complete overview of adobe illustrator, from core concept of the entire package as well as essential workflows that require to create professional graphic illustration.

Working with Illustrator Documents –Create a document using preloaded templates or built in document profiles such as print, web & film.

Module – II – Working with Tools **(20 Hrs.)**

Working with Shapes & Symbols – Understanding vector and raster graphics, drawing basic shapes, working with drawing modes, shapes & perspectives, selections, transforming shapes using shape builder tools and working with symbols.

Working with Colors, Gradients & Patterns - Explore standard graphic tools for vector-based images. Creating point-based vector shapes and symbols. In depth study on color wheel and gamut for modifying and setting color pallet and pattern for repetitive design.

Drawing and Painting in Illustrator - Learn to use illustrator as traditional brush-based painting software & vector-based color pattern designer.

Working with Type – Learning Type of Tools using Type to format text and different type styles.

Working with Brushes, Styles & Effects - Brief overview of tools pallet and standard function. Defining and exploring brush parameters, styles setting and effects panel to make professional illustrations.

Working with Text - Exploring text and typography, base design workflow for designing object and subjects.

Automation Saving and Exporting - Learning core concept of various file association and parameter to control exporting illustrations for production.

Organizing Objects in Illustrator – Exploring the layer panel, creating new layers, sub layer, hiding and showing layers, merging layers, moving objects to another layer, isolation mode and working with ruler's guides and grids.

Textbook:

1. Adobe Press, Adobe Illustrator CC Classroom in a Book, Pearson Education India, 2014.

References:

1. Kogent Learning Solution Inc., Illustrator CS6 in Simple Steps, Dreamtech Press, 2014.
2. https://helpx.adobe.com/illustrator/tutorials.html

Lab: Adobe Illustrator
Marks: 100
Credits: 04
Total Hours: 60

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1. Explore the workspaces; tabbed document windows, application bar, workspace switcher, panel title bar, control panel, tool panel, collapse to icons button and four panel groups in vertical dock.
2. Draw straight lines with the Line Segment tool, draw rectangles and squares, specify the corner radius of a rounded rectangle, draw ellipses, polygons, stars, arcs, spirals and grids.
3. Working with multiple artboards, tools and shapes.
4. Working with color and blending modes, RGB, CMYK, HSB, grayscale, color spaces and gamut, spot and process colors.
5. Working with gradients and strokes, layers, brushes, graphic styles and effects.
6. Exploring character paragraph and text; change the definition of a default character and paragraph styles, remove style overrides, delete character or paragraph styles.
7. Importing, exporting and saving artwork into file formats, compressing – PDF, SWF, JPEG, PSD, PNG, TIFF, EPS, SVG.
8. Use the shape builder tool to create new complex new shapes by merging simple shapes.
9. Draw an object, assign either fill or stroke or both to it. Draw other objects, paint similarly, and layer each new object on top of the previous ones.
10. Draw objects, create an envelope using either preset wrap shape or rectangular grid or an object, and reshape the envelope.

Software

- Adobe Illustrator
- GIMP (Open Source)

SEMESTER-II

Course Title: Creative Design & 2D Animation
Course Code: VFX-SK4
Marks: 50
Total Hours: 30
Credits: 02
Course Prerequisites: Nil

Course Objectives:

- To introduce the student to the creative processes which combines art and technology to communicate ideas visually.

Learning Outcome: At the end of this course, students will be able to

- Identify the software tools used to create graphics and manipulate images.
- Associate the interaction of the tools with the graphics or images to attain the intended result.
- Manipulate images to attain the desired result.
- Animate 2D characters.

SYLLABUS

Module – I - Adobe Flash **(15Hrs.)**

Adobe Flash is a multimedia software platform for production of animations, browser games, rich Internet applications, desktop applications, mobile applications and mobile games. Flash displays text, vector graphics and raster graphics to provide animations, video games and applications. It allows streaming of audio and video, and can capture mouse, keyboard, microphone and camera input.

Introduction to Adobe Flash - Overview of Adobe Flash for creating dynamic, interactive graphics. Exploring tools and interface. Learn to incorporate shapes objects and other media to develop professional presentation for video and web.

Image, Audio & Animation - Exploring the stage and property tools to assemble image, audio and make 2D animation. Learning pallets for preset parameters to deliver frame by frame animation.

Drawing and Painting - Creating line art and brush-based painting with flash. Explore the bucket and brush parameters to modify design in various interactive form.

Text & Interactivity - Making buttons, roll over and hyperlink properties with text and ty99pographic parameter. Using general snippets creating functional interactivity for rich media presentation.

Action Script & Effects – Understanding core concept of Adobe Flash programming learning the common syntax of action script 3.0 and action script 2.0.

Exporting and Publishing - Creating frame by frame motion, tweening and animation with proper workflows. Understanding the publish dialogue box for export parameters and publish in standard professional extensions.

Module – II- Adobe Photoshop (15Hrs.)

Adobe Photoshop is the predominant photo editing and manipulation software on the market. Its uses range from full featured editing of large batches of photos to creating intricate digital paintings and drawings that mimic those done by hand.

Introduction to Adobe Photoshop – This section will help introduce the student to digital image editing, creating a new file and familiarizing them with the various tools in Photoshop. Knowing when to use Photoshop.

Working with Selection, Layers & Channel – This section will help students learn how to use the selection tool, menu & choosing selections based on color.

Using Paint, Paths, Shapes and Text Tools – This section will help to learn to use different paint brushing techniques and customizing paint brush settings. Understanding how parts and shapes are manipulated and created. Learn to add text to images as vector objects.

Working with Camera Raw – Examining raw file types and displaying images in camera Raw. Understanding Raw workspace, creating altered versions of your images and exporting from the raw format.

Working with 3D Images – Understanding the 3D workspace and using different 3D file formats. Creating 3D objects, importing 3D objects into Photoshop and working with them.

Working with Video and Animations – Dealing with aspect ratio, opening video files and using a timeline panel. Trimming of video clips and rearranging video footage. Animating text and 3D objects using key frames.

Advance Output Techniques – Understanding color management, calibrating color profiles, configuring color management to print accurate colors.

Textbook:

1. Russell Chun, Adobe Flash Professional CC Classroom in a Book, Adobe, 2014.
2. Andrew Faulkner and Conrad Chavez, Adobe Photoshop CC Classroom in a Book, Adobe Press, 2015.

References:

1. Fred Gerantabee, Adobe Flash Professional CS6 Digital Classroom, John Wiley & Sons, 2012.
2. Lisa Danae Dayley and Brad Dayleyz, Adobe Photoshop CC Bible, Wiley India Pvt. Ltd., 2014.
3. Angie Taylor, Design Essentials for the Motion Media Artist: A Practical Guide to Principles & Techniques, Focal Press, 2010.
4. https://helpx.adobe.com/in/photoshop/tutorials.html
5. https://helpx.adobe.com/in/adobe-character-animator/tutorials.html

Lab: Creative Design & 2D Animation
Marks: 100
Credits: 4
Total Hours: 60
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1. Working with Software Layouts.
2. Photo Manipulation using shapes and pen tool.
3. Adjusting image brightness, contrasts, saturation and levels.
4. Mixing of different photographs to create a single image.
5. Working on transparent layers.
6. Changing the view size of a document, resizing files and adjusting resolutions, printing on different mediums.
7. Working with multiple shapes and objects.
8. Working with images and audios.
9. Working with objects in motion and animation of different shapes.
10. Drawing and painting using different tools.
11. Working with text animation and interactivity, action script and effects.
12. Exporting and publishing in different file products.
13. Creating animation for webpages and videos.

Software

- Adobe Photoshop
- Adobe Flash Professional / Animate
- GIMP (Open Source)

Course Title: 3D Animation - II
Course Code: VFX-SK5
Marks: 50
Total Hours: 30
Credits: 02
Course Prerequisites: 3D Animation – I (VFX-SK2)

Course Objectives:

- Use the basic knowledge acquired in combination with advanced level 3D modelling.
- Compose advance 3D animation characters for architecture, games, videos. Etc.

Learning Outcome: At the end of this course, students will be able to

- Identify the various modeling techniques.
- Associate how the different modeling techniques are used to model a 3D character.
- Model advanced 3D characters.

SYLLABUS:

Module - I: Advance Modeling in 3d Animation (10 Hrs.)

3D Assets Modeling - Creating different 3d asset types and function for modeling scene hierarchy. Understand core concept of developing inter portability asset modeling including edit poly modeling, bezier modeling and sub-d modeling.

Nurbs Modeling - Exploring the non-rational B-spline techniques to build 3d objects from line projections. Understanding nurb isoparms, hulls and control vertex. Learning the parametric adaptation to modify object geometry according to suite.

Patch Modeling - Overview of quad based patch geometric data for advance nurbs modeling. Explore the parameters and various operation like lathe, revolve, birail and planer.

Polygon Modeling - Create 3d advance objects with use of quad surface poly. Exploring different parameter of component level modeling like vertex edge and face. Learning the tools for sub level polygon operation like extrude bevel and various definitive.

Module – II - Material & Texturing and Virtual Camera (10Hrs.)

Standard Materials - Overview of shade materials to give color perception to 3d objects. Using nodes and connectors to channel color data for illuminating surface parametric representation.

Slate Material Editor - Explore one of the material controller sets of preset assembly. Learn to use compact node stack workflow for editing and making materials.

Compact Material Editor - Explore advanced material controller sets of preset assembly. Learn to use nonlinear node workflow for editing and making materials.

Material Modifier - Explore modifier functionality for controlling material look and development. Apply set of world space and object spec modifier to enhance color data.

UV Mapping - Overview of processing 3d objects to retain and apply 3d image or procedural texture in 0 and 1 space of quad poly adaptation. Learn the workflow of setting and manipulating face coordinate to create world space UV coordinate for material and shading.

Concept of Virtual Cameras - Exploring the parameters and operation of cameras for rendering and final output. Overview of camera properties to control depth, color, blur, material and scene content.

Module – III - Lighting, Rendering and Export (10 Hrs.)

Lighting Techniques - Overview of light panel with in depth study of standard and photo metric lights. Creating light lister and referencing for advance light probe techniques.

Standard and Photometric Lights - Core concept of virtual light paradigms operation and relation. Explore the illumination model in various spaces like world view and local.

Atmospheric and Render Effects - Create background FX with render atmospheric tools. Learning the effects parameter functionality to control various effects for final render.

Rendering with Mental Ray - Overview of interface and operative nodes of Mental ray render engine. Learning advanced render algorithms Final Gather and Global illumination techniques. Explore core concept for calculating and finalising render outputs.

Composting with Video Elements - Exploring render data composition in various formats and assembly. Learn to manipulate and modify editable video data from composite render elements.

Video Post and Export - Learn video post dialogue parameter to modify edit and deliver for final production output.

Textbook:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Isaac V. Kerlow, The Art of 3D Computer Animation and Effects, John Wiley & Sons, 2009.
3. https://www.autodesk.com/education/home
4. https://www.youtube.com/watch?v=kqQmwXCH6w8

Lab: 3D Animation – II
Marks: 100
Credits: 04
Total Hours: 60

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1. Converting spline modelling into polygon modelling.
2. Creating of complex model using advance modelling tools.
3. Building an exterior using NURBS, patch and polygon modelling.
4. Understanding material editor in slate mode and compact material.
5. Solving UV and create a map for a given model.
6. Use max cameras to get the shot render from different angles.
7. Light up the interior scene using standard light in MAX.
8. Illuminate scene using photometric lights.
9. Create a daylight system using mental ray.
10. Take video output of a ten second after composting final scene.

Software

- Autodesk 3ds Max
- Blender (Open Source)

Course Title: Project - First Year End
Course Code: VFX-SK6
Marks: 150
Credits: 06
Hours: 90
Course Prerequisites: **Drawing & Painting (VFX-SK1)**
3D Animation - I (VFX-SK2)
Vector Graphics - Illustrator (VFX-SK3)
Creative Design & 2D Animation (VFX-SK4)
3D Animation – II (VFX-SK5)

Project - First Year End – Part A – (80 Marks)

- **Logo Creation:** The student should create a logo based of his choice.
- **Corporate Branding:** The student should create layouts and design a company's letterhead, envelopes, business cards, brochure, and banner stand.

    - Creating a Design – 15 Marks
    - Color Scheme – 10 Marks
    - Comprehension – 15 Marks
    - Placements - 10 Marks
    - Concept - 15 Marks
    - Presentation – 15 Marks
        - Logo – 1 nos.
        - Corporate Branding – 5 nos.
            - Letterhead
            - Envelope
            - Business Card
            - Brochure
            - Banner Stand

Project - First Year End – Part B – (70 Marks)

- Model a building architecture. Map the project and take the final output into photo realistic JPEG file.
    - Creating a design – 10 Marks
    - Modelling – 10 Marks
    - Solving UVs – 10 Marks
    - Texturing – 5 Marks
    - Lighting – 10 Marks
    - Rendering – 5 Marks
    - Final Presentation – 20 Marks

THREE YEAR B.VOC. DEGREE PROGRAMME IN MULTIMEDIA – DIGITAL FILMMAKING

SEMESTER I

Course Title: Drawing & Painting
Course Code: MDF-SK1
Marks: 50
Credits: 02
Total Hours: 30
Course Prerequisites: Nil

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into personal forms of pictorial expression and representation.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Learning Outcome: At the end of this course, students will be able to

- Identify the various techniques used and elements required in drawing.
- Sketch virtual art using computer graphics software program.
- Compose layouts as per their own creative visualizations.

SYLLABUS:

Module - I - Fundamentals of Art **(12 Hrs.)**

This module involves a series of exercises designed to introduce the basics and give a grounding in various types of drawings.

The sections covered are:

Fundamentals of Art- The fundamentals of art are the building blocks for successful art-making. Artwork can also be analyzed according to the use of the elements in a work of art.

Elements of Art-The elements of art are the basic components of art-marking. It is impossible to create a work of art without using at least one of the seven elements of art.

Principles of Art-Balance, emphasis, movement, proportion, rhythm, unity, and variety; the means an artist uses to organize elements within a work of art. By the careful placement of repeated elements in a work of art to cause a visual tempo or beat. Equilibrium or stability to a work of art.

Content- Refers to the message or meaning within an artwork.

Aesthetics - Refers to the artwork's visual attraction or beauty**.**

Art Criticism - An organized approach to evaluating artwork.

Symbolism - Using visual objects or arrangements to represent an alternate meaning.

Module - II - Fundamentals of Drawing **(12 Hrs.)**

Introduction with Basic Line Drawing - This includes drawing straight lines, circles & half circles to give the student a basic exercise of free hand drawing.

Different Technique of Drawing - This includes techniques of holding pencils, brushes and use of other mediums and drawing materials which help the student understand the different techniques of drawing.

Object Drawing – This section involves drawing basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres, this will help the students get an understanding of the dimensions of different objects.

Pictorial Design – This is a 2d design which will help students to gain an understanding of composition, color & balance in a design.

Nature Drawing – Involves the drawing of natural objects such as leaves, flowers, fruits, vegetables in a still life composition.

Perspective – Various methods of perspective will be looked where students will learn the rules of perspective and learn how to effectively use them in their drawings & compositions

Composition – Composition is the most important part of art work as it helps an artist to create visual harmony and balance in a painting. Students will learn the rules of composition in any given space.

Color Theory- practical guidance to color mixing and the visual effects of a specific color combination. Definitions (or categories) of colors based on the color wheel: primary color, secondary color and tertiary color.

Module - III - Digital Painting **(6 Hrs.)**

Digital painting is a method of creating an art object (painting) digitally. It is a technique for making digital art on the computer. As a technique, it refers to a computer graphics software program that uses a virtual canvas and virtual painting box of brushes, colors and other resources. The virtual box contains many instruments that do not exist outside the computer. This helps to give digital artwork a different look and feel from an artwork that is made the traditional way.

Digital Drawing – Introduction of digital format as a canvas for drawing and painting. Students will learn different digital media techniques and professional digital painting software.

Textbook:

3. Barrington Barber, The Fundamentals of Drawing, Arcturus publishing Limited, 2009.
4. Victor Perard, Anatomy and Drawing, Grace Prakashan, 2011.

References:

4. 3D Total Team, Gilles Beloeil, Andrei Riabovitchev, Roberto F. Castro, Publishing 3D Total; Art Fundamentals: Color, Light, Composition, Antomy, Perception and Depth, 3D Total Publishing, 2013.
5. https://www.craftsy.com/art
6. https://www.youtube.com/watch?v=8xdchD4lUXI

Lab: Drawing & Painting
Marks: 100
Credits: 4
Total Hours: 60

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11. Drawing of straight lines, curve lines, horizontal lines, vertical lines, thick lines, thin lines, diagonal lines, dotted lines.
12. Drawing of basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres.
13. Drawing of two objects by observation.
14. Drawing of illustrative design.
15. Drawing of objects from nature.
16. Drawing using the rules of perspective.
17. Drawing using the rules of composition.
18. Using the different color combinations to create visual art.
19. Using the color wheel: primary color, secondary color and tertiary color to create visual art.
20. Creating digital art object using Wacom Intuos.

Hardware

- Wacom Intuos

Course Title: 3D Animation – I
Course Code: MDF-SK2
Marks: 50
Credits: 02
Total Hours: 30

Course Prerequisites: Nil

Course Objectives:

- To give an introduction to basic animation tools and techniques.
- To prepare the student for the advanced level course in the next semester.

Learning Outcome: At the end of this course, students will be able to

- Explore the basic tools and interfaces used to model a 3D animation character.
- Positioning 3D objects.
- Create 3D object using splines tools and splines modifier.
- Manipulate and segregate 3D objects.

SYLLABUS

Module – I - Fundamentals of 3D Animation **(12 Hrs.)**

In this module, we teach how to plan the production and interact with 3D studio max software.

Introduction with 3D Studio Max CC - Learn to get around with 3d studio max, from ground up, providing overview of the entire package as well as essential workflows that require to create professional models and animations.

Exploring Interface - Complete overview of the 3Ds Max interface, navigation, configure major parts of the interface, including the viewports, the timeline, the outliner, and the various other parts of the 3Ds Max UI.

Controlling of Viewports - Creating and manipulating standard 3ds Max primitives such as spheres, cubes, cones, and cylinders, then moves on to extended primitives such as the capsule and the oil tank. Exploring modifiers and use them as the basis for modeling.

Working with Files & Hierarchy - Exploring the different 3d file extension and assembly. Discover various file association, referencing and grouping techniques. Learn industry standard file types like FBX and alembic.

Module - II- Modeling in 3D **(9 Hrs.)**

Creating and positioning 3D Object, running a mass Fx simulation and animating object with key frames.

Creating and Modeling, Editing Primitive - Overview of graphite modeling tools. Exploring functionality of connect tool, weld tool, extrude tool and various component tool that help in modeling and topology techniques.

Selecting Objects and Using Layers - Overview of modeling interface and modifier stacks. Procedural way of modifying objects, parameters and adjusting the workflow of modeling techniques. Preparing and understanding assets through poly modeling.

Transformation Tools – Learning rich tool set to view and manipulate vertex editing, edge and border editing. Zoom in and out workflows with controlling distance with clipping planes.

Cloning and Array - Overview of breaking edit mesh and poly mesh models into different files for sub tool modeling techniques. Explore isolated, hidden, freeze, wire frame and adaptive degradation technique with proxy file assembly.

Module – III - Shapes and Splines **(9 Hrs.)**

Working with layer and creating 3D object using splines tools and splines modifier.

Creating and Modeling, Editing Primitive - Creating common nurms and spline shapes primitive that allow to create 3d objects from 2d shapes. Shapes comprises of basic line, circle, and curved shapes, with their own set of parameters that can be further edited

Selecting Objects and Using Layers - Learn to renaming and segregate objects. Using selection sets and compile them to layer distribution for non-linear edits and modifying objects. Discover layer base modeling and animatics with layer properties and parameters.

Transformation Tools - Explore the manipulation tools translate, rotate and scale. In-depth parameters on manipulation gizmo and co-ordinate. Discover how manipulation axis order in global, local, view and normal contribute to the workflow of developing professional 3d objects.

Textbooks:

2. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012.

References:

5. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
6. Richard E. Williams, The Animator's Survival Kit, Faber, 2009.
7. https://www.autodesk.com/education/home
8. https://www.youtube.com/watch?v=kqQmwXCH6w8

Lab: 3D Animation – I
Marks: 100
Credits: 04
Total Hours: 60

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11. Introduction to 3ds Max, opening and saving the files, adjusting workspace, exploring the menus.
12. Creating and manipulating objects, adjusting the pivot, aligning, snapping, and adjusting the gizmos.
13. Manipulating object using vertexes, lines, and faces. Create a crusher using polygon tools.
14. Modelling of coke bottle and detailing with extrude.

15. Modelling interior furniture using connect and weld tool.
16. Modelling interior using chamfer tool.
17. Modelling a ship using boolean modifier.
18. Modelling shrine using duplicate option and array.
19. Modelling a bicycle using spline.
20. Create chess pieces using revolve modifier.

Softwares

- Autodesk 3ds Max
- Blender (Open Source)

Course Title: Vector Graphics - Illustrator
Course Code: MDF-SK3
Marks: 50
Credits: 02
Total Hours: 30
Course Prerequisites: Nil

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into digital forms.
- To train students to create small file size vector graphics.

Learning Outcome: At the end of this course, students will be able to

- Sketch virtual art using computer graphics software program.
- Create vector images using Adobe Illustrator.

SYLLABUS

Module - I – Introduction to Adobe Illustrator **(10 Hrs.)**

Adobe Illustrator is a program used by both artists and graphic designers to create vector images. These images will then be used for company logos, promotional uses or even personal art work, both in print and digital form.

Introduction to Adobe Illustrator - Complete overview of adobe illustrator, from core concept of the entire package as well as essential workflows that require to create professional graphic illustration.

Working with Illustrator Documents –Create a document using preloaded templates or built in document profiles such as print, web & film.

Module – II – Working with Tools **(20 Hrs.)**

Working with Shapes & Symbols – Understanding vector and raster graphics, drawing basic shapes, working with drawing modes, shapes & perspectives, selections, transforming shapes using shape builder tools and working with symbols.

Working with Colors, Gradients & Patterns - Explore standard graphic tools for vector-based images. Creating point-based vector shapes and symbols. In depth study on color wheel and gamut for modifying and setting color pallet and pattern for repetitive design.

Drawing and Painting in Illustrator - Learn to use illustrator as traditional brush-based painting software & vector-based color pattern designer.

Working with Type – Learning Type of Tools using Type to format text and different type styles.

Working with Brushes, Styles & Effects - Brief overview of tools pallet and standard function. Defining and exploring brush parameters, styles setting and effects panel to make professional illustrations.

Working with Text - Exploring text and typography, base design workflow for designing object and subjects.

Automation Saving and Exporting - Learning core concept of various file association and parameter to control exporting illustrations for production.

Organizing Objects in Illustrator – Exploring the layer panel, creating new layers, sub layer, hiding and showing layers, merging layers, moving objects to another layer, isolation mode and working with ruler's guides and grids.

Textbook:

2. Adobe Press, Adobe Illustrator CC Classroom in a Book, Pearson Education India, 2014.

References:

3. Kogent Learning Solution Inc., Illustrator CS6 in Simple Steps, Dreamtech Press, 2014.
4. https://helpx.adobe.com/illustrator/tutorials.html

Lab: Adobe Illustrator
Marks: 100
Credits: 04

Total Hours: 60

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11. Explore the workspaces; tabbed document windows, application bar, workspace switcher, panel title bar, control panel, tool panel, collapse to icons button and four panel groups in vertical dock.
12. Draw straight lines with the Line Segment tool, draw rectangles and squares, specify the corner radius of a rounded rectangle, draw ellipses, polygons, stars, arcs, spirals and grids.
13. Working with multiple artboards, tools and shapes.
14. Working with color and blending modes, RGB, CMYK, HSB, grayscale, color spaces and gamut, spot and process colors.
15. Working with gradients and strokes, layers, brushes, graphic styles and effects.
16. Exploring character paragraph and text; change the definition of a default character and paragraph styles, remove style overrides, delete character or paragraph styles.
17. Importing, exporting and saving artwork into file formats, compressing – PDF, SWF, JPEG, PSD, PNG, TIFF, EPS, SVG.
18. Use the shape builder tool to create new complex new shapes by merging simple shapes.
19. Draw an object, assign either fill or stroke or both to it. Draw other objects, paint similarly, and layer each new object on top of the previous ones.
20. Draw objects, create an envelope using either preset wrap shape or rectangular grid or an object, and reshape the envelope.

Software

- Adobe Illustrator
- GIMP (Open Source)

SEMESTER II

Course Title: Creative Design & 2D Animation
Course Code: MDF-SK4
Marks: 50
Total Hours: 30
Credits: 02

Course Prerequisites: Nil

Course Objectives:

- To introduce the student to the creative processes which combines art and technology to communicate ideas visually.

Learning Outcome: At the end of this course, students will be able to

- Identify the software tools used to create graphics and manipulate images.
- Associate the interaction of the tools with the graphics or images to attain the intended result.
- Manipulate images to attain the desired result.
- Animate 2D characters.

SYLLABUS

Module – I - Adobe Flash **(15Hrs.)**

Adobe Flash is a multimedia software platform for production of animations, browser games, rich Internet applications, desktop applications, mobile applications and mobile games. Flash displays text, vector graphics and raster graphics to provide animations, video games and applications. It allows streaming of audio and video, and can capture mouse, keyboard, microphone and camera input.

Introduction to Adobe Flash - Overview of Adobe Flash for creating dynamic, interactive graphics. Exploring tools and interface. Learn to incorporate shapes objects and other media to develop professional presentation for video and web.

Image, Audio & Animation - Exploring the stage and property tools to assemble image, audio and make 2D animation. Learning pallets for preset parameters to deliver frame by frame animation.

Drawing and Painting - Creating line art and brush-based painting with flash. Explore the bucket and brush parameters to modify design in various interactive form.

Text & Interactivity - Making buttons, roll over and hyperlink properties with text and ty99pographic parameter. Using general snippets creating functional interactivity for rich media presentation.

Action Script & Effects – Understanding core concept of Adobe Flash programming learning the common syntax of action script 3.0 and action script 2.0.

Exporting and Publishing - Creating frame by frame motion, tweening and animation with proper workflows. Understanding the publish dialogue box for export parameters and publish in standard professional extensions.

Module – II- Adobe Photoshop **(15Hrs.)**

Adobe Photoshop is the predominant photo editing and manipulation software on the market. Its uses range from full featured editing of large batches of photos to creating intricate digital paintings and drawings that mimic those done by hand.

Introduction to Adobe Photoshop – This section will help introduce the student to digital image editing, creating a new file and familiarizing them with the various tools in Photoshop. Knowing when to use Photoshop.

Working with Selection, Layers & Channel – This section will help students learn how to use the selection tool, menu & choosing selections based on color.

Using Paint, Paths, Shapes and Text Tools – This section will help to learn to use different paint brushing techniques and customizing paint brush settings. Understanding how parts and shapes are manipulated and created. Learn to add text to images as vector objects.

Working with Camera Raw – Examining raw file types and displaying images in camera Raw. Understanding Raw workspace, creating altered versions of your images and exporting from the raw format.

Working with 3D Images – Understanding the 3D workspace and using different 3D file formats. Creating 3D objects, importing 3D objects into Photoshop and working with them.

Working with Video and Animations – Dealing with aspect ratio, opening video files and using a timeline panel. Trimming of video clips and rearranging video footage. Animating text and 3D objects using key frames.

Advance Output Techniques – Understanding color management, calibrating color profiles, configuring color management to print accurate colors.

Textbook:

3. Russell Chun, Adobe Flash Professional CC Classroom in a Book, Adobe, 2014.
4. Andrew Faulkner and Conrad Chavez, Adobe Photoshop CC Classroom in a Book, Adobe Press, 2015.

References:

6. Fred Gerantabee, Adobe Flash Professional CS6 Digital Classroom, John Wiley & Sons, 2012.
7. Lisa Danae Dayley and Brad Dayleyz, Adobe Photoshop CC Bible, Wiley India Pvt. Ltd., 2014.
8. Angie Taylor, Design Essentials for the Motion Media Artist: A Practical Guide to Principles & Techniques, Focal Press, 2010.
9. https://helpx.adobe.com/in/photoshop/tutorials.html
10. https://helpx.adobe.com/in/adobe-character-animator/tutorials.html

Lab: Creative Design & 2D Animation
Marks: 100
Credits: 4
Total Hours: 60
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14. Working with Software Layouts.
15. Photo Manipulation using shapes and pen tool.
16. Adjusting image brightness, contrasts, saturation and levels.
17. Mixing of different photographs to create a single image.
18. Working on transparent layers.
19. Changing the view size of a document, resizing files and adjusting resolutions, printing on different mediums.
20. Working with multiple shapes and objects.
21. Working with images and audios.
22. Working with objects in motion and animation of different shapes.
23. Drawing and painting using different tools.
24. Working with text animation and interactivity, action script and effects.
25. Exporting and publishing in different file products.
26. Creating animation for webpages and videos.

Software

- Adobe Photoshop
- Adobe Flash Professional / Animate
- GIMP (Open Source)

Course Title: 3D Animation - II
Course Code: MDF-SK5
Marks: 50
Total Hours: 30
Credits: 02
Course Prerequisites: 3D Animation – I (MDF-SK2)

Course Objectives:

- Use the basic knowledge acquired in combination with advanced level 3D modelling.
- Compose advance 3D animation characters for architecture, games, videos. Etc.

Learning Outcome: At the end of this course, students will be able to

- Identify the various modeling techniques.
- Associate how the different modeling techniques are used to model a 3D character.
- Model advanced 3D characters.

SYLLABUS:

Module - I: Advance Modeling in 3d Animation **(10 Hrs.)**

3D Assets Modeling - Creating different 3d asset types and function for modeling scene hierarchy. Understand core concept of developing inter portability asset modeling including edit poly modeling, bezier modeling and sub-d modeling.

Nurbs Modeling - Exploring the non-rational B-spline techniques to build 3d objects from line projections. Understanding nurb isoparms, hulls and control vertex. Learning the parametric adaptation to modify object geometry according to suite.

Patch Modeling - Overview of quad based patch geometric data for advance nurbs modeling. Explore the parameters and various operation like lathe, revolve, birail and planer.

Polygon Modeling - Create 3d advance objects with use of quad surface poly. Exploring different parameter of component level modeling like vertex edge and face. Learning the tools for sub level polygon operation like extrude bevel and various definitive.

Module – II - Material & Texturing and Virtual Camera (10Hrs.)

Standard Materials - Overview of shade materials to give color perception to 3d objects. Using nodes and connectors to channel color data for illuminating surface parametric representation.

Slate Material Editor - Explore one of the material controller sets of preset assembly. Learn to use compact node stack workflow for editing and making materials.

Compact Material Editor - Explore advanced material controller sets of preset assembly. Learn to use nonlinear node workflow for editing and making materials.

Material Modifier - Explore modifier functionality for controlling material look and development. Apply set of world space and object spec modifier to enhance color data.

UV Mapping - Overview of processing 3d objects to retain and apply 3d image or procedural texture in 0 and 1 space of quad poly adaptation. Learn the workflow of setting and manipulating face coordinate to create world space UV coordinate for material and shading.

Concept of Virtual Cameras - Exploring the parameters and operation of cameras for rendering and final output. Overview of camera properties to control depth, color, blur, material and scene content.

Module – III - Lighting, Rendering and Export (10 Hrs.)

Lighting Techniques - Overview of light panel with in depth study of standard and photo metric lights. Creating light lister and referencing for advance light probe techniques.

Standard and Photometric Lights - Core concept of virtual light paradigms operation and relation. Explore the illumination model in various spaces like world view and local.

Atmospheric and Render Effects - Create background FX with render atmospheric tools. Learning the effects parameter functionality to control various effects for final render.

Rendering with Mental Ray - Overview of interface and operative nodes of Mental ray render engine. Learning advanced render algorithms Final Gather and Global illumination techniques. Explore core concept for calculating and finalising render outputs.

Composting with Video Elements - Exploring render data composition in various formats and assembly. Learn to manipulate and modify editable video data from composite render elements.

Video Post and Export - Learn video post dialogue parameter to modify edit and deliver for final production output.

Textbook:

2. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012

References:

5. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
6. Isaac V. Kerlow, The Art of 3D Computer Animation and Effects, John Wiley & Sons, 2009.
7. https://www.autodesk.com/education/home
8. https://www.youtube.com/watch?v=kqQmwXCH6w8

Lab: 3D Animation – II
Marks: 50
Credits: 04
Total Hours: 60

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11. Converting spline modelling into polygon modelling.
12. Creating of complex model using advance modelling tools.
13. Building an exterior using NURBS, patch and polygon modelling.
14. Understanding material editor in slate mode and compact material.
15. Solving UV and create a map for a given model.
16. Use max cameras to get the shot render from different angles.
17. Light up the interior scene using standard light in MAX.
18. Illuminate scene using photometric lights.
19. Create a daylight system using mental ray.
20. Take video output of a ten second after composting final scene.

Software

- Autodesk 3ds Max
- Blender (Open Source)

Course Title: Project - First Year End
Course Code: MDF-SK6
Marks: 150
Credits: 06
Hours: 90
Course Prerequisites: **Drawing & Painting (MDF-SK1)**
3D Animation - I (MDF-SK2)
Vector Graphics - Illustrator (MDF-SK3)
Creative Design & 2D Animation (MDF-SK4)
3D Animation – II (MDF-SK5)

Project - First Year End – Part A – (80 Marks)

- **Logo Creation:** The student should create a logo based of his choice.
- **Corporate Branding:** The student should create layouts and design a company's letterhead, envelopes, business cards, brochure, and banner stand.

    - Creating a Design – 15 Marks
    - Color Scheme – 10 Marks
    - Comprehension – 15 Marks
    - Placements - 10 Marks
    - Concept - 15 Marks
    - Presentation - 15 Marks
        - Logo – 1 nos.
        - Corporate Branding – 5 nos.
            - Letterhead
            - Envelope
            - Business Card
            - Brochure
            - Banner Stand

Project - First Year End – Part B – (70 Marks)

- Model a building architecture. Map the project and take the final output into photo realistic JPEG file.
    - Creating a design – 10 Marks
    - Modelling – 10 Marks
    - Solving UVs – 10 Marks
    - Texturing – 5 Marks
    - Lighting – 10 Marks
    - Rendering – 5 Marks
    - Final Presentation – 20 Marks

3D Media and Virtual Reality – VFX

Bachelor of Vocation in 3D Media & Virtual Reality - VFX

Semester	General Education Component			Skill Component		
I	VFX-G1 Language Paper	Theory Credits 4	Practical Credits 0	VFX-SK1 Drawing & Painting	Theory Credits 2	Practical Credits 4
	VFX-G2 Introduction to Creative Writing	Theory Credits 4	Practical Credits 0	VFX-SK2 3D Animation-I	Theory Credits 2	Practical Credits 4
	VFX-G3 History of Indian Art	Theory Credits 4	Practical Credits 0	VFX-SK3A Raster Graphics	Theory Credits 2	Practical Credits 4
II	VFX-G4A Academic Writing	Theory Credits 4	Practical Credits 0	VFX-SK4A Vector Graphics	Theory Credits 2	Practical Credits 4
	VFX-G5 Introduction to Digital Mass Media	Theory Credits 4	Practical Credits 0	VFX-SK5 3D Animation-II	Theory Credits 2	Practical Credits 4
	VFX-G6 History of Western Art	Theory Credits 4	Practical Credits 0	VFX-SK6 Project - First Year End	Theory Credits 0	Practical Credits 6
Outcome	1) Art Setter 2) Graphic Desinger 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	VFX-G7 Environmental Studies-I	Theory Credits 2	Practical Credits 0	VFX-SK7 Visual Effects-I	Theory Credits 2	Practical Credits 4
	VFX-G8 Art Appreciation	Theory Credits 2	Practical Credits 0	VFX-SK8 Colour Grading	Theory Credits 2	Practical Credits 4
	VFX-G9 Business Communication	Theory Credits 4	Practical Credits 0	VFX-SK9 Video Editing	Theory Credits 2	Practical Credits 4
	VFX-G10 Cyber Security	Theory Credits 4	Practical Credits 0			
IV	VFX-G11 Environmental Studies-II	Theory Credits 2	Practical Credits 0	VFX-SK10 Visual Effects-II	Theory Credits 2	Practical Credits 4
	VFX-G12 Film Appreciation	Theory Credits 2	Practical Credits 0	VFX-SK11 Audio Editing	Theory Credits 2	Practical Credits 4
	VFX-G13 Print Advertising	Theory Credits 4	Practical Credits 0	VFX-SK12 Project - Second Year End	Theory Credits 0	Practical Credits 6
	VFX-G14 Personality Enhancement	Theory Credits 4	Practical Credits 0			
Outcome	1) Video Editor 2) Studio Coordinator 3) Studio Recordist 4) Studio Designer 5) VFX/SFX Engineer 6) CG Operator					

Semester	General Education Component			Skill Component		
V	VFX-G15 Mathematics for competitive Exams	Theory Credits 4	Practical Credits 0	VFX-SK13 Advanced Visual Effects	Theory Credits 2	Practical Credits 4
	VFX-G16 Film Studies	Theory Credits 4	Practical Credits 0	VFX-SK14 Rotoscopy Techniques	Theory Credits 2	Practical Credits 4
	VFX-G17 Digital Marketing	Theory Credits 4	Practical Credits 0	VFX-SK15 Broadcast Design	Theory Credits 2	Practical Credits 4
VI	VFX-G18 E-Commerce	Theory Credits 4	Practical Credits 0	VFX-SK16 Virtual Reality	Theory Credits 2	Practical Credits 4
	VFX-G19 HCI	Theory Credits 4	Practical Credits 0	VFX-SK17 Particle Illusion	Theory Credits 2	Practical Credits 4
	VFX-G20 Entrepreneurship	Theory Credits 4	Practical Credits 0	VFX-SK18 Internship	Theory Credits 0	Practical Credits 6
Outcome	1) Roto Artist 2) Production Designer 3) VFX Supervisor 4) Animator 5) Game modelling artist 6) Graphic Animator					

Internship to be undertaken during end semester breaks. (End of 4th Semester onwards)

SEMESTER – I

General Education Component

Course Title: Language Paper

Course Code: VFX-G1

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To help students develop proficiency in oral communication in English.
- To help students understand the importance of developing good listening skills.
- To help students become proficient in listening, writing and speaking skills.

Course Outcome: At the end of this course, students will be able to

CO-1 To speak fluently, confidently and use correct English.

CO-2 To draft letters– formal & informal letters, representations, notices, agendas and minutes of meetings.

CO-3 To communicate effectively through written communication.

SYLLABUS:

Module – I – Fun with Grammar **(15 hrs)**

Students need to have a basic proficiency in Grammar to complete this course.

Pre-requisite to the course: Knowledge of Basic Grammar – Articles, Adjectives, adverbs, Conjunctions, Sentence Structures – SVO etc

1. Parts of Speech
2. Reported Speech
3. Punctuation
4. Phrases and Clauses
5. Active and Passive
6. Basic Errors in English Language
7. Spotting Errors and correcting them
8. Revising and Editing

Module – II – Spoken English **(15 hrs)**

1. Individual Presentation Skills 5 hours

Students are to be taught public speaking using Presentation skills through application-based teaching; public speaking is to be taught and application of these skills in formal and informal settings.

a) Concepts:

i. Importance of Body Language and Eye Contact in Spoken Communication

ii. Ways to Overcome Fear of Speaking

iii. Pace, Tone and Intonation

iv. Listening as an Essential Part of Communication. How to be an Effective Listener

b) Applied:

Students will be given topics to present before the class. They can use a host of methods to do so

1. Presentation with material - Formal
2. Oral presentation
3. Formal/Informal Speeches – Welcome, Introduction to a dignitary, Raising a toast, Farewell Speech, celebratory speeches

2. Pair Based Activities 5 hours

a) Telephone Etiquette

b) Speaking and Listening Classroom Practice Exercises in Pairs and Groups.

3. Group Based Activities 5 hours

Minutes of the meeting can be used as a group-based activity.

Group Discussions of Formal and Informal nature.

Module – III – Written English **(15 hrs)**

1. Letters

a) Formal Letters

   i. Job Application Letters
   ii. Enquiry Letters
   iii. Orders and Complaints letters
   iv. RTI
   v. Representations
   vi. Writing a resume

b) Social Letters

   i. Invitation &Reply
   ii. Condolence & Reply
   iii. Congratulations & Reply
   iv. Thank you & Reply

Module – IV – Digital Story Telling (DST) **(15 hrs)**

Descriptive Writing – (Open to the Teacher to explore this writing in various areas Fiction and Non-Fiction and creative expression of personal writing)

Primary References:

1. Azar, Betty Schrampfer. Basic English Grammar. New York: Pearson Education, 1996.
2. Biber, Douglas, Susan Conrad and Geoffrey Leech. Longman Student Grammar of Spoken
3. and Written English. Edinburgh: Pearson Education Limited, 2002.
4. Bullock, Richard. The Norton Field Guide to Writing. New York: W.W. Norton & Company, 2009.
5. Jain, A.K. and Dr. Pravin S.R. Bhatia. Professional Communication Skills. New Delhi: S.Chand & Company Ltd, 2000.
6. Mohan, Krishna and Singh, N. P. Speaking English Effectively Macmillan India Ltd.
7. Sadanand, Kamelesh & Susheela Punitha. Spoken English: A Foundation Course – Part 1.
8. Hyderabad: Orient Blackswan Private Limited, 2009.
9. Stanek, William. Effective Writing for Business, College and Life. Reagent Press, 2005.

Secondary References:

1. Bullock, Richard. The Norton Field Guide to Writing. New York: W.W. Norton & Company, 2009.
2. Chakravarty, Auditi and Bonnie Boehme. Grammar & Usage for Better Writing. New York: Amsco School Publications, 2004.
3. Downing, Angela and Philip Locke. English Grammar A University Course. London and New York: Routledge, 2006.
4. Hewings, Martin. Advanced Grammar in Use. 2nd. Great Britain: Cambridge
5. Naylor, Helen and Raymond Murphy. Grammar in Use Supplementary Exercises. Edinburgh: Cambridge University Press, 2001.

Course Title: Introduction to Creative Writing

Course Code: VFX-G2

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To expose students to a variety of literary genres, authors and styles through reading, discussion and analysis.
- To experiment with a variety of writing genres like short story, poetry, novella, drama etc.
- To help students understand the process of revision, editing and proofreading.
- To develop the skills to self-critique one's own writing through a process of giving and receiving criticism on one's own and others' writings.
- To encourage students to publish their works in the college magazine, college newsletters, local newspapers etc.

Course Outcome: At the end of this course, students will be able to

CO-1 Demonstrate an understanding of literary conventions like plot, character, theme etc.

CO-2 Develop a basic understanding of various prose fiction genres.

CO-3 Learn to use current events as inspiration for Creative Writing.

CO-4 Understand the importance of proof reading, editing and rewriting.

CO-5 Learn to critique the writings of their peers.

CO-6 Improve their vocabulary and sentence structures.

CO-7 Learn to think and write creatively.

SYLLABUS:

Module – I – How to Get Started? **(05 hrs)**

a) Journal Writing (Recording Personal Experiences).

b) Free Writing.

c) Clustering.

d) Badly Written First Drafts as Helpful a Starting Point.

Module – II – How to find Subject Matter? **(05 hrs)**

a) Be inspired by events in personal life.

b) Draw inspiration from people one comes across.

c) Be moved by injustice.

d) Draw on current events in Politics, Society etc.

e) Look at genres of fiction one loves to read etc.

Module – III – How to make a story interesting? **(05 hrs)**

a) Introduce conflict, complications, trouble, crisis, resolution.

b) Create feeling of suspense.

c) Appeal to emotions.

d) Surprise reader with unexpected ending.

Module – IV – Difference between 'Story' and 'Plot.' **(05 hrs)**

Module – V – Characterization. **(05 hrs)**

a) Memorable characters have 'Credibility', 'Purpose' and 'Complexity.'

b) 'Indirect Method' or 'Telling' method of Character Presentation – Authorial Interpretation

c) Direct Method or 'Showing Method' of Character Presentation.

   i. Showing appearance

   ii. Showing action

   iii. Portraying speech

d) Checklist for Creating Character.

Age, gender, race, nationality, marital status, region, education, religion, profession, memories, dietary habits, ideology, likes, dislikes etc.

Module – VI – Importance of Atmosphere and Setting in Fiction **(05 hrs)**

Module – VII – Point of View/Narrative voice **(05 hrs)**

a) Who speaks:

i. First Person Narrative
ii. Second Person narrative
iii. Third Person Narrative

b) To whom:

i. To the Reader?
ii. To Another character in the Story?

Module – VIII – The Concept of Authorial Distance or Psychic Distance. **(5 hrs)**

Module – IX – Difference between types of Prose Fiction. **(05 hrs)**

Novel, Short Story, Play

Module – X – The Importance of Proofreading, Editing, Rewriting. **(05 hrs)**

Module – XI – Poetry **(10 hrs)**

Prosodic Features-Rhyme. Rhythm, Metre, Stanzaic Forms, Figurative Language, Symbolism, Special Linguistic Features etc.

Primary References:

1. Burroway, Janet. Writing Fiction: A Guide To Narrative Craft. New York: Longman Publishers, 2000.
2. Earnshaw, Steven. The Handbook of Creative Writing. 2007: Edinburgh University Press, Edinburgh.
3. Morley, David. The Cambridge Introduction to Creative Writing. New York: Cambridge University Press, 2007.

4. Strunk, William, and E.B.White. The Elements of Style. New York: Longman, 2000.

Secondary References:

1. Boden, Margaret. the creative mind - myths and mechanisms. 2nd. New York: Routledge, 2004.
2. Bolton, Gille. Write Yourself - Creative Writing and Personal Development. London: Jessica Kingsley Publishers, 2011.
3. Hamand, Maggie. Creative Writing For Dummies. West Sussex: John Wiley & Sons, Ltd, 2009.
4. Harper, Graeme. On Creative Writing. London: Short Run Press, 2010.
5. Kaufman, Scott Barry and James Kaufman, The Psychology of Creative Writing. New York: Cambridge University Press, 2009.
6. May, Steve. doing creative writing. Oxon: Routledge, 2007.
7. Mills, Paul. The Routledge Creative Writing Coursebook. Routledge, 2006.
8. Neale, Derek. A Creative Writing Handbook: Developing Dramatic Technique, Individual

Course Title: History of Indian Art

Course Code: VFX-G3

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To examine a range of approaches to understanding works of art from India.
- To study the religious, ritual, social and political contexts in which these artworks were made.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Course Outcome: At the end of this course, students will be able to

CO-1 Familiarize themselves with works of Indian artists.

CO-2 Have and appreciation of the various factors that have contributed to the art movements throughout history.

CO-3 Provide an overview of the religious and cultural history of the Indian Subcontinent.

SYLLABUS:

Module – I – Temporal History of Indian Art **(35 hrs)**

Introduction to Early Indian Art, Rock Art, Indus Valley Civilization, Mauryan Art, Buddhist Art, Gupta Art, Dynasties of South India, Temples of Khajurao, Modern Colonial Era, Rajputs and Sultans, Vijayanagar Empire, Gajapatis, Ahoms, Maughals, Polygars, Mysore, Marathas & Sikhs. Art during the British period. Contemporary Indian Art.

Module – II – Material History of Indian Art **(15 hrs)**

Introduction to sculptures, Sculptures, wall paintings and cave paintings in the Indian subcontinent, Ajanta and Elora Caves. Introduction to miniature paintings, Rajput Paintings.

Module – III – Contextual History of Indian Art **(10 hrs)**

Introduction to temple art, Indian rock-cut architecture, Early caves, monolithic rock cut temples.

Textbook:

1. Craven, Roy C. Indian Art: A Concise History. Thames & Hudson, 1997.

Reference books:

1. Huntington, Susan L., and John C. Huntington. The Art of Ancient India: Buddhist, Hindu, Jain. Motilal Banarsidass Publishers, 2016.
2. Khan, Sharmin. History of Indian Architecture: Buddhist, Jain and Hindu Period. CBS Publishers & Distributors, 2017.
3. Dalmia, Yashodhara. Contemporary Indian Art: Other Realities. Marg, 2008.

SEMESTER – I

Skill Component

Course Title: Drawing & Painting

Course Code: VFX-SK1

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into personal forms of pictorial expression and representation.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Course Outcome: At the end of this course, students will be able to

CO-1 Identify the various techniques used and elements required in drawing.

CO-2 Compose layouts as per their own creative visualizations.

CO-3 Explore the possibilities of various media, and the diverse conceptual modes available to a painter.

CO-4 Understand basic principles of design and colour, concepts, media and formats, and the ability to apply them to a specific aesthetic intent.

SYLLABUS:

Module - I - Fundamentals of Art **(10 Hrs.)**

Fundamentals of Art – Introduction to fundamental principles of creating artworks.

Elements of Art – Understanding of line, shape, form, value, space, colour and texture.

Principles of Art - Balance, emphasis, movement, proportion, rhythm, unity, and variety of artworks.

Module - II - Fundamentals of Drawing **(20 Hrs.)**

Introduction with Basic Line Drawing - Drawing straight lines, circles & half circles and other basic exercises for free hand drawing.

Different Technique of Drawing - Techniques of holding pencils, brushes and use of other mediums and drawing materials.

Object Drawing – Understanding dimensions of different objects through basic geometric 3D objects such as squares, triangles, cones, circular objects and spheres.

Pictorial Design – Understanding of composition, colour & balance in a design.

Perspective – One point, two point and three-point perspective exercises in pencil and colour.

Composition – Create visual harmony and balance in a painting in any space, using rules of composition.

Colour Theory - Definitions (or categories) of colours based on the colour wheel: primary colour, secondary colour and tertiary colour.

Textbook:

1. Barrington Barber, The Fundamentals of Drawing, Arcturus publishing Limited, 2009.

Reference Books:

1. Victor Perard, Anatomy and Drawing, Grace Prakashan, 2011.
2. 3D Total Team, Gilles Beloeil, Andrei Riabovitchev, Roberto F. Castro, Publishing 3D Total; Art Fundamentals: Colour, Light, Composition, Antomy, Perception and Dep, 3D Total Publishing, 2013.

Lab: Drawing & Painting

Marks:100

Credits: 4

Total Hours: 60

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1. Drawing of straight lines, curve lines, horizontal lines, vertical lines, thick lines, thin lines, diagonal lines, dotted lines. (08 Hrs.)
2. Drawing of basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres. (06 Hrs.)
3. Drawing of two objects by observation. (04 Hrs.)
4. Drawing of illustrative design. (08 Hrs.)
5. Drawing of objects from nature. (06 Hrs.)
6. Drawing using the rules of perspective. (04 Hrs.)
7. Drawing using the rules of composition. (06 Hrs.)
8. Using the different colour combinations to create visual art. (10 Hrs.)
9. Using the colour wheel: primary colour, secondary colour and tertiary colour to create visual art. (light to dark) (04 Hrs.)
10. Using the colour wheel: primary colour, secondary colour and tertiary colour to create visual art. (dark to light) (04 Hrs.)

Course Title: 3D Animation – I

Course Code: VFX-SK2

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To give an introduction to basic animation tools and techniques.
- To prepare the student for the advanced level course in the next semester.

Course Outcomes: At the end of this course, students will be able to

CO-1 Explore the basic tools and interfaces used to model a 3D animation character.

CO-2 Learn positioning of 3D objects.

CO-3 Create 3D object using splines tools and splines modifier.

CO-4 Manipulate and segregate 3D objects.

SYLLABUS

Module – I - Fundamentals of 3D Animation **(12 Hrs.)**

Introduction to 3D Animation - Learn to get around the animation software, providing overview of the entire package as well as essential workflows that require to create professional models and animations.

Exploring Interface - Complete overview of the interface, navigation, configure major parts of the interface, including the viewports, the timeline, the outliner, and the various other parts of the UI.

Controlling of Viewports - Creating and manipulating standard and extended primitives. Exploring modifiers and using them as the basis for modeling.

Working with Files & Hierarchy - Exploring the different 3D file extension, assembly, various file association, referencing and grouping techniques. Learn industry standard file types like FBX and alembic.

Module – II – Modeling in 3D **(9 Hrs.)**

Creating and Modeling, Editing Primitive - Overview of graphite modeling tools. Exploring functionality of connect tool, weld tool, extrude tool and various component tool.

Selecting Objects and Using Layers - Overview of modeling interface and modifier stacks, modifying objects, parameters and adjusting the workflow of modeling techniques. Preparing and understanding assets through poly modeling.

Transformation Tools – Learning rich tool set to view and manipulate vertex editing, edge and border editing.

Cloning and Array - Overview of breaking edit mesh and poly mesh models into different files for sub tool modeling techniques. Explore isolated, hidden, freeze, wire frame and adaptive degradation technique with proxy file assembly.

Module – III - Shapes and Splines **(9 Hrs.)**

Creating and Modeling, Editing Primitive - Creating common nurms and spline shapes primitive that allow to create 3d objects from 2D shapes. Shapes comprises of basic line, circle, and curved shapes, with their own set of parameters that can be further edited

Selecting Objects and Using Layers - Using selection sets and compile them. Discover layer base modeling and animatics with layer properties and parameters.

Transformation Tools - Explore the manipulation tools, translate, rotate and scale. In-depth parameters on manipulation gizmo and co-ordinate.

Textbooks:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012.

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Richard E. Williams, The Animator's Survival Kit, Faber, 2009.
3. https://www.autodesk.com/education/home

Lab: 3D Animation – I

Marks: 100

Credits: 04

Total Hours: 60

1.	Introduction to 3ds Max, opening and saving the files, adjusting workspace, exploring the menus.	(04 Hrs.)
2.	Creating and manipulating objects, adjusting the pivot, aligning, snapping, and adjusting the gizmos.	(08 Hrs.)
3.	Manipulating object using vertexes, lines, and faces. Create a crusher using polygon tools.	(06 Hrs.)
4.	Modelling of coke bottle and detailing with extrude.	(06 Hrs.)
5.	Modelling interior furniture using connect and weld tool.	(06 Hrs.)
6.	Modelling interior using chamfer tool.	(06 Hrs.)
7.	Modelling a ship using boolean modifier.	(06 Hrs.)
8.	Modelling shrine using duplicate option and array.	(06 Hrs.)
9.	Modelling a bicycle using spline.	(08 Hrs.)
10.	Create chess pieces using revolve modifier.	(04 Hrs.)

Course Title: Raster Graphics

Course Code: VFX-SK3

Marks: 50

Total Hours: 30

Credits: 02

Course Objectives:

- To introduce the student to the creative processes which combines art and technology to communicate ideas visually.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the software tools used to create graphics and manipulate images.

CO-2 Associate the interaction of the tools with the graphics or images to attain the intended result.

CO-3 Manipulate images to attain the desired result.

CO-4 Learn to use tools and techniques to be more efficient in your photo-editing skills.

SYLLABUS

Module – I - Introduction to Raster Graphics (03 Hrs.)

Introduction to digital image editing, creating a new file and the various tools in the software.

Module – II - Working with Selection, Layers & Channel (06 Hrs.)

The selection tool, menu & choosing selections based on colour.

Module – III - Using Paint, Paths, Shapes and Text Tools (06 Hrs.)

Paint brushing techniques and customizing paint brush settings, manipulation of shapes and parts. Adding text to images as vector objects.

Module – IV - Working with Camera Raw **(04 Hrs.)**

Examining raw file types and displaying images in camera Raw. Understanding Raw workspace, creating altered versions of your images and exporting from the raw format.

Module – V - Working with 3D Images **(05 Hrs.)**

Understanding the 3D workspace and using different 3D file formats. Creating 3D objects, importing 3D objects into Photoshop and working with them.

Module – VI - Working with Video and Animations **(04 Hrs.)**

Dealing with aspect ratio, opening video files and using a timeline panel. Trimming of video clips and rearranging video footage. Animating text and 3D objects using key frames.

Module – VII - Advanced Output Techniques **(02 Hrs.)**

Understanding colour management, calibrating colour profiles, configuring colour management to print accurate colours.

Textbook:

1. Andrew Faulkner and Conrad Chavez, Adobe Photoshop CC Classroom in a Book, Adobe Press, 2015.

References:

1. Lisa Danae Dayley and Brad Dayleyz, Adobe Photoshop CC Bible, Wiley India Pvt. Ltd., 2014.
2. https://helpx.adobe.com/in/photoshop/tutorials.html

Lab: Raster Graphics

Marks: 100

Credits: 4

Total Hours: 60

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1. Working with Software Layouts. (04 Hrs.)
2. Photo Manipulation using shapes and pen tool. (06 Hrs.)
3. Adjusting image brightness, contrasts, saturation and levels. (04 Hrs.)
4. Mixing of different photographs to create a single image. (10 Hrs.)
5. Working on transparent layers. (04 Hrs.)
6. Changing the view size of a document, resizing files and adjusting resolutions, printing on different mediums. (04 Hrs.)
7. Working with multiple shapes and objects. (08 Hrs.)
8. Working with images and audios. (08 Hrs.)
9. Working with objects in motion and animation of different shapes. (06 Hrs.)
10. Drawing and painting using different tools. (06 Hrs.)

SEMESTER – II

General Education Component

Course Title: Academic Writing

Course Code: VFX-G4

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To provide valuable practice of essential academic structures, vocabulary, and
- organizational patterns
- To ensure that students will attain a level of writing expected by an academic
- audience.
- To enable students to understand a variety of academic genres.
- To ensure that students understand how to document their sources appropriately i.e use of citations and works cited/references.
- To ensure that students learn to quote, paraphrase, and summarize information accurately and with confidence
- To help students develop a formal tone and style (registers) expected in academic writing

Learning Outcomes: At the end of the course students will be able to

CO-1 Gain a complete understanding of each stage of writing process

CO-2 Attain practical experience of writing essay outlines, editing drafts, and producing a completed essay for each of the three essay types.

CO-3 Learn to use sources and incorporate them effectively into an essay, adding valuable evidence and authority to an essay.

CO-4 Develop a strong academic vocabulary using transitional words and comparison and contrast phrases.

SYLLABUS

Module – I – Writing a Paragraph **(10 Hrs)**

Brainstorming, Writing a coherent paragraph, Editing a paragraph, Transitional words and phrases.

Module – II – Writing an Academic Essay **(10 Hrs)**

Generating thesis statement, From a Paragraph to an Essay, Essay Structure, Editing an Essay, Writing an Expository Essay.

Module – III – Writing an Argumentative Essay **(10 Hrs)**

Developing and Organizing Arguments, Supporting Arguments, Strengthening Arguments, Reporting Verbs and Tones, Editing an Argumentative Essay.

Module – IV – The Compare and Contrast Essay **(10 Hrs)**

Compare and Contrast Essay Structure, Useful Vocabulary and Style, Editing compare and contrast essays.

Module – V – Working with sources **(10 Hrs)**

Avoiding plagiarism, Selecting resources, Citing the sources of information, Citations, quotations and integration.

Module – VI – Working with drafts **(10 Hrs)**

Drafting, Revising and Proof reading

Primary References

1. Fowler, R.H., Aaron, J.E. & McArthur, M., 2005. The Little Brown Handbook. 4th ed. Toronto: Pearson Longman.
2. Harris, M., 2008. Prentice Hall Reference Guide. 7th ed. New Jersey: Pearson Prentice Hall.
3. Heather, A., Lucille, S., Karen, T. & Kathleen, J.-C., 1995. Thinking It Through: A Practical Guide To Academic Essay Writing. 2nd ed. Peterborough: Academic Skills Centre Trent University Peterborough.
4. Hurling, S. et al., 2007. Academic Writing Skills and Strategies II. Shinjuku-ku: Waseda University International Co., Ltd.
5. Troyka, L.Q. & Hesse, D., 2005. Simon & Schuster Handbook For Writers. 4th ed. Toronto: Pearson Prentice Hall.
6. Graff, G., & Birkenstein, C. (2006). "They Say/I Say". New York: W.W. Norton & Company Ltd.

Course Title: Introduction to Digital Mass Media

Course Code: VFX-G5

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To give students an overview of Mass Media in today's world.
- To introduce them to the world of communication in Media, through the fields of Print Media, Radio, Television, Film, Digital Media/New Media.
- To develop an understanding of Mass Media and related concepts through a practical hands-on approach.
- To introduce students to the various equipment and software required in the field.
- To create a foundation and a broad base knowledge for further studies and careers in Media as an option for students.

Learning Outcomes: On completion of the course the student should be able to:

CO-1 To comprehend the field of Mass Media - from print to Digital Media.

CO-2 To understand a few theoretical perspectives behind mass media and the jargon associated with the field.

CO-3 To be comfortable around the various equipment and software required for various media.

CO-4 To demonstrate competence in the field of Mass Media – be it in the ideation or execution stage.

SYLLABUS

Module – I – Mass Communication & Media Studies **(05 Hrs)**

Concepts: Mass Communications; Other forms of Communications; Technologies and Communications; Mass Media and Contemporary Culture; Media Studies – Encoding messages; Audience responses; Agenda

Module – II – Advertising **(11 Hrs)**

Concepts: Brief History; Target Audience; Buying Motives; Advertising Message; Advertising Ethics; Advertisements in Different Media (Print; TV; Radio; New Media): Future in Advertising; Careers

Applied: Radio ad; Print ads – Newspapers/magazines – Product/info-ads; copy/layout/design; TV ad; Advertisements in New Media; PSA's

Module – III – Print Media – Newspapers & Magazines **(12 Hrs)**

Concepts: Brief history of Newspapers & Magazines; Types of Magazines & Newspapers; Layout/Design of Newspapers & Magazines; Reports – Different formats; Photography and Print

Applied: Creation of Magazine/Newspaper; Layout/composition

Module – IV – Radio & Music **(11 Hrs)**

Concepts: Brief History of Radio& Music; Radio Today: Internet and Music; Types of Radio Formats; Types of Music Formats; Digital Radio & Music; Future of Radio& Music; Careers

Applied: Radio Shows; Radio Editing; Radio Plays; Music and Composing

Module – V – Television, Cinema & Video **(11 Hrs)**

Concepts: Brief History of Broadcast TV & Cable TV; Cinematic History; Cinema & TV industry today; Future of TV & Cinema; Types of TV formats/shows etc; Types of Cinema; Internet and the Age of Streaming; Careers

Applied: TV Shows; Documentaries; Basic Shots; Editing; 3 Act movie; Short movie

Module – VI – Internet & New Media **(10 Hrs)**

Concepts: Brief History of Internet & New Media; Internet in the new age; Internet and Disruption; Mobile Phones; Blogging; Video games; New Media Careers; Future of the internet

Applied: New Media – Blogging, Podcasting, Social Media

Primary References:

1. Campbell, Richard. Martin, Christopher. Fabos, Bettina. Media & Culture – An Introduction to Mass Communication (8th Ed.). Bedford. 2012.
2. Dominick, Joseph. The Dynamics of Mass Communications (8thed.). Mcgraw-Hill, 2005.
3. Paxson, Peyton. Mass Communications and Media Studies – An Introduction. Continuum, 2010.
4. Thompson, Ray. Grammar of the Edit. Burlington: Focal Press,1993.

Secondary References:

1. Mcquail, Denis. Mass Communication Theory. Vistaar Publications. 2007.
2. The Associated Press Style Book and Libel Manuel Norm The A.P, 1994.
3. Hilliard, Robert. Writing for Television, Radio and New Media (Seventh Ed.). Wadsworth. 2006.
4. Pavlik, J.V. Media in the Digital Age. 2008.
5. Perry, David K. Theory and Research in Mass Communication. Lawrence Erlbaum Associates, 2002.
6. Ruberg, Michelle. Handbook of Magazine Article Writing. Writer's Digest. 2009
7. Stadler, Jane and McWilliam, Kelly. Screen Media – Analysing Film and Television. Allen & Unwin. 2009.
8. White, Ted. Broadcast News Writing, Reporting & Production. Macmillan.

Course Title: History of Western Art

Course Code: VFX-G6

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To understand the functions of visual art in the periods covered in the course
- develop an understanding and appreciation of the art forms, media, iconography, styles, and techniques of western visual art as expressed in painting, sculpture, ceramics, and architecture
- To develop an appreciation of each work as an individual work with its own formal integrity
- To increase knowledge and understanding of yourself and others through your experience with western visual art

Course Outcomes:

CO1: Have an appreciation for the various art movements that happened through Europe

CO2: Identify artists with their works.

SYLLABUS

<u>Module – I – Ancient Art</u> **(08 Hrs)**

Art of ancient Egypt, Art of Pre-Dynastic Egypt (6000-3000 BC), Art of Dynastic Egypt, Characteristics of ancient Egyptian art, Art of Mesopotamia, Characteristics of Mesopotamian art, Prehistoric Mesopotamia, Historic Mesopotamia.

Module – II – Art of the classical civilizations **(14 Hrs)**

1230-100 BC: Greece: Ancient Greek art, 1900-1300 BC: The Minoan Period, 2000-1100 BC: The Mycenean Period, 1100-800 BC: The Greek Dark Ages, 800- 500 BC: The Archaic Period, 500-300 BC: The Hellenic Period, 300-50 BC: The Hellenistic Period, 700 BC-AD 325: Roman art, 700-500 BC: Etruscan, 150 BC-AD 150: Development of Greco-Roman Culture, 100-350: Early Christian Art, 150-350: The Late Roman Empire 325-1453: Byzantium: The Art of Byzantium

Module – III – The Art of the middle ages **(18 Hrs)**

Medieval Art 500–1400, Celtic art c. 1400 BCE, Viking Art c. 790-1100 CE, Romanesque Art 900-1200, Gothic Art 1100-1500, Late Gothic Art, Renaissance Art 1400–1600, Early Renaissance 1400-1494, High Renaissance 1494-1564, Mannerism 1527–1580, Northern Renaissance 1497, Dutch and flemish renaissance painting 1400–1523, Dutch Golden Age 1600, Baroque Art 1550-1700, Rococo 1699–1780, Neoclassicism 1750–1850, Romanticism 1790-1850.

Module – IV – The Art of the Modern Period

Realism 1850-1910, Art Nouveau 1890–1910, Impressionism 1865–1885, Post-impressionism 1885–1910, Fauvism 1900–1935, Expressionism 1905–1920, Cubism 1907–1914, Futurism, Supremativism, Constructivism, De Stijl, Dadaism, surrealism 1916–1950, Abstract Expressionism 1940s–1950s, Op Art 1950s–1960s, Pop Art 1950s–1960s, Minimalism 1960s–1970s, Conceptual Art 1960s–1970s, Contemporary Art 1970–present

Textbook:

1. Adams, Laurie. A History of Western Art. McGraw-Hill Education; 5 edition (October 15, 2010)

References:

1. Ward-Perkins, J. B. Roman Imperial Architecture. Yale University Press, 1994.
2. Henig, Martin. A Survey of the Visual Arts of the Roman World. Phaidon Press Ltd, 1983.
3. Robins, Gay. The Art of Ancient Egypt. Harvard University Press, 2008.

SEMESTER – II

Skill Component

Course Title: Vector Graphics

Course Code: VFX-SK4

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into digital forms.
- To train students to create small file size vector graphics.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the capabilities and functions of drawing, transformation and shape tools in a vector graphics software.

CO-2 Sketch virtual art using computer graphics software program.

CO-3 Apply skills in the combination of bitmapped and vector elements to create design work

CO-4 Create vector images using a graphic design software.

SYLLABUS

Module - I – Introduction to Vector Graphics **(10 Hrs.)**

Introduction to Vector Graphics - Overview of the software, core concepts and the essential workflows to create graphic illustrations.

Working with Documents –Create a document using preloaded templates or built in document profiles such as print, web & film.

Module – II – Working with Tools **(20 Hrs.)**

Working with Shapes & Symbols – Drawing basic shapes, working with drawing modes & perspectives. Selections, transforming shapes and working with symbols.

Working with Colours, Gradients & Patterns - Standard graphic tools for vector-based images. Creating point-based vector shapes and symbols. Colour wheel and gamut.

Working with Brushes, Styles & Effects - Tools palette and standard function. Defining and exploring brush parameters, styles setting and effects panels.

Working with Text - Exploring text and typography, base design workflow for designing object and subjects.

Automation Saving and Exporting - Learning core concept of various file association and parameter to control exporting illustrations for production.

Organizing Objects – Exploring the layer panel, creating new layers, sub layer, hiding and showing layers, merging layers, moving objects to another layer, isolation mode and working with ruler's guides and grids.

Textbook:

1. Adobe Press, Adobe Illustrator CC Classroom in a Book, Pearson Education India, 2014

References:

1. Kogent Learning Solution Inc., Illustrator CS6 Classroom in a Book, Pearson Education India, 2014.
2. https://helpx.adobe.com/illustrator/tutorials.html

Lab: Vector Graphics

Marks: 100

Credits: 04

Total Hours: 60

1.	Explore the workspaces; windows, panels and docks.	(02 Hrs.)
2.	Drawing shapes such as lines, rectangles, ellipses, polygons, stars, arcs, spirals and grids.	(08 Hrs.)
3.	Working with multiple artboards, tools and shapes.	(06 Hrs.)
4.	Working with colour and blending modes, RGB, CMYK, HSB, grayscale, colour spaces and gamut, spot and process colours.	(04 Hrs.)
5.	Working with gradients and strokes, layers, brushes, graphic styles and effects.	(08 Hrs.)
6.	Change the definition of a default character and paragraph styles, remove style overrides, delete character or paragraph styles.	(04 Hrs.)
7.	Importing, exporting and saving artwork into file formats, compressing – PDF, SWF, JPEG, PSD, PNG, TIFF, EPS, SVG.	(04 Hrs.)
8.	Use the shape builder tool to create new complex new shapes by merging simple shapes.	(06 Hrs.)
9.	Draw an object, assign either fill or stroke or both to it, paint similarly, and layer each new object on top of the previous ones.	(08 Hrs.)
10.	Create an envelope using either preset wrap shape or rectangular grid, and reshape the envelope.	(10 Hrs.)

Course Title: 3D Animation - II

Course Code: VFX-SK5

Marks: 50

Total Hours: 30

Credits: 02

Course Objectives:

- Use the basic knowledge acquired in combination with advanced level 3D modelling.
- Compose advance 3D animation characters for architecture, games, videos. Etc.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the various modeling techniques.

CO-2 Associate how the different modeling techniques are used to model a 3D character.

CO-3 Model advanced 3D characters.

SYLLABUS:

Module – I - Advance Modeling in 3d Animation **(10 Hrs.)**

3D Assets Modeling - Creating different 3D asset types and function for modeling scene hierarchy. Understand core concept of developing inter portability asset modelling.

Nurbs Modeling - Exploring the non-rational B-spline techniques to build 3D objects from line projections. Understanding nurb isoparms, hulls and control vertex.

Patch Modeling - Overview of quad based patch geometric data for advance nurbs modeling. Explore the parameters and various operation like lathe, revolve, birail and planer.

Polygon Modeling - Create 3D advance objects with use of quad surface poly. Exploring different parameter of component level modeling like vertex edge and face. Learning the tools for sub level polygon operation like extrude bevel and various definitive.

Module – II - Material & Texturing and Virtual Camera **(10Hrs.)**

Standard Materials - Overview of shade materials to give colour perception to 3d objects. Using nodes and connectors to channel colour data for illuminating surface parametric representation.

Slate Material Editor - Explore one of the material controller sets of preset assembly. Learn to use compact node stack workflow for editing and making materials.

Compact Material Editor - Explore advanced material controller sets of preset assembly. Learn to use nonlinear node workflow for editing and making materials.

Material Modifier - Explore modifier functionality for controlling material look and development. Apply set of world space and object spec modifier to enhance colour data.

UV Mapping - Overview of processing 3D objects to retain and apply 3D image or procedural texture in 0 and 1 space of quad poly adaptation. Learn the workflow of setting and manipulating face coordinate to create world space UV coordinate for material and shading.

Concept of Virtual Cameras - Exploring the parameters and operation of cameras for rendering and final output. Overview of camera properties to control depth, colour, blur, material and scene content.

Module – III - Lighting, Rendering and Export **(10 Hrs.)**

Lighting Techniques - Overview of light panel with in depth study of standard and photo metric lights. Creating light lister and referencing for advance light probe techniques.

Standard and Photometric Lights - Core concept of virtual light paradigms operation and relation. Explore the illumination model in various spaces.

Atmospheric and Render Effects - Create background FX with render atmospheric tools. Learning the effects parameter functionality to control various effects for final render.

Rendering with Mental Ray - Overview of interface and operative nodes of Mental ray render engine. Learning advanced render algorithms Final Gather and Global illumination techniques. Explore core concept for calculating and finalising render outputs.

Composting with Video Elements - Exploring render data composition in various formats and assembly. Learn to manipulate and modify editable video data from composite render elements.

Video Post and Export - Learn video post dialogue parameter to modify edit and deliver for final production output.

Textbook:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Isaac V. Kerlow, The Art of 3D Computer Animation and Effects, John Wiley & Sons, 2009.
3. https://www.autodesk.com/education/home

Lab: 3D Animation – II

Marks: 100

Credits: 04

Total Hours: 60

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1. Converting spline modelling into polygon modelling. (04 Hrs.)
2. Creating of complex model using advance modelling tools. (10 Hrs.)
3. Building an exterior using NURBS, patch and polygon modelling. (06 Hrs.)
4. Understanding material editor in slate mode and compact material. (04 Hrs.)
5. Solving UV and create a map for a given model. (06 Hrs.)
6. Use max cameras to get the shot render from different angles. (06 Hrs.)
7. Light up the interior scene using standard light in MAX. (08 Hrs.)
8. Illuminate scene using photometric lights. (04 Hrs.)
9. Create a daylight system using mental ray. (04 Hrs.)
10. Take video output of a ten second after composting final scene. (04 Hrs.)

Course Title: Project - First Year End

Course Code: VFX-SK6

Marks: 150

Credits: 06

Hours: 90

Project - First Year End – Part A – (75 Marks)

- **Logo Creation:** The student should create a logo based of his choice.
- **Corporate Branding:** The student should create layouts and design a company's letterhead, envelopes, business cards, brochure, and banner stand.
    - Logo – 1 nos.
    - Corporate Branding – 5 nos.
        - Letterhead
        - Envelope
        - Business Card
        - Brochure
        - Banner Stand
- Creating a Design – 15 Marks
- Colour Scheme – 10 Marks
- Comprehension – 10 Marks
- Placements - 5 Marks
- Concept - 15 Marks
- Presentation - 20 Marks

Project - First Year End – Part B – (75 Marks)

Model a building architecture. Map the project and take the final output into photo realistic JPEG file.

- Creating a design – 10 Marks
- Modelling – 10 Marks
- Solving UVs – 10 Marks
- Texturing – 10 Marks
- Lighting – 10 Marks
- Rendering – 5 Marks
- Final Presentation – 20 Marks

SEMESTER III

General Education Component

Course Title: Art Appreciation
Course Code: VFX-G8
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

1. This course is an exploration of visual art forms and their cultural connections for the student with little experience in the visual arts. It includes a brief study of art history and in-depth studies of the elements, media, and methods used in creative processes and thought.
2. In this course, students will learn how to develop a system for understanding visual art in all forms.

Course Outcomes: At the end of the course, the students will be able to:

1. Interpret works of art based on a system of analysis
2. Demonstrate an understanding of the terminology and conventions of visual expression.
3. Explain the processes involved in the artistic production, themes, and the political, social, cultural and aesthetic issues that artists examine in their work
4. Explain the role and effect of visual arts in societies, history, and other world cultures.

SYLLABUS

Module – I – Definitions, Artistic roles, and Visual thinking **(06 Hrs)**

Form and content, Aesthetics, Subjective and Objective perspectives, Artistic roles, Artistic categories, Artistic styles, Cultural styles, Ideas of perception and Visual awareness.

Module – II – Process and Training **(08 Hrs)**

The Artistic process, The individual Artist, Artistic training methods, Art as a social activity

Module – III – How Art speaks - Finding meaning **(12 Hrs)**

Introduction: Objective VS Subjective meaning, The first level of meaning: Formal, The second level of meaning: Subject, The third level of meaning: Context, The forth level of meaning: Iconography, Critical Perspectives

Module – IV – How Art works **(10 Hrs)**

The Elements of Art, The Principles of Design

Module – V – Artistic media **(10 Hrs)**

Two - Dimensional media, The Camera, Three - Dimensional media, Architecture, Public Art, Performance

Module – VI – Our World **(12 Hrs)**

Identity, Self – Portraits, The Natural World, Social and Collaborative Art, Politics, Conflict and, War, Memorials, Peace

Module – VII – Other Worlds **(08 Hrs)**

Myths, Dreams, Spirituality

Textbook:

1. Fichner-Rathus, L. (2017). Understanding art. Australia: Cengage Learning.

References:

1. Rynck, P. D., & Alkins, T. (2004). How to read a painting: Lessons from the old masters. New York: Abrams.
2. An eye for art: Focusing on great artists and their work. (2013). Washington, D.C.: Presented by the National Gallery of Art.

Course Title: Business Communication
Course Code: VFX-G9
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- To develop and enhance communication skills that are required for the modern work-place
- To learn the dynamics involved in spoken communication, including non-verbal interaction
- To understand the essential elements of Written Communication as required in business activities.

Course Outcomes:

CO-1 To apply creative thinking abilities necessary for effective communication in the modern workplace situation
CO-2 To demonstrate clarity, precision, conciseness and coherence in use of language
CO-3 To learn how to make one's writing better, faster and more successful
CO-4 To produce successful documents in any given situation in different formats, while considering the writer's objectives, the reader's needs, the reader-writer relationship and the context.
CO-5 To increase personal confidence in delivering speeches to small & large audiences
CO-6 To understand and gain non-verbal skills essential to effective oral communication.
CO-7 Make proper presentations that disseminate information, conduct negotiation and use persuasion.

SYLLABUS

Module – I – Overview of Business Communication – I **[7Hrs]**

Process of Communication, Levels of Communication, Communication Networks (formal & informal)

Module – II – Overview of Business Communication – II [7Hrs]
Barriers to Communication, strategies to avoid miscommunication.

Module – III - Non-verbal communication [7Hrs]
Non-verbal communication, Interpretation & Effectiveness

Module – IV – Interpersonal communication [8Hrs]
Small Talk & Group communication

Module – V – Rhetorical communication **[6Hrs]**
Negotiation & Persuasion skills

Module – VI – Public Speaking & Presentation **[10Hrs]**
Public Speaking: Preparation for Public Speaking, Speech Writing, Delivery of Speech, Types of Speeches, Professional Presentations, Anxiety Management.

Module – VII – Written Communication **[7Hrs]**
Effective Writing: Principles & strategies, Technical Writing

Module – VIII – Business Writing **[8Hrs]**
Business communication: Emails, Memos, Letters, Reports, Proposal

Textbooks:

1. K. K. Sinha - Business Communication - Galgotia Publishing Company, New Delhi.
2. C. S. Rayudu - Media and Communication Management - Himalaya Publishing House, Bombay.

Reference Books

1. Rajendra Pal and J. S. Korlhalli -Essentials of Business Communication - Sultan Chand & Sons, New Delhi.
2. Nirmal Singh - Business Communication (Principles, Methods and Techniques) Deep & Deep Publications Pvt. Ltd., New Delhi.
3. Dr. S.V. Kadvekar, Prin. Dr. C. N. Rawal and Prof. Ravindra Kothavade -Business Communication - Diamond Publications, Pune.
4. R. Sharma, Krishna Mohan Business Correspondence and Report Writing - Tata McGraw-Hill Publishing Company Limited, New Delhi

Course Title: Cyber Security
Course Code: VFX-G10
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- To develop awareness and understand the concept of Cyber Security.
- To understand the aspects related to Cyber Security.
- To take measures to protect individual privacy and prevent loss/theft of data.

Course Outcomes:

CO-1 Understand the working of a computer network.
CO-2 Be aware of the various measures that need to be taken in order to protect data.
CO-3 Able to understand various forms of crimes in cyber world.
CO-4 Gain knowledge about various rights given to the individual to protect their intellectual property.

SYLLABUS

Module – I – Basics of Computer Networking **[12Hrs]**

Networking basics, why networking of computer is needed, Introduction to Wireless networks, Internet – role and importance, IP Addressing– public Vs Private, Static Vs Dynamic, www & related protocols.

Module – II – Emerging threats in Cyber Space **[12Hrs]**

Threats in Cyber Space, Classification of threats, BYOD and portable devices threats, 0-day attacks, insider threats, Cyber Warfare, Malware threats, mobile apps threats. Social media and its safe usages: Social media- its usages, Social Networking - types, usages, importance, social networking safety.

Module – III – Online Privacy **[10Hrs]**

Privacy – basic concepts, Sensitive personal information, Privacy policies (case study of Google/Facebook or any other privacy policies), Privacy laws, IPR, Ethics & safe practices.

Module – IV – Cyber Crimes – An Introduction **[10Hrs]**

Introduction – Types of cyber crimes (Phishing, Social Engineering, Denial of Service, Cyber stalking, ID-theft, etc), How to report cyber crimes, its impact– social, personal, financial; Cyber Terrorism.

Module – V – Cyber Laws **[8Hrs]**

Evolution and purpose, offense; defense, bailable and non-bailable offenses, provisions related to e-commerce, provisions for cyber crimes, adjudicating officers, CERT-IN-its role and powers

Module – VI – Cyber Forensic **[8Hrs]**

Data recovery, evidence collection, cloning of devices, media sanitization

List of suggested Activities

1. Connecting to Network, Sharing directories.
2. Connecting to shares, Set up a common storage.
3. Advanced Networking: Identify IP address, ping
4. Set up a basic firewall, Setup a wireless n/w, Set up a security level, Setup free online backup
5. Setting up and maintaining the laptop, data storage devices and smart phone.
6. Ensuring secure-environments wrt online shopping, wi-fi networks, passwords, social networking and online banking)

Reference Books:

1. Rick Lehtinen and G.T. Gangemi, Computer Security Basics, O'Reillly Media, Inc.,2nd edition, 2006

2. Wall, David, Cybercrime: The Transformation of Crime in the Information Age. Polity Publishing, 2007.

3. Michael Cross, Scene of the Cyber Crime: Cyber Forensics Handbook, Syngress Publishing, 2ndEdition, 2002.

4. Chander, Harish, CyberLaws and IT Protection, Prentice Hall IndiaLearning, 2012

SEMESTER III

Skill Component

Course Title: Visual Effects-I
Course Code: VFX SK7
Marks: 50
Hours: 30
Credits: 02

Course Objective:

1. To educate in Visual effects which involves the integration of live-action footage and generated imagery to create environments which look realistic, but would be dangerous, expensive, impractical, or impossible to capture on film.
2. To create computer generated imagery using easy to use and affordable animation and compositing software.

Course Outcomes: By the end of the course, students will be able to:

CO-1 Develop and understanding of the visual effects' software interface and tools.
CO-2 Design visual effects sequences using storyboarding and pre-visualization that meet production requirements.
CO-3 Integrate live action sequences with virtual environments seamlessly using masking techniques.
CO-4 Demonstrate an in-depth knowledge of VFX principles, practice and system capabilities.

SYLLABUS

Module - I - Introduction to the Visual Effects software **(04 Hrs)**

The Project, Composition, & Timeline panels – Detail knowledge of the environment to be familiar with.

Splitting Layers – Splitting layers will help us to cut layer according to time indicator, this will work on audio, video, or image layers.

Color Grading - Working in the color grading workspace using waveforms and color grading effects, fixing color balance issues and working with special effects.

Previewing in real time – helps to preview video with sound if imported.

Module - II - Fade-Ins & Working with Text **(02 Hrs)**

Creating a fade-in by animating the Opacity property, creating & animating text, adjusting clip lengths in the Timeline, using Title Safety to ensure TV viewers can see the text and copying & pasting styles.

Module – III - Null Objects & Hold Keyframes **(04 Hrs)**

Scaling up multiple child layers using a Null Object, creating a colour wedge using a shape layer, animating the Rotation property, changing text values using hold Keyframes

Module – IV - Anchor Points & Working with Images **(04 Hrs)**

Resizing images to fit the Composition frame, setting layer in points using the in column, aligning still images & changing anchor points and adjusting animation timing

Module – V - Cross-Dissolves & Working with Logos **(03 Hrs)**

Make pre-comps to apply effects and fading layers. Creating cross-dissolves ("fade-ups") between layers, pre-composing layers, scaling up vector layers, adding a fade to black using a solid color layer and how to find missing project files.

Module – VI - Styling Text & Rendering **(04 Hrs)**

Stylize text and creating vignette effect for composition. Styling the main & secondary text, adding a cross-fade between the video & title text, working in the Render Queue and using masks to create a vignette.

Module – VII - Alpha Mattes & Animated colours **(04 Hrs)**

Working with Transparent layers and Title Safe. Using an alpha matte to hide/show the text based on the wedge's movement, bringing back the coloured wedge, animating instantaneous colour changes.

Module – VIII - Concept of Masking **(05 Hrs)**

Create masks – Creating mask and animating the mask to cut out object from background or foreground.

Create masks from text - Creating a trace to get shape from the text to animate.

Mask modes – Using mask modes, you can create complex compound masks with multiple transparent areas.

Textbook:

1. Gyncild, B., & Fridsma, L. (2019). Adobe After Effects CC: 2019 release. San Jose, CA, USA: Adobe Press.

Reference Books:

1. Davidson, Gack (2017). Adobe After Effects CC 2017: The Complete Beginner's Guide. CreateSpace Independent Publishing Platform.

Lab: Visual Effects - I
Marks: 100
Total Hours: 60
Credits: 4

1.	To Animate a simple DVD title sequence using vfx software	(04 Hrs)
2.	To create basic Animations using effects and presets.	(04 Hrs)
3.	To create animated text and text styles.	(06 Hrs)
4.	To create animated backgrounds using shapes and presets.	(04 Hrs)
5.	To animate a multimedia presentation.	(06 Hrs)
6.	To Animate layers to match audio.	(08 Hrs)
7.	To animate multiple layers and create a CG background.	(08 Hrs)
8.	To create a logo animation in vfx software	(06 Hrs)
9.	To create a bulletin montage using logos and dissolve.	(06 Hrs)
10.	To separate background and foreground for using mask tool.	(08 Hrs)

Course Title: Colour Grading
Course Code: VFX SK-8
Marks: 50
Credits: 02
Total Hours 30

Course Objectives:

1. To teach students to apply colour management for different colour grading workflows.
2. To apply successful colour grading techniques that are similar to toolsets found in other applications

Course Outcomes: At the end of the course students will be able to:

CO-1	Gain a broad understanding of colour theory and apply techniques to grading of motion pictures
CO-2	Confidently use node-based workflow of the colour grading software
CO-3	Perform primary and secondary grading to a round trip project.
CO-4	Demonstrate a working knowledge of effects technologies and techniques

SYLLABUS

Module - I - Introduction to Colour Grading **(03 Hrs)**

Ingest RAW Camera Formats to the software, Conforming with XML and EDLs, Editing on the software, Basic Colour theory and how it works in the colour grading software.

Module - II - Waves and Nodes **(04 Hrs)**

Waveforms and vectroscope, working with nodes, Keyframing both colour correction and framing controls, Grading digital media content.

Module - III - LUTs and Looks **(06 Hrs)**

Look creation, Exporting LUTs and Looks, 3D Tracking of Masks

Module - IV - Working with files online and offline **(07 Hrs)**

Exporting XML. How to Round-trip successfully, Conform to Offline Media in Resolve using XML, Offset, Curves and LOG grading.

Module - V - Advanced Colour Grading **(10 Hrs)**

Primary and secondary correction, using Control Surface, Advanced Secondary Grading, Keying, Window Tracking and Keyframing, Optical Flow/Retiming, Render out for Digital Cinema & Other Online Medium

Textbook:

1. D. S., & P. S. (2018). The Definitive Guide to DaVinci Resolve 15: Editing, Color, Audio, and Effects (2nd ed.). Blackmagic Design.

Reference Book:

1. Rory Cantwell (2019). Advanced Editing with DaVinci Resolve 15. Blackmagic Design.

Lab: Colour Grading
Marks: 100
Credits: 4
Total Hours: 60

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1. How to import camera RAW and EDL, XML. (04 Hrs)
2. Edit a video using colour grading software. (08 Hrs)
3. Balancing the colours of a video using waveform and vectroscope. (06 Hrs)
4. Enhancing colours of a video using basic tools. (08 Hrs)
5. Using different LUTs to change the look of a video clip. (06 Hrs)
6. Tracking a mask over an object in a moving clip (04 Hrs)
7. Exporting different types of file formats (04 Hrs)
8. Color grading of a 3-minute clip using primary and secondary correction (08 Hrs)
9. Working on a control surface for color grading of a short clip (08 Hrs)
10. Colour grading and merging of a VFX video. (04 Hrs)

Course Title: Video Editing
Course Code: VFX-SK9
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. The course will familiarize students with what editors do. Video editing has moved from time-consuming tape-to-tape linear video editing systems to powerful computer hardware and video editing software.
2. Video editing is essentially the process of editing segments of motion video production footage by cutting, trimming and overlaying them, and adding special effects and sound recordings.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Acquire basic skill set to build presentable sequences with video clips provided and export to compressed video files for upload to various media
CO-2	Understand fundamental concepts of creating and editing videos for different media
CO-3	Be familiarized with the user interface and work efficiently with video editing software
CO-4	Edit and compress video for use in various delivery modes of digital media using standard digital video editing software.

SYLLABUS

Module – I: Fundamentals of Video Editing **(05 Hrs)**

Understanding different shot, scene, sequence, rules of video editing.

Type of Shots –Standard, jump, L cut & J cut, Wide Shots, Mid shots, Close ups, Cutaways and more.

Understanding Rules of Videography – Framing of the video, rule of thirds, types of shots, cropping and framing, subject headroom.

Different Types of Editing Techniques – Types of Edits and significance. Techniques such as montage, cross dissolve, wipe, and parallel editing.

Module – II: Fundamentals of Video Editing **(15 Hrs)**

Introduction to video editing software - Creating a new file and the various tools of the software.

Setting up a Project & importing footage – Creating a new project, choosing a sequence preset and editing. Learning to import footage from original source clips.

Essentials of Video Editing – Working with clips & creating sequences in the source monitor. Using of essential editing commands and understanding tracks.

Working with Clips, Markers, Files and Formats – Using markers, comparing program monitor with source monitor. Removing clips from a sequence and understanding the various output files and formats.

Transitions and Video Effects – Adding video transitions and applying fine-tuned transitions to multiple clips, using the effect presets and working with key framing effects.

Working with Motion Clips – Adjusting motion effects for clips and changing clip size for adding rotation. Enhancing motion with shadows and bevelled edges. Working with key frame interpolation.

Multi-Camera Edit – Synchronizing clips based on audio. Creating multi-camera target sequences, switching between multi camera edit and finalizing a multi camera-editing project.

Module - III – Advanced Video Editing **(10 Hrs)**

Compositing Techniques – Different compositing techniques using the alpha channel. Working with opacity and green screens.

Audio Mixing and Balancing – Working in the audio workspace, adjusting clip audio volume. Using audio levels in a sequence and using the audio clip mixer.

Creating Titles – Working with Video typography, using the titler window and creating titles. Working with shapes, logos, text roll and stylizing text.

Exporting Frames, Clips & Sequences – Exporting single frames, creating movie image sequence and audio files, exporting to final cut pro and avid media composer.

Textbook:

1. Jago, M. (2019). Adobe Premiere Pro CC Classroom in a Book (2019 Release). Adobe Press.

References:

1. Ken Dancyger, The Technique of Film and Video Editing: History, Theory, and Practice, Focal Press, 2010.
2. Murch, W. (2001). In the blink of an eye: A perspective on film editing. Los Angeles: Silman-James Press.

Lab: Video Editing
Marks:100
Credits: 4
Total Hours: 60

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1. Working with workspace and get started with project sequences. (04 Hrs)
2. Working with bins, panels, clips and footages. (08 Hrs)
3. Working with different grading tools and command. (04 Hrs)
4. Using markers and selecting clips in timeline. (06 Hrs)
5. Working with transitions and different cuts. (08 Hrs)
6. Working with different video effects and clips in motion. (08 Hrs)
7. Working with multi-camera video footage. (08 Hrs)
8. Working with audio and syncing with video. (08 Hrs)
9. Working with titles and composting techniques. (04 Hrs)
10. Exporting frames, clips and different formats of video (02 Hrs)

SEMESTER IV

General Education Component

Course Title: Film Appreciation
Course Code: VFX -G12
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. To enhance the students' understanding of the filmmaking process in all its dimensions including aesthetic, creative, communicative and commercial.
2. To impart skills in appreciating an audio-visual work, grasping the impact of its diverse elements and understanding its importance to the story being told.

Course Outcomes: At the end of the course, the students will be able to:

1. Recognize types of films, their impact on society, and their roles in our lives
2. Recall concepts such as sound, lighting techniques, script, editing, etc. and how they impact a film
3. List the roles of directors, critics in the film industry
4. Identify the works of prominent film directors of different genres and various editing styles.

SYLLABUS

Module -I – Understanding Cinema **(08 Hrs)**

Genres of Films, Cultural significance in relation to Film, how the medium is influenced by other mediums, Film Screening.

Module-II – Study of Iconic Film Directors and their styles **(10 Hrs)**

Case Studies on the works of: Satyajit Ray, V Shantaram, Ingmar Bergman, George Lucas, Fredrico Fellini, Steven Spielberg, Majid Majidi, Akira Kurosava, etc.

Module-III – Introduction to Film theories & Important Movements (12 Hrs)

Feminist film theory, Realism Movement, Neo Realism movement., new wave, white telephone. Understanding audience psychology, History of cinematography- cameras, type of shots, script writings, some case studies of scripts Charulata- by Ray, Short film trends and digital Film making as an overview

Textbook:

1. Manchel, F. (1990). Film study: An analytical bibliography. Rutherford: Fairleigh Dickinson University Press

References:

1. Doraiswamy, R., & Padgaonkar, L. (2010). Asian film journeys: Selections from Cinemaya. New Delhi: Wisdom Tree.
2. Kawin, B. F. (1992). How Movies Work. Berkeley, CA: University of California Press.
3. Cavell, S. (1995). The world viewed: Reflections on the ontology of film. Cambridge, MA: Harvard Univ. Press.

Course Title: Print Advertisement
Course Code: VFX-G13
Marks: 100

Credits: 04
Total Hours: 60

Course Objective:

1. To understand advertising in the form of traditional print media and recognize the impact of advertising on society.
2. To assess the import of print advertising in the age of digital media and leveraging the digital space for traditional advertising techniques.

Course Outcomes: At the end of the course, the students will be able to:

1. Learn the different phases involved in a print campaign
2. Identify and foresee the various existing and upcoming avenues available in the field of print advertising
3. Learn how to effectively use this information to create and sustain a brand image.

SYLLABUS

Module – I – Introduction to Print Advertisement **(06 Hrs)**

Introduction to print media, identifying the different forms of print media currently available and the influence of advertisement on the modern society.

Module – I – History of Print Media **(08 Hrs)**

The history, designs and techniques used in early printing and the impact print media has had on advertising.

Module – II – Types of Print Advertisement Mediums **(06 Hrs)**

Identifying the different types of advertising mediums in print media available and measuring their effectiveness in the market.

Module – III – Key Players in Print Advertising **(08 Hrs)**

Identifying the different stake holders involved in print advertising and understanding the roles played by them in creating an advertisement.

Module – IV – The Impact of Digital Media on Print Advertisement **(10 Hrs)**

The advantages and disadvantages of Digital Media with respect to print advertisement. How to identify potential avenues to publish print advertisement.

Module – V – Steps involved in Development of an Advertisement **(10 Hrs)**

Identifying the different phases involved right from conceptualization to developing a print campaign.

Module – VI – Printing and Publishing **(12 Hrs)**

This section covers graphics, illustrations, composition & layout for print design.

Textbook:

1. James S. Norris, Advertising, Prentice-Hall, 4nd edition, 1991.

References:

2. Belch, Advertising and Promotion: An Integrated Marketing Communications Perspective, McGraw Hill Education; Ninth edition, 2017.
3. William Wells, John Burnett, Sandra Ernst Moriarty, R. Charles Pearce, Advertising: Principles and Practice, Prentice Hall, 1989.

Course Title: Personality Enhancement
Course Code: VFX -G14

Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- Enable students to develop and enhance their presentation skills that are required for the present day work environment themselves well and help them build their self confidence.
- To enhance their soft skills of confidence building, self esteem and self image through personal grooming & social etiquette.
- To understand and learn techniques of non verbal communication to maintain healthy relationships at workplace.
- Develop skills required for self motivation and managing stress in a competitive environment.

Course Outcomes:

CO-1 To learn to present themselves well and positively influence other people's perceptions of them in a business environment.
CO-2 To project the right self image and behavioral etiquette by being well groomed.
CO-3 To learn soft skills like good manners, empathy, ability to collaborate and negotiate and develop etiquettes that are needed in a social and business setting.
CO-4 To build a positive body language to appear more approachable, confident and professional.
CO-5 To understand and learn techniques required to sustain good mental health for everyday functioning.

SYLLABUS

Module – I - Self Assessment, Self Acceptance, Self Esteem and Confidence **[4Hrs]**

Building a positive image of yourself, knowing yourself, gaining self confidence and self esteem.

Module – II – Body Language-Posture and Gestures **[6Hrs]**

Presenting a positive image through non-verbal communication

Module – III – Etiquette/Protocol, Dressing-up, Hygiene, Diet and Exercise **[10Hrs]**

Expected etiquettes in a business setting

Module – IV – Team Work and Character building **[8Hrs]**

Skills development for a team player, leadership and developing good values

Module – V – Motivation **[8Hrs]**

Positive and negative motivation; Internal and external, motivated performance and

Reinforcement

Module – VI – Conflicts and Stress Management **[12Hrs]**

The art of prioritizing and scheduling. Causes and consequences of conflicts; methods of conflict resolution. Causes of stress at workplace; Stress (its effects, causes and ways of coping with stress), Recognizing emotions and values of regulating emotions.

Module – VII – Understanding Emotions **[12Hrs]**

Emotions: Feeling, Thinking, and Communicating, Theories of emotion: James-Lange, Cannon Bard, Schachter-Singer and Lazarus. Motivation: Nature and types; need hierarchy model.

Textbooks:

1. Barun Mitra "Personality Development and Soft Skills", Oxford Second Edition (2016).

2. Elizabeth Hurlock "Personality Development" McGraw Hill Education (2017)

SEMESTER IV

Skill Component

Course Title: Visual Effects-II
Course Code: VFX SK-10
Marks: 50
Credits: 02
Total Hours 30

Course Objectives:

1. To learn how to import layered files and paths and how to animate flat vector artwork in both 2D and 3D space, and explore options for outputting your animations.
2. To familiarize students with the workings of audio files and blending with the project.

Course Outcomes: At the end of the course students will be able to:

CO-1	Integrate 2D and/or 3D computer generated imagery and live action elements using compositing techniques.
CO-2	Analyze images and physical sets to digitally re-create lights, cameras, locations and objects.
CO-3	Recreate natural phenomena by using appropriate particle or dynamic effects.
CO-4	Create photo-real images to match live action footage by the application of advanced rendering techniques.

SYLLABUS

Module – I: Vector Layouts & the Graph Editor **(03 Hrs)**

Graph Editor: Property values using a two-dimensional graph

Animating vector shapes: Animating vector shapes using trim paths.

Module – II: 2D Animation & Motion Graphics **(05 Hrs)**

Animating Infographics, Charts & Graphs – Animating different components to define infographics charts and graphs

Animating 2D Characters - Rigging character to animate using Puppet Tool

Designing Motion Graphics & Logos - Create full motion graphics videos and professional logos.

Module – III: Putting It All Together & Adding Audio **(06 Hrs)**

Sequencing multiple compositions: Importing multiple compositions and blending together using different blending modes.

Animating like an editor: Overlapping shots & using blending modes

Adding audio to a composition - Detail background audio sound imports in a composition

Module – IV: Rendering & Exporting options **(05 Hrs)**

Render uncompressed and Alpha type (Transparent images). Rendering uncompressed files, video with transparency, creating a render template and exporting images

Module – V: Hard Ease Fashion Reveal **(06 Hrs)**

Setting Keyframe Velocity for fine-tuned ease control, understanding basic motion paths, sequencing the "stripes" and adding a Drop Shadow effect.

Module – VI: More Reveals from Different Directions **(05 Hrs)**

Learning layer or text reveals and animating sequences. The benefits of a composition with modular parts, creating three more reveals, more keyframe influence, animation sequencing, & drop shadows

Textbook:

1. Gyncild, B., & Fridsma, L. (2019). Adobe After Effects CC: 2019 release. San Jose, CA, USA: Adobe Press.

Reference Books:

2. Davidson, Gack (2017). Adobe After Effects CC 2017: The Complete Beginner's Guide. CreateSpace Independent Publishing Platform.

Lab: Visual Effects-II
Marks: 100
Credits: 4
Total Hours: 60

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1. Colour neutralization and enhancement for a video clip (04 Hrs)
2. Adding animation elements to a video scene (06 Hrs)
3. Generate special effects to video scenes. (08 Hrs)
4. To create an animated object with the Puppet Tools (06 Hrs)
5. To separate foreground object from background using Roto Brush Tool (04 Hrs)
6. Creating a 3D Environment (08 Hrs)
7. To track a virtual environment using a 3D virtual camera. (06 Hrs)
8. To Stabilize shaky camera shots using tracking techniques. (04 Hrs)
9. To track single & multiple point motion tracking techniques (06 Hrs)
10. To create visual effects using particle simulation (08 Hrs)

Course Title: Audio Editing
Course Code: VFX SK-11
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. To expose students to the technology adopted in construction of music for films, TV, advertisements, music albums, etc**.**
2. To give the students hands-on experience with the workings of an audio studio and the process of creating sound files for films and animation.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Get familiarized with a digital audio interface (DAW) to facilitate efficient editing
CO-2	Learn to record, edit and superimpose audio files on video presentations and animations.
CO-3	Demonstrate critical decision making as used in a mixdown session
CO-4	Make informed judgements as to the quality of a sound recording through analysis of the audio signal.

SYLLABUS

Module – I - Sound Editing in Audio Editing software **(06 Hrs)**

Introduction to Audio Editing software – Basic to intermediate features, including tips and techniques using the software for a wide variety of projects.

Module - II - Audio Interfacing **(08 Hrs)**

Software Environment – Create custom workspaces, arrange panels, using the media browser and using markers in waveform editor or a session in the multi-track editor.

Basic Sound Editing – Select a portion of a waveform; cut, copy, paste, mix and remove silence audio; extend and shorten pieces of music and create loops with music files.

Signal Processing – The effects rack, apply effects to audio, adjust parameters & simulate different instrument amps.

Audio Restoration – Remove hiss or preamp noise, reduce level of clicks, undesired artefacts. Using restoration tools to modify instrument loops.

Module - III - Sound Developing **(06 Hrs)**

Mastering – Effects to improve sound output, applying EQ to reduce "mud", Applying dynamics and altering stereo imaging.

Sound Design – Learn to apply extreme processing to sounds, create special effects, use pitch shifting and use the Doppler effect

Recording Multiple Files – Learn record files in waveform editor, multi-track editor and create custom templates.

Multitrack Editor Orientation – Integrating waveform and multi-track editors. Edit track level and apply EQ, effects. Mapping of effects channels and setting up side change effects.

Multitrack Mixer View – Learn how to switch from the multitrack editor to the mixer view, adjust mixer feeder, differentiate among channel types and rearrange the mixer channel order.

Module - IV - Sound Mixing and Enhance **(10 Hrs)**

Editing Sound Clips – Learn how to use crossfading, expert mixes, pan individual clips and apply global clip stretching. Extending clips via looping.

Recoding in the Multitrack Editor – Assigning track to audio interface inputs to record into a multi-track editor. Monitoring interface input while recording. Setting up the metronome, recording and overdub.

Automation – Automating Volume, pan and effect changes within clips. Using key frames to edit automation envelopes. Automating mixer fader and pan control moves.

Scoring Audio to Video - Loading video preview files into audition. Alter software tempo to create "hit points". Creating a soundtrack music bed. Synchronize ADR (dubbed) dialogue with original dialogue.

Audio Dubbing – Overview of fundamentals and techniques to record vocals, music and instrument for post-production. Vocal production technique or dubbing introduces editing and mixing popular DAWS, doubling effect for additional texture, vibes, auto-tunes, melodyne and isotope VSTS. Exploring the application and implementation of EQ, compression, reverb, delay, and automation.

Final Mixing and Exporting- Test room acoustics, optimize tracks to mesh, setting up the mixing environment, creating clip groups and exporting the completed tracks in various formats.

Textbook:

1. Anderton, C. (2013). Adobe Audition CC: Classroom in a book. San Jose, CA: Adobe Press.

Reference Books:

1. Riley, R. (2008). Audio editing with Adobe Audition. Merton: PC Publishing.

Lab: Audio Editing
Marks: 100
Credits: 4
Total Hours: 60

1.	To get familiarized with an audio studio set up	(02 Hrs)
2.	Managing audio studio equipment	(04 Hrs)
3.	Create a basic recording setup and signal flow	(04 Hrs)
4.	To get familiarized with DAW	(06 Hrs)
5.	To record a voiceover using DAW	(06 Hrs)
6.	Applying EQ, Compression, Limiter	(06 Hrs)
7.	Applying Gate, Reverb, Delay and Automation	(08 Hrs)
8.	Editing, Mixing and enhancing audio file.	(10 Hrs)
9.	Mastering the audio file	(08 Hrs)
10.	How to mix down the project file	(06 Hrs)

Course Title: Project - First Year End
Course Code: MDF-SK12
Marks: 150
Credits: 06
Hours: 90

- **Sci-fi Short Film:**
  Students have to make an animated short film with voiceover, background score and visual effects.

Semester	Course Title	Existing (Indicate only the unit where the change	Changes Proposed	Specify the reason for the change
I	**VFX-SK1 / MDF-SK1**	Course titled "**Drawing and Painting**"	Removed topics: Content, Aesthetics, Art Criticism, Symbolism	Removed from "Drawing and Painting" to void repetition of course content in "Art Appreciation"
I	**VFX-SK1 / MDF-SK1**	Course titled "**Drawing and Painting**"	Removed module - III - Digital Painting	Removed to Accommodate more time for module - II - Fundamentals of Drawing
I/II	**VFX-SK3A / MDF-SK3A**	Course titled "**Vector Graphics - Illustrator**"	Removed from syllabus, replaced with Raster Graphics	Removed from syllabus, replaced with Raster Graphics; now shifted to VFX-SK5A / MDF-SK5A as "Vector Graphics"
I/II	**VFX-SK5A / MDF-SK5A**	Course titled "**Creative Design & 2D Animation**"	Removed from syllabus, replaced with Vector Graphics	Removed from syllabus, replaced with Vector Graphics
Course Structure			Rearrangement of courses all across the semesters	To accommodate common courses with B.Voc. Software Development; adequate placement of courses.

ANNEXURE – II

Parvatibai Chowgule College of Arts and Science

(Autonomous)

DEPARTMENT OF APPLIED AND PROFESSIONAL STUDIES

B. Voc (3D Media & Virtual Reality – VFX)

Program Structure

B. Voc (3D Media & Virtual Reality – VFX)

2020 – 2021

Parvatibai Chowgule College of Arts and Science
Autonomous

DEPARTMENT OF B.VOC

COURSE STRUCTURE

THREE YEAR B.VOC. DEGREE COURSE IN 3D MEDIA AND VIRTUAL REALITY – VFX
2020-2021

Semester	General Education Component			Skill Component		
I	**VFX-G1** Language Paper	Theory Credits 4	Practical ---	**VFX-SK1** Drawing & Painting	Theory Credits 2	Practical Credits 4
	VFX-G2 Introduction to Creative Writing	Theory Credits 4	Practical ---	**VFX-SK2** 3D Animation-	Theory Credits 2	Practical Credits 4
	VFX-G3 History of Indian Art	Theory Credits 4	Practical ---	**VFX-SK3** Raster Graphics	Theory Credits 2	Practical Credits 4
II	**VFX-G4** Academic Writing	Theory Credits 4	Practical ---	**VFX-SK4** Vector Graphics	Theory Credits 2	Practical Credits 4
	VFX-G5 Introduction to Digital Mass Media	Theory Credits 4	Practical ---	**VFX-SK5** 3D Animation-II	Theory Credits 2	Practical Credits 4
	VFX-G6 History of Western Art	Theory Credits 4	Practical ---	**VFX-SK6** Project - First Year-End	Theory ---	Practical Credits 6
Outcome	1) Art Setter 2) Graphic Designer 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	**VFX-G7** Environmental Studies-I	Theory Credits 2	Practical ---	**VFX-SK7** Visual Effects-I	Theory Credits 2	Practical Credits 4
	VFX-G8 Art Appreciation	Theory Credits 2	Practical ---	**VFX-SK8** Video Editing	Theory Credits 2	Practical Credits 4
	VFX-G9 Business Communication	Theory Credits 4	Practical ---	**VFX-SK9** Colour Grading	Theory Credits 2	Practical Credits 4
	VFX-G10 Cyber Security	Theory Credits 4	Practical ---			
IV	**VFX-G11** Environmental Studies-II	Theory Credits 2	Practical ---	**VFX-SK10** Visual Effects-II	Theory Credits 2	Practical Credits 4
	VFX-G12 Film Appreciation	Theory Credits 2	Practical ---	**VFX-SK11** Audio Editing	Theory Credits 2	Practical Credits 4
	VFX-G13 Print Advertising	Theory Credits 4	Practical ---	**VFX-SK12** Project - Second Year-End	Theory ---	Practical Credits 6
	VFX-G14 Personality Enhancement	Theory Credits 4	Practical ---			
Outcome	1) Video Editor 2) Studio Coordinator 3) Studio Recordist 4) Studio Designer 5) VFX/SFX Engineer 6) CG Operator					

Semester	General Education Component			Skill Component		
V	**VFX-G21** Intellectual Property Rights	Theory Credits 4	Practical ---	**VFX-SK13** Advanced Visual Effects	Theory Credits 2	Practical Credits 4
	VFX-G16 Film Studies	Theory Credits 4	Practical ---	**VFX-SK14** Rotoscopy Techniques	Theory Credits 2	Practical Credits 4
	VFX-G17 Digital Marketing	Theory Credits 4	Practical ---	**VFX-SK15** Broadcast Design	Theory Credits 2	Practical Credits 4
VI	**VFX-G20** Entrepreneurship	Theory Credits 4	Practical ---	**VFX-SK16** Internship	Theory ---	Practical Credits 6
	VFX-G22 Production Management	Theory Credits 4	Practical ---	**VFX-SK17** Virtual Reality	Theory Credits 2	Practical Credits 4
	VFX-G23 Direction for Acting and Films	Theory Credits 4	Practical ---	**VFX-SK18** Particle Illusion	Theory Credits 2	Practical Credits 4
Outcome	1) Roto Artist 2) Production Designer 3) VFX Supervisor 4) Animator 5) Game modelling artist 6) Graphic Animator					

Internship to be undertaken during end semester breaks. (End of 5th Semester onwards)

Parvatibai Chowgule College of Arts and Science (Autonomous)

Course Structure

B.Voc. 3D Media & Virtual Reality - VFX
2020-21

Parvatibai Chowgule College of Arts and Science
Autonomous

DEPARTMENT OF B.VOC

COURSE STRUCTURE – SEMESTER V & VI

THREE YEAR B.VOC. DEGREE COURSE IN 3D MEDIA & VIRTUAL REALITY – VFX
2020-2021

Semester	General Education Component			Skill Component		
V	**VFX-G21** Intellectual Property Rights ✓	Theory Credits 4	Practical ---	**VFX-SK13** Advanced Visual Effects ✓	Theory Credits 2	Practical Credits 4
	VFX-G16 Film Studies ✓	Theory Credits 4	Practical ---	**VFX-SK14** Rotoscopy Techniques ✓	Theory Credits 2	Practical Credits 4
	VFX-G17 Digital Marketing ✓	Theory Credits 4	Practical ---	**VFX-SK15** Broadcast Design ✓	Theory Credits 2	Practical Credits 4
VI	**VFX-G20** Entrepreneurship	Theory Credits 4	Practical ---	**VFX-SK16** Internship	Theory ---	Practical Credits 6
	VFX -G22 Production Management ✓	Theory Credits 4	Practical ---	**VFX-SK17** Virtual Reality ✓	Theory Credits 2	Practical Credits 4
	VFX -G23 Direction for Acting and Films ✓	Theory Credits 4	Practical ---	**VFX-SK18** Particle Illusion ✓	Theory Credits 2	Practical Credits 4

Parvatibai Chowgule College of Arts and Science
(Autonomous)

Department of B. Voc 3D Media & Virtual Reality - VFX
2020-21

SEMESTER V

T.Y.B.Voc in VFX – Semester V– General Education Component
Course Title: Intellectual Property Rights
Course Code: VFX-G21
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To introduce fundamental aspects of Intellectual property Rights to students who are going to play a major role in the development and management of innovative projects in industries.
- To disseminate knowledge on patents, the patent regime in India and abroad and registration aspects.
- To disseminate knowledge on copyrights and its related rights and registration aspects.
- To disseminate knowledge of trademarks and registration aspects.
- To disseminate knowledge on Design, Geographical Indication (GI), Plant Variety and Layout Design Protection, and their registration aspects.
- To be aware of current trends in IPR and Govt. steps in fostering IPR.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Know about patent and copyright for their innovative & research works.
CO-2 Know the use of patent documents and providing a useful insight into the novelty of ideas from state-of-the-art search.
CO-3 Pave the way for students to choose Intellectual Property (IP) as a career option.
CO-4 Gain knowledge for developing ideas or innovations

Syllabus:

Unit I: Overview of Intellectual Property **(15 hours)**

Introduction and the need for intellectual property right (IPR) - Kinds of Intellectual Property Rights: Patent, Copyright, Trade Mark, Design, Geographical Indication, Plant

Varieties and Layout Design – Genetic Resources and Traditional Knowledge – Trade Secret - IPR in India: Genesis and development – IPR in abroad - Major International Instruments concerning Intellectual Property Rights: Paris Convention, 1883, the Berne Convention, 1886, the Universal Copyright Convention, 1952, the WIPO Convention, 1967,the Patent Co-operation Treaty, 1970, the TRIPS Agreement, 1994.

Unit II: Patents **(15 hours)**

Patents - Elements of Patentability: Novelty, Non-Obviousness (Inventive Steps), Industrial Application - Non - Patentable Subject Matter - Registration Procedure, Rights and Duties of Patentee, Assignment and license, Restoration of lapsed Patents, Surrender and Revocation of Patents, Infringement, Remedies & Penalties - Patent office and Appellate Board.

Unit III: Copyrights & Trademarks **(15 hours)**

Nature of Copyright - Subject matter of copyright: original literary, dramatic, musical, artistic works; cinematograph films and sound recordings - Registration Procedure, Term of protection, Ownership of a copyright, Assignment, and license of copyright - Infringement, Remedies & Penalties – Related Rights - Distinction between related rights and copyrights.

Trademarks

Concept of Trademarks - Different kinds of marks (brand names, logos, signatures, symbols, well-known marks, certification marks, and service marks) - Non-Registrable Trademarks-Registration of Trademarks-Rights of holder and assignment and licensing of marks - Infringement, Remedies & Penalties - Trademarks registry and appellate board.

Unit IV: Other forms of Intellectual property **(15 hours)**

i. Design: meaning and concept of the novel and original - Procedure for registration, effect of registration and term of protection
ii. Geographical Indication (GI) Geographical indication: meaning, and the difference between GI and trademarks - Procedure for registration, the effect of registration, and term of protection.
iii. Plant variety protection: meaning and benefit-sharing and farmers' rights – Procedure for registration, the effect of registration and term of protection

iv. Layout Design Protection Layout Design protection: meaning – Procedure for registration, the effect of registration and term of protection

Current Contour

India`s New National IP Policy, 2016 – Govt. of India step towards promoting IPR – Govt. Schemes in IPR – Career Opportunities in IP - IPR in the current scenario with case studies.

References:
Mandatory:

1. Nithyananda, K V. (2019). *Intellectual Property Rights: Protection and Management*. India, IN Cengage Learning India Private Limited.
2. Neeraj, P., & Khusdeep, D. (2014). *Intellectual Property Rights*. India, IN:PHI Learning Private Limited.

Supplementary:

1. Ahuja, V K. (2017). *Law relating to Intellectual Property Rights*. India, IN: Lexis Nexis.

Web-Based:

1. Subramanian, N., & Sundararaman, M. (2018). Intellectual Property Rights – An Overview. Retrieved from http://www.bdu.ac.in/cells/ipr/docs/ipr-eng- ebook.pdf
2. World Intellectual Property Organisation. (2004). WIPO Intellectual property Handbook. Retrieved from https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo_pub_489.pdf
3. Cell for IPR Promotion and Management (http://cipam.gov.in/)
4. World Intellectual Property Organisation (https://www.wipo.int/about-ip/en/)

Journals:

1. Journal of Intellectual Property Rights (JIPR):NISCAIR

T.Y.B.Voc in VFX - Semester V– General Education Component
Course Title: Film Studies
Course Code: VFX-G16
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To know the history of Indian and international cinema.
- To learn different type of film genres.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Gain knowledge in different types and duration of films and documentaries.
CO-2 Gain knowledge of the world of cinema.
CO-3 Analyse ethics & aesthetics of films.
CO-4 Learn to appreciate different genres of films.

Syllabus:

Unit I: History of Cinema (15 hours)

Early Cinema, Development of Indian & Hollywood Cinema, History of global films, Origin of classic Narrative cinema – soundless film.

Unit II: Film Ethics & Aesthetics (15 hours)

Different genres of films and realize the aesthetics required in making these films. Film Theories, Film Genres (Silent Movie, Documentary, Comedy, musical, Sci. fi.)

Unit III: Film Appreciation (15 hours)

Movies and their Roles in our Lives, Deconstructing, Understanding, and Appreciating the Magic of Cinema; while learning about the spectacle, struggles, & power of this Art form.

Unit IV: Film Analysis **(15 hours)**

Different sections and components of a film and how to analyse each in detail. Critical Analysis (Regional, National, and International Films) Components of Movie Review.

References:

Mandatory:

1. Barnouw Erik. *Documentary: A History of the non-fiction film*.
2. Cook A. David. *History of Narrative Film.*
3. Gazetas Aristides. *An Introduction to World Cinema*. Mcfarland& Company
4. Saran Ranu. *History of Indian Cinema.*

Supplementary:

1. Cook A. David. *History of Narrative Film.*

Reference Films:

1. *Documentary Display: Re-visiting Non-fiction Film and Video* by Keith Beattie
2. *Documentary Films in India: Critical Aesthetics at Work* by Aparna Sharma

Web Based:

https://www.youtube.com/watch?v=Arwso3fy50M&list=PLS47JmLo27M3ZFiPvsr6NTIsh_3w9dB6t

T.Y.B.Voc in VFX – Semester V– General Education Component
Course Title: Digital Marketing
Course Code: VFX-G17
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To build Accessible Websites that are optimized for the Search Engines.
- To study various online Marketing Strategies.
- Analyze and research the Internet to improve the quality and marketability of the Websites.

Course Outcomes: At the end of the course, students will be able to:

CO-1	Optimize the website for various search engines.
CO-2	Market the company/product using Search Engine and Social Media.
CO-3	Analyse the Web for improving the marketing strategy.
CO-4	Know how to advertise company/product on the internet platform.

Syllabus:

Unit I: Search Engine Optimisation (SEO) (15 hours)

Introduction to Online Search; Function of Search Engines; Google Page Rank; Introduction to Search Engine Optimization; Building Accessible Site; Keyword Research and Optimization; Link Building Strategies; Useful Tools for SEO; The Past, Present, and Future of SEO.

Hands-on Session: Using Search Engine Optimization tools (like Google & Bing search console, HubSpot, web CEO, Google page speed).

Unit II: Search Engine Marketing (SEM): (15 hours)

Introduction to Internet and Search Engine Marketing; Google Ad words; Ad words Account Structure; Navigating in Google Ad words; Working with Keywords; Creating Ads in Google Ad words; Creating and Managing your First Ad Campaign; Ad words Reporting and Account Performance Reports.

Hands-on session: Using Search Engine Marketing tools (like Google ad words, Google ad words certifications, search, display, remarketing formats, Facebook marketing, linked in advertising).

Unit III: Social Media Marketing (SMM): (15 hours)

Introduction to the World of SMM; Why Social Media? Getting Started with Social Media; Building Relationships via Facebook, Twitter, LinkedIn, YouTube; Handling Positive and Negative Comments; Social Media Content Base Creation.

Hands-on session: Using Social Media Marketing tools (like Hootsuite, buffer, sprout social, klear, twitonomy, social mention, Google alerts, mention)

Unit IV: Marketing and Analysis (15 hours)

Email Marketing:

Importance of Email Marketing; Email Marketing Software; Subscriber List; Email Marketing Campaign; Newsletters; Measuring the results.

Hands-on session: Using Email Marketing tools (campaign monitor, mail gun, mandrill, phplist, amazonses).

WEB Analytics:

Web Analytics and Intelligence Tools; Basic Metrics Demystified; Introduction to Google Analytics; Goals and Actionable Insights; Data Management; Social Media Analytics; Social Media Goals and KPIs; Tools for Social Media Analytics.

Hands-on Session: Using Web Analytics tools (like Google Analytics, compete.com, crazy egg, Facebook insights, twitter insights)

Marketing Automation:

Introduction to Marketing Automation. Advantages of using Marketing Automation Software, Issues with Marketing Automation.

Marketing and Distribution of Content

Understand how your creations make it to your local cinema, television screen, through various distribution channels, promotion of your content through Online Film Festivals, Channels, YouTube Uploading Films and Creating Traffic, Studying of various web-based entertainment practices, portals, Web Series – Content, Style, Techniques, and difference with other forms of media.

References:

Mandatory:

1. Damian Ryan. (2014). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. Kogan Page Publisher (3rd eds).

Supplementary:

1. Jones Calvin and Damian Ryan. *The Best Digital Marketing Campaigns in the World*.
2. Kaushik Avinash. (2013). *Web Analytics 2.0: The Art of Online Accountability & Science of Customer Centricity (Sybex)*. Wiley Publishing. (2nd eds)
3. Odden Lee. (2012). *Optimize: How to Attract and Engage More Customers by Integrating SEO, Social Media, and Content Marketing*. Wiley Publishing(1st ed) Publisher.
4. Smith Nick. (2013). *Successful SEO and Search Marketing in a Week*: *Teach Yourself*

Web-Based:

https://www.youtube.com/watch?v=nU-IIXBWlS4

https://adespresso.com/guides/facebook-ads-beginner/facebook-manager-campaign-setup/

https://neilpatel.com/what-is-google-adwords/

https://www.spyfu.com/blog/tutorial-start-adwords-campaign-scratch/

T.Y.B.Voc in VFX – Semester V– Skill Component
Course Title: Advanced Visual Effects
Course Code: VFX-SK13
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To educate in the Advance level of Visual effects which involves the integration of live-action footage and generated imagery to create 3D environments that look realistic.
- To create computer-generated imagery using motion tracking software.

Course Outcomes: At the end of the course, students will be able to:

CO-1	Develop and understand 3D elements.
CO-2	Adjust camera settings to match real-world footage.
CO-3	Understand the techniques of remove rolling shutter distortions from DSLR footage.
CO-4	Demonstrate an in-depth knowledge of a 3D camera tracker.

Syllabus:

Unit I: Introduction to 3D Environment (15 hours)

3D Background –3D layer and look at a 3D scene from multiple views**,** 3D **Lights** – Adding lights to create shadows and depth of background, Animate camera layer to create realistic 3D World.

Motion tracker
Track footage and text using the 3D camera tracker. Adjusting the camera's parameters. Single and multipoint motion tracking.

Unit II: Integration with After effects and Cinema 4D (15 hours)

Simulation in After Effects: Using warp stabilizer VFX. Creating a particle simulation. Retiming playback and Timewarp effect.

Cinema 4D
Focus on post and linking of 3D editing scenes within after-effects for match move and colour correction, make dynamic simulation using the dynamic engines.

Advanced Editing Techniques

Using warp stabilizer VFX. Creating a particle simulation. Retiming playback editing and Timewarp effects.

References:

Mandatory:

1. Gyncild, B., & Fridsma, L. (2019). *Adobe After Effects CC: 2019 release.* San Jose, CA, USA: AdobePress.
2. Rizzo Jen. *Cinema 4D Beginners Guide*

Supplementary:

1. Davidson, Gack (2017). *Adobe After Effects CC 2017: The Complete Beginner's Guide*. Create Space Independent Publishing Platform.

2. Tickoo Sham. *Maxon Cinema 4D R17 Studio, A tutorial approach* (4th ed)

Web Based:

https://www.youtube.com/watch?v=7okteHQ4Zwo

Lab:

Course Title: Advanced Visual Effects

Course Code: VFX-SK13

Marks: 100

Duration: 60 hours

Credits: 04

1. To create a 3DBackground (6 hours)
2. Using Light to create realistic 3DBackground. (6 hours)
3. To create animated background using camera. (6 hours)
4. Single point motion tracking. (6 hours)
5. Multipoint motion tracking for video footage. (6 hours)
6. 3D editing scenes intrigued with after effects and cinema 4D for match move. (6 hours)
7. Dynamic simulation and multi pass rendering. (6 hours)
8. Partial simulation to create animated environment. (6 hours)
9. Create a 3D environment using multi camera footage. (6 hours)
10. Create a news promo using cinema 4D particle elements. (6 hours)

T.Y.B.Voc in VFX – Semester V– Skill Component
Course Title: Rotoscopy Techniques
Course Code: VFX-SK14
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- Students will be specially trained for the Role and responsibility of a Roto Artist.
- Students will learn the various elements of Roto, Tracking, Motion Blur, Defocus, Hair Details, and Mixed Complex places of industry professionals.

Course Outcomes: At the end of the course students will be able to:

CO-1	Learn Rotoscopy techniques and plan workflow.
CO-2	Learn to manage equipment and material.
CO-3	Learn the separation of foreground to background.
CO-4	Learn various phases of Rotoscope techniques.

Syllabus:

Unit I: Introduction to Roto (15 hours)

Introduction to the Philosophy of Roto. It's important to establish the set of principles we will be working with throughout the course. Digital rotoscoping is the process of creating a mask or matte to isolate part of an image or video so you can change it to a different background and is a very important part of the visual effects process.

Unit II: Roto Tools (15 hours)

i. The Roto Brush tool provides an alternative, faster workflow for this segmentation and creation of a matte. With the Roto Brush tool, you draw strokes on representative areas of the foreground and background elements, and then After Effects uses that information to create a segmentation boundary between the foreground and background elements. The strokes that you make on one area inform After Effects about what is foreground and what background in adjacent areas and on adjacent frames is.

ii. Masking & Tracking

The pen tool, which lets us draw shapes and masks and animated mask shape frame by frame according to your object tracking point. Various techniques are used to track regions across time, and this information is used to propagate segmentation forward and backward in time so that each stroke that you make is used to improve the results on nearby frames.

iii. Wire removal

Some wire removals are relatively straightforward. In this lesson we take a look at how to handle a wire removal through the semi-transparent fabric, motion blur, and hair. We introduce adobe photoshop tools to remove unwanted elements form video footage through frame by frame.

iv. Beauty Retouch

We put the shapes to use to do some beauty retouch work. We look at natural-looking skin-smoothing techniques that do not compromise the texture or create a plasticky surface.

References:

Mandatory:

Adobe After Effects CC Classroom in a book. Dorling Kindersley, India. Pvt. Ltd.

Supplementary:

Bratt, Benjamin. *Rotoscoping: Techniques and Tools for the Aspiring Artist*.

Web-Based:

https://www.youtube.com/watch?v=bV4YIjAGfJE

https://www.youtube.com/watch?v=gMjucU3YQQU

https://www.youtube.com/watch?v=ZqAyS2AMvG4

https://www.youtube.com/watch?v=PBXbCFKXjWE

Lab:

Course Title: Rotoscopy Techniques

Course Code: VFX- SK14

Marks: 100

Credits: 4

Duration: 60 hours

1. Element Trace over motion picture footage (6 hours)
2. Create A Super Impose Video Use Roto Brush tool. (6 hours)
3. Separation foreground and background. (6 hours)
4. Develop a monotone video footage (6 hours)
5. Individual character beauty retouching (6 hours)
6. Tracking Colour elements into black & White footage (6 hours)
7. Remove a particular element from moving footage. (6 hours)
8. Sharpen and blur a particular region of moving footage (6 hours)
9. Making a monochrome video with an animated background (6 hours)
10. Synchronize a cartoon character with video footage (6 hours)

T.Y.B.Voc in VFX – Semester V– Skill Component
Course Title: Broadcast Design
Course Code: VFX-SK15
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To educate students in Cinema 4D, covering the interface, the tools, and the hierarchy—the key to grasping everything in Cinema4D.
- To enhance the student learning of broadcast design with motion graphics, models, and visualizations with 3D objects, dynamic effects, and animation.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Create animations for shot pre visualization by morphing between cameras.
CO-2 Learn to use various file formats that are common to VFX workflows and how to optimize models with the polygon reduction and level of detail tools, learn to use various file formats that are common to VFX workflows.
CO-3 Apply lights and how to work in 3D with advanced techniques for creating and modifying materials as well as how to get work out of Cinema4D
CO-4 Use Projection mapping workflow when creating VFX shots and cover working with Projection Man and how to bake textures.

Syllabus:

Unit I: Cinema 4D environment and workflow (15 hours)

Cinema 4d Fundamentals:

The basic workflow and interactive tools in Cinema4D. Introduction to the basic: understanding 3D space, Main menus, and command palates. How to create and manipulate objects in a virtual environment within the element of time. Organize scene and arrange elements with layer browser to flexibly optimize workflow.

Customizing interface and content browser that can help streamline the creative process.

Power of primitives: learn to define primitive building blocks that are parametric. Manipulate Basic parameters of a primitive, or critical dimensions such as length radius mathematically. Change primitive object to editable vertex, edges, polys, and hypernurbs to build 3d assets for animation and VFX.

Materials in-depth: Define material forms through the implementation of shaders. Understand the visual properties and co-relation of parameters of the geometric form. Change and unwrap through body paint 3D for controlled materials and paint textures. Build custom shaders through the material manager.

Lighting and rendering: Simulate real-world lighting and how cameras and other objects behave into the light in the real world. Setup different mathematical probabilities for render engine to trace rays for accurate renderings. Implement next-gen Fg and Gi solution to match real-world shots for compositing and tracking. Dial path operators for different types of render engines like Cpu renders or Gpu renders

Unit II: Animation FX Dynamics **(15 hours)**

Cinema 4D Essentials:

Advanced workflow and interactive tools for productions. Animation Basics: Create a continuous dynamic composition with keyframes. Set countless combinations of parameters to generate incredibly complex animate sequences for media and VFX.

Delve deeper using animation menu, rail Splines, and F-curves. The set appropriate method of linear or nonlinear animation for production and broadcast.

Dynamics and special effects: Make dynamic simulation using the dynamic engines. Rigid body and soft body dynamics. Create Effects with hair and cloth engines.

Manipulate Cloner soft body dynamics in relation to baking Dynamic calculations. Introduction to pyro cluster effects.

References:

Mandatory:

1. Rizzo Jen. *Cinema 4d Beginners Guide*.

Supplementary:

1. Quilkin Mc Kent, Powers Anne. *The artist Project sourcebook (third edition)*

Web-Based:

Maxon Cinema 4d R17 Studio, A tutorial approach 4th edition- Sham Tickoohttp://http.maxon.net/pub/r17/doc/Quickstart_CINEMA_4D_R17_EN.pdf

Lab:
Course Title: Broadcast Design
Course Code: VFX-SK15
Marks:100
Credits:04
Duration: 60 hours

1. Work with Cinema 4d workspace, preference, unit, views, and viewports. (2 hours)
2. Exploring File menus, object menus, tools menu, Selection menus, structure menus and function menus along with their workflow for animation and VFX. (2 hours)
3. A brief explanation of how to use coordinate manager, object manager, material manager attribute managers. (2 hours)
4. Understanding the timeline for complex animation and how to manipulate object with numerical values. (4 hours)
5. Create different motion with F-curve Manager and Xpresso editor (4 hours)
6. Modeling with primitives and NURBS modeling tools. (4 hours)
7. Modelling a outdoor scene with power primitives. (2 hours)
8. Model and indoor scene with polygon objects and spline objects. (2 hours)
9. Make a tabletop scene with hyper NURBS and NURBS toolset. (2 hours)
10. Modelling with Metaballs deformers and Booleans. (4 hours)
11. Applying materials and shaders to object and layout UVs with managers and body paint3d. (2 hours)
12. Make a planetary scene with shaders and maps. (4 hours)
13. Making a butterfly project and controlling animation with rail splines and curves. (4 hours)
14. Animating objects and scenes with pose morph. (2 hours)
15. Creating custom animation with mograph spline effector, tracer and sound Effector. (6 hours)

16. Motion tracking a footage for production (4 hours)

17. Investigate Render settings and Multi-pass rendering (4 hours)

18. Create an ad cosmetic commercial and integrate with post-production software like after effects for composite and colour correction (2 hours)

19. Make a fantasy landscape with pyroclastic, dynamics, special effects, rigid body, cloth, and fracture object. (4 hours)

SEMESTER VI

T.Y.B.Voc in VFX – Semester VI– General Education Component
Course Title: Production Management
Course Code: VFX-G22
Marks:100
Credits: 04
Duration: 60 hours

Course Objectives:

- To learn the basic skills required of a Line Producer to plan and complete a project through Pre-Production, Production, and Post Production. Including building calendars, hiring cast and crew, working with unions, shooting on location, problem-solving.

Course Outcomes: At the end of the course, students will be able to:

CO-1	Learn the basics of scheduling projects by using critical thinking skills and understanding a project's particular needs.
CO-2	Learn the basics of budgeting projects by using critical thinking skills.
CO-3	Identify production challenges and find solutions and resources.
CO-4	Prepare a preliminary project plan that includes a calendar, shooting schedule, budget, and list of assumptions.

Syllabus:

Unit I: Production plan **(15 hours)**

Difference between a Line Producer, Executive Producer, and Producer the Basic Principles of Line Producing, creating a Production plan with all the necessary documentation and permission.

Unit II: Production Fundamentals **(15 hours)**

Prepare a concept note, set designing and Planning of a shoot, Location scouting and Planning for outdoor shoots & scheduling of workforce as per shoot timeline

Unit III: Budget Plan & Proposal **(15 hours)**

Seeking approvals & permissions, creating a project plan, Budgeting Principles, how to use your calendar and schedule for a more accurate budget, Introduction to Movie Magic budgeting software, building a budget, building cash flow, and how to read a cost report.

Unit IV: Crew & Casting **(15 hours)**

Work with Casting Directors, create character breakdowns, Contracts, and resources, negotiating with agents and managers, filling outcast forms and paperwork, determining the best candidates for your project, labor Laws, crew forms, and paperwork.

References:

Mandatory:

1. Honthaner, E. L. (n.d.). *The Complete Film Production. Routledge* (4 edition).

Supplementary:

1. Singleton, R. (n.d.). *Film Scheduling 2nd* edition. Lone Eagle. (2nd edition).

Web-Based:

https://www.youtube.com/watch?v=BHQjkWJJPgU

https://www.studiobinder.com/tutorials/

http://www.learnmoviemagic.com/tutorials.html

T.Y.B.Voc in VFX – Semester VI– General Education Component
Course Title: Direction for Acting & Films
Course Code: VFX-G23
Marks: 100
Credits: 04

Course Objective:

- Prepare students to enter the workplace with a high level of competence to lead successfully the production team through the entire production of a motion picture.
- Preparing students who aspire to lead a production team. By analysing the work of classic and contemporary directors, the course investigates the art and language of filmmaking.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Learn basic terminology associated with cinematography and filmmaking, learn various directing styles of filmmakers.
CO-2 Compose effective treatments and scripts for use in common video and film genres including documentaries, dramas, commercials, news, and public service announcements.
CO-3 Demonstrate the preparation needed for film and video production, management budgeting, supervision of personnel, permitting, scheduling and post-production supervision.
CO-4 Demonstrate the skills necessary to direct a production crew.

Unit I: Artistic Identity **(15 hours)**

The role of director, Identifying the story and theme, the finer details that are involved in the production of feature films.

Unit II: Story Development **(15 hours)**

Seeing with a Moviemaker's eye and recognizing Screenplay, how to create drama, analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations.

Unit III: Aesthetics **(15 hours)**

Point of Views, Genres, Structure, Plot, Space, Stylized Environments, and Performances, Form and Style, Narrative, Dramatic, and Poetic Visual Styles, & the Variety of Dramatic Structures

Unit IV: Costumes & Visualization **(15 hours)**

Make-Up and Costume types and its Role in Film Production Straight, Character, Prosthetics, surface modeling, medical and wounds, Natural makeup. Visualizing of characters for story and sketching of costumes to match the character's progress through the storyline.

References:

Mandatory:

1. Katz Douglas Steven. *Film Directing Shot by Shot: Visualizing from Concept to Screen*. Sheridan Books.

Supplementary:

2. Proferes T. Nicholas. *Film Directing Fundamentals: See Your Film Before Shooting*. Focal Press.

3. Irving K. David. *Fundamentals of Film Directing*. Jefferson Press.

Web-Based:

https://www.youtube.com/watch?v=00E3r0is-K8

https://study.com/how_to_be_a_film_director.html

https://actioncutprint.com/filmmaking-articles/7stepfilmdirectingformula/

http://filmschoolonline.com/sample_lessons/sample_lessons.htm

T.Y.B.Voc in VFX - Semester VI – Skill Component
Course Title: Virtual Reality
Course Code: VFX-SK17
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To provide a detailed understanding of the concepts of Virtual Reality and its applications.
- To understand the latest hardware and software used in Virtual reality environments.

Course Outcome: At the end of this course, students will be able to:

CO-1	Study about Virtual Hardware and Software.
CO-2	Develop Virtual Reality environments using applications.
CO-3	Understand geometric modeling and Virtual environment.
CO-4	Develop 3D Game using VR Software

Syllabus:

Unit I: Introduction to Virtual Reality **(15 hours)**

Virtual Reality and Virtual Environment: Introduction, Computer graphics, Real-time computer graphics, Flight Simulation, Virtual environment requirement, benefits of virtual reality, Historical development of VR, Scientific Landmark

3D Computer Graphics: Introduction, The Virtual world space, positioning the virtual observer, the perspective projection, human vision, stereo perspective projection, 3D clipping, Colour theory, Simple 3D modeling, Illumination models, Reflection models, Shading algorithms, Radiosity, Hidden Surface Removal, Realism-Stereographic image.

Geometric Modelling:
Geometric Modelling: Introduction, from 2D to 3D, 3D space curves, 3D boundary representation Geometrical Transformations: Introduction, Frames of reference, Modelling transformations, Instances, Picking, Flying, Scaling the VE, Collision detection, Generic VR system: Introduction, Virtual environment, Computer environment, VR technology, Model of interaction, VR Systems

Unit II: Virtual Environment **(15 hours)**

Animating the Virtual Environment: Introduction, The dynamics of numbers, Linear and Nonlinear interpolation, the animation of objects, linear and non-linear translation, shape & object in between, free form deformation, particle system.

Physical Simulation: Introduction, Objects falling in a gravitational field, Rotating wheels, Elastic collisions, projectiles, simple pendulum, springs, Flight dynamics of an aircraft.

VR Hardware and Software:

Human factors: Introduction, the eye, the ear, the somatic senses.

VR Hardware: Introduction, sensor hardware, Head-coupled displays, Acoustic hardware, Integrated VR systems.

VR Software: Introduction, Modelling virtual world, Physical simulation, VR toolkits,

References:

Mandatory:

1. Adams. (2000). *Visualizations of Virtual Reality*. Tata McGraw Hill.
2. R. Anand. *Augmented and Virtual Reality*. Khanna Publishing House, Delhi.

Supplementary:

1. Burdea C. Grigore, Coiffet Philippe (2006). *Virtual Reality Technology*. Wiley Inter-Science (2nd Edition).
2. Vince John. (2007). *Virtual Reality Systems*. Pearson Education Asia.

Web-Based:

www.vresources.org
www.vrac.iastate.edu
www.w3.org/Mar/VRM

Lab:

Course Title: Virtual Reality
Course Code: VFX-SK17
Marks: 100
Credits: 04

Total Hours: 60

1. Developing architecture of a house using Virtual Reality. (6 hours)
2. Perform CRO based experiments using Virtual Reality. (6 hours)
3. Explore human anatomy using Virtual Reality. (6 hours)
4. Simulation of circulation of blood in the heart. (6 hours)
5. Simulation of Fight/Vehicle/Space Station. (6 hours)
6. Developing the concept of Virtual classroom with multiplayer**.** (6 hours)
7. Develop a virtual scene for a computer game. (6 hours)
8. Develop a CG virtual scene for a short clip. (6 hours)
9. Create a virtual classroom. (6 hours)
10. Create a virtual tour of a city. (6 hours)

T.Y.B.Voc in VFX - Semester VI – Skill Component
Course Title: Particle Illusion
Course Code: VFX-SK18
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- Students will be specially trained for Visual effects in motion pictures.
- Apply various particles to simulate the 3D world to Real World.

Course Outcomes: At the end of this course, students will be able to:

CO-1	Understand Different shapes of particles to generate realistic effects.
CO-2	Manage to link particle in animated footage.
CO-3	Students will learn the behaviour of different types of particles. (Fire, Water, Smoke, etc.)
CO-4	Know how to place emitter in a different area in the scene.

Syllabus:

Unit I: Introduction to particle Illusion Tools **(15 hours)**

Introduction to all essential tools and nodes for generating various types of computer-generated effects, blending with realistic video footage or animated footage.

Unit II: Functions of particle Illusion **(15 hours)**

i. Camera Tracking -- Layer Offset

Animation or video clip in which the camera is moving (from side to side or up and down), need a way to match this movement in particle Illusion.

ii. Library Manager

Various types of partials effects, computer-generated animated background for special effects.

iii. Deflectors, Blockers, and Forces

Creating the appearance of 3D in a 2D project – deflectors, blockers, and forces. Deflectors are objects that particles, Blockers are objects that obscure particles.

iv. Import and Export

Integration with particle Illusion and after effects, Import and export video file in various file formats and link with After Effects.

References:

Mandatory:

1. Steve Julin. *Avid Xpress Pro Power!* Muska & Lipman Publishing Lanier Lee.

   Compositing Visual Effects in After Effects: Essential Technique. CRC Press.

Supplementary:

1. Adobe Creative Team. *Adobe After Effects CC Classroom in a boo.* Adobe Systems.

Web Based:

https://www.youtube.com/watch?v=e6Kl_hSmH8Q

Lab:
Course Title: Particle Illusion
Course Code: VFX-SK18
Marks: 100
Credits: 04
Duration: 60 hours

1. Create a fire for a moving sequence (6 hours)
2. Animated particle emitter. (6 hours)
3. Tracking particle emitter with moving object. (6 hours)
4. Develop a fireworks animated video footage (6 hours)
5. Create an animated background using multiples emitters (6 hours)
6. Combined 3 types of particle effects in a single footage (6 hours)
7. Blanding Multiple footages and multiple video effects. (6 hours)
8. Exporting 3 types of files. (6 hours)
9. Create a CGI Scene use different particle. (6 hours)
10. Create a visual effects scene using real footage. (6 hours)

Multimedia - Digital Filmmaking – MDF

Bachelor of Vocation in Multimedia - Digital Filmmaking

Semester	General Education Component			Skill Component		
I	MDF-G1 Language Paper	Theory Credits 4	Practical Credits 0	MDF-SK1 Drawing & Painting	Theory Credits 2	Practical Credits 4
	MDF-G2 Introduction to Creative Writing	Theory Credits 4	Practical Credits 0	MDF-SK2 3D Animation-I	Theory Credits 2	Practical Credits 4
	MDF-G3 History of Indian Art	Theory Credits 4	Practical Credits 0	MDF-SK3A Raster Graphics	Theory Credits 2	Practical Credits 4
II	MDF-G4A Academic Writing	Theory Credits 4	Practical Credits 0	MDF-SK4A Vector Graphics	Theory Credits 2	Practical Credits 4
	MDF-G5 Introduction to Digital Mass Media	Theory Credits 4	Practical Credits 0	MDF-SK5 3D Animation-II	Theory Credits 2	Practical Credits 4
	MDF-G6 History of Western Art	Theory Credits 4	Practical Credits 0	MDF-SK6 Project - First Year End	Theory Credits 0	Practical Credits 6
Outcome	1) Art Setter 2) Graphic Desinger 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	MDF-G7 Environmental Studies-I	Theory Credits 2	Practical Credits 0	MDF-SK7 Digital Photography	Theory Credits 2	Practical Credits 4
	MDF-G8 Art Appreciation	Theory Credits 2	Practical Credits 0	MDF-SK8 Digital Cinematography-I	Theory Credits 2	Practical Credits 4
	MDF-G9 Business Communication	Theory Credits 4	Practical Credits 0	MDF-SK9 Video Editing	Theory Credits 2	Practical Credits 4
	MDF-G10 Cyber Security	Theory Credits 4	Practical Credits 0			
IV	MDF-G11 Environmental Studies-II	Theory Credits 2	Practical Credits 0	MDF-SK10 Digital Cinematography-II	Theory Credits 2	Practical Credits 4
	MDF-G12 Film Appreciation	Theory Credits 2	Practical Credits 0	MDF-SK11 Audio Editing	Theory Credits 2	Practical Credits 4
	MDF-G13 Print Advertising	Theory Credits 4	Practical Credits 0	MDF-SK12 Project - Second Year End	Theory Credits 0	Practical Credits 6
	MDF-G14 Personality Enhancement	Theory Credits 4	Practical Credits 0			
Outcome	1) Graffer 2) Focus Puller 3) Assistant Cameraman 4) Video Editor 5) Studio Coordinator 6) Studio Recordist 7) Sound Designer 8) Audio - Visual Supervisor					

Semester	General Education Component			Skill Component		
V	MDF-G15 Mathematics for Competitive Exams	Theory Credits 4	Practical Credits 0	MDF-SK13 Motion Graphics-I	Theory Credits 2	Practical Credits 4
	MDF-G16 Film Studies	Theory Credits 4	Practical Credits 0	MDF-SK14 Pre-production	Theory Credits 2	Practical Credits 4
	MDF-G17 Digital Marketing	Theory Credits 4	Practical Credits 0	MDF-SK15 Production & Distribution	Theory Credits 2	Practical Credits 4
VI	MDF-G18 E-Commerce	Theory Credits 4	Practical Credits 0	MDF-SK16 Motion Graphics-II	Theory Credits 2	Practical Credits 4
	MDF-G19 HCI	Theory Credits 4	Practical Credits 0	MDF-SK17 Advanced Video Production	Theory Credits 2	Practical Credits 4
	MDF-G20 Entrepreneurship	Theory Credits 4	Practical Credits 0	MDF-SK18 Internship	Theory Credits 0	Practical Credits 6
Outcome	1) Junior Compositor 2) Roto Artist 3) Junior 3D Compositor 4) Motion Graphics Designer 5) Script/Story Writer 6) Screenplay Artist 7) Storyboard Artist 8) Production Artist					

Internship to be undertaken during end semester breaks. (End of 4th Semester onwards)

SEMESTER – I

General Education Component

Course Title: Language Paper

Course Code: MDF-G1

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To help students develop proficiency in oral communication in English.
- To help students understand the importance of developing good listening skills.
- To help students become proficient in listening, writing and speaking skills.

Course Outcome: At the end of this course, students will be able to

CO-1 To speak fluently, confidently and use correct English.

CO-2 To draft letters– formal & informal letters, representations, notices, agendas and minutes of meetings.

CO-3 To communicate effectively through written communication.

SYLLABUS:

Module – I – Fun with Grammar **(15 hrs)**

Students need to have a basic proficiency in Grammar to complete this course.

Pre-requisite to the course: Knowledge of Basic Grammar – Articles, Adjectives, adverbs, Conjunctions, Sentence Structures – SVO etc

1. Parts of Speech
2. Reported Speech
3. Punctuation
4. Phrases and Clauses
5. Active and Passive
6. Basic Errors in English Language
7. Spotting Errors and correcting them
8. Revising and Editing

Module – II – Spoken English **(15 hrs)**

1. Individual Presentation Skills 5 hours

Students are to be taught public speaking using Presentation skills through application-based teaching; public speaking is to be taught and application of these skills in formal and informal settings.

a) Concepts:

i. Importance of Body Language and Eye Contact in Spoken Communication

ii. Ways to Overcome Fear of Speaking

iii. Pace, Tone and Intonation

iv. Listening as an Essential Part of Communication. How to be an Effective Listener

b) Applied:

Students will be given topics to present before the class. They can use a host of methods to do so

1. Presentation with material - Formal
2. Oral presentation
3. Formal/Informal Speeches – Welcome, Introduction to a dignitary, Raising a toast, Farewell Speech, celebratory speeches

2. Pair Based Activities 5 hours

a) Telephone Etiquette

b) Speaking and Listening Classroom Practice Exercises in Pairs and Groups.

3. Group Based Activities 5 hours

Minutes of the meeting can be used as a group-based activity.

Group Discussions of Formal and Informal nature.

Module – III – Written English **(15 hrs)**

1. Letters

a) Formal Letters

   i. Job Application Letters
   ii. Enquiry Letters
   iii. Orders and Complaints letters
   iv. RTI
   v. Representations
   vi. Writing a resume

b) Social Letters

   i. Invitation &Reply
   ii. Condolence & Reply
   iii. Congratulations & Reply
   iv. Thank you & Reply

Module – IV – Digital Story Telling (DST) **(15 hrs)**

Descriptive Writing – (Open to the Teacher to explore this writing in various areas Fiction and Non-Fiction and creative expression of personal writing)

Primary References:

1. Azar, Betty Schrampfer. Basic English Grammar. New York: Pearson Education, 1996.
2. Biber, Douglas, Susan Conrad and Geoffrey Leech. Longman Student Grammar of Spoken
3. and Written English. Edinburgh: Pearson Education Limited, 2002.
4. Bullock, Richard. The Norton Field Guide to Writing. New York: W.W. Norton & Company, 2009.
5. Jain, A.K. and Dr. Pravin S.R. Bhatia. Professional Communication Skills. New Delhi: S.Chand & Company Ltd, 2000.
6. Mohan, Krishna and Singh, N. P. Speaking English Effectively Macmillan India Ltd.
7. Sadanand, Kamelesh & Susheela Punitha. Spoken English: A Foundation Course – Part 1.
8. Hyderabad: Orient Blackswan Private Limited, 2009.
9. Stanek, William. Effective Writing for Business, College and Life. Reagent Press, 2005.

Secondary References:

1. Bullock, Richard. The Norton Field Guide to Writing. New York: W.W. Norton & Company, 2009.
2. Chakravarty, Auditi and Bonnie Boehme. Grammar & Usage for Better Writing. New York: Amsco School Publications, 2004.
3. Downing, Angela and Philip Locke. English Grammar A University Course. London and New York: Routledge, 2006.
4. Hewings, Martin. Advanced Grammar in Use. 2nd. Great Britain: Cambridge
5. Naylor, Helen and Raymond Murphy. Grammar in Use Supplementary Exercises. Edinburgh: Cambridge University Press, 2001.

Course Title: Introduction to Creative Writing

Course Code: MDF-G2

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To expose students to a variety of literary genres, authors and styles through reading, discussion and analysis.
- To experiment with a variety of writing genres like short story, poetry, novella, drama etc.
- To help students understand the process of revision, editing and proofreading.
- To develop the skills to self-critique one's own writing through a process of giving and receiving criticism on one's own and others' writings.
- To encourage students to publish their works in the college magazine, college newsletters, local newspapers etc.

Course Outcome: At the end of this course, students will be able to

CO-1 Demonstrate an understanding of literary conventions like plot, character, theme etc.

CO-2 Develop a basic understanding of various prose fiction genres.

CO-3 Learn to use current events as inspiration for Creative Writing.

CO-4 Understand the importance of proof reading, editing and rewriting.

CO-5 Learn to critique the writings of their peers.

CO-6 Improve their vocabulary and sentence structures.

CO-7 Learn to think and write creatively.

SYLLABUS:

Module – I – How to Get Started? **(05 hrs)**

a) Journal Writing (Recording Personal Experiences).

b) Free Writing.

c) Clustering.

d) Badly Written First Drafts as Helpful a Starting Point.

Module – II – How to find Subject Matter? **(05 hrs)**

a) Be inspired by events in personal life.

b) Draw inspiration from people one comes across.

c) Be moved by injustice.

d) Draw on current events in Politics, Society etc.

e) Look at genres of fiction one loves to read etc.

Module – III – How to make a story interesting? **(05 hrs)**

a) Introduce conflict, complications, trouble, crisis, resolution.

b) Create feeling of suspense.

c) Appeal to emotions.

d) Surprise reader with unexpected ending.

Module – IV – Difference between 'Story' and 'Plot.' **(05 hrs)**

Module – V – Characterization. **(05 hrs)**

a) Memorable characters have 'Credibility', 'Purpose' and 'Complexity.'

b) 'Indirect Method' or 'Telling' method of Character Presentation – Authorial Interpretation

c) Direct Method or 'Showing Method' of Character Presentation.

   i. Showing appearance

   ii. Showing action

   iii. Portraying speech

d) Checklist for Creating Character.

Age, gender, race, nationality, marital status, region, education, religion, profession, memories, dietary habits, ideology, likes, dislikes etc.

Module – VI – Importance of Atmosphere and Setting in Fiction **(05 hrs)**

Module – VII – Point of View/Narrative voice **(05 hrs)**

a) Who speaks:

i. First Person Narrative
ii. Second Person narrative
iii. Third Person Narrative

b) To whom:

i. To the Reader?
ii. To Another character in the Story?

Module – VIII – The Concept of Authorial Distance or Psychic Distance. **(5 hrs)**

Module – IX – Difference between types of Prose Fiction. **(05 hrs)**

Novel, Short Story, Play

Module – X – The Importance of Proofreading, Editing, Rewriting. **(05 hrs)**

Module – XI – Poetry **(10 hrs)**

Prosodic Features-Rhyme. Rhythm, Metre, Stanzaic Forms, Figurative Language, Symbolism, Special Linguistic Features etc.

Primary References:

1. Burroway, Janet. Writing Fiction: A Guide To Narrative Craft. New York: Longman Publishers, 2000.
2. Earnshaw, Steven. The Handbook of Creative Writing. 2007: Edinburgh University Press, Edinburgh.
3. Morley, David. The Cambridge Introduction to Creative Writing. New York: Cambridge University Press, 2007.

4. Strunk, William, and E.B.White. The Elements of Style. New York: Longman, 2000.

Secondary References:

1. Boden, Margaret. the creative mind - myths and mechanisms. 2nd. New York: Routledge, 2004.
2. Bolton, Gille. Write Yourself - Creative Writing and Personal Development. London: Jessica Kingsley Publishers, 2011.
3. Hamand, Maggie. Creative Writing For Dummies. West Sussex: John Wiley & Sons, Ltd, 2009.
4. Harper, Graeme. On Creative Writing. London: Short Run Press, 2010.
5. Kaufman, Scott Barry and James Kaufman, The Psychology of Creative Writing. New York: Cambridge University Press, 2009.
6. May, Steve. doing creative writing. Oxon: Routledge, 2007.
7. Mills, Paul. The Routledge Creative Writing Coursebook. Routledge, 2006.
8. Neale, Derek. A Creative Writing Handbook: Developing Dramatic Technique, Individual

Course Title: History of Indian Art

Course Code: MDF-G3

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To examine a range of approaches to understanding works of art from India.
- To study the religious, ritual, social and political contexts in which these artworks were made.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Course Outcome: At the end of this course, students will be able to

CO-1 Familiarize themselves with works of Indian artists.

CO-2 Have and appreciation of the various factors that have contributed to the art movements throughout history.

CO-3 Provide an overview of the religious and cultural history of the Indian Subcontinent.

SYLLABUS:

Module – I – Temporal History of Indian Art **(35 hrs)**

Introduction to Early Indian Art, Rock Art, Indus Valley Civilization, Mauryan Art, Buddhist Art, Gupta Art, Dynasties of South India, Temples of Khajurao, Modern Colonial Era, Rajputs and Sultans, Vijayanagar Empire, Gajapatis, Ahoms, Maughals, Polygars, Mysore, Marathas & Sikhs. Art during the British period. Contemporary Indian Art.

Module – II – Material History of Indian Art **(15 hrs)**

Introduction to sculptures, Sculptures, wall paintings and cave paintings in the Indian subcontinent, Ajanta and Elora Caves. Introduction to miniature paintings, Rajput Paintings.

Module – III – Contextual History of Indian Art **(10 hrs)**

Introduction to temple art, Indian rock-cut architecture, Early caves, monolithic rock cut temples.

Textbook:

1. Craven, Roy C. Indian Art: A Concise History. Thames & Hudson, 1997.

Reference books:

1. Huntington, Susan L., and John C. Huntington. The Art of Ancient India: Buddhist, Hindu, Jain. Motilal Banarsidass Publishers, 2016.
2. Khan, Sharmin. History of Indian Architecture: Buddhist, Jain and Hindu Period. CBS Publishers & Distributors, 2017.
3. Dalmia, Yashodhara. Contemporary Indian Art: Other Realities. Marg, 2008.

SEMESTER – I

Skill Component

Course Title: Drawing & Painting

Course Code: MDF-SK1

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into personal forms of pictorial expression and representation.
- To enable the student to develop a relationship with the physical production of art and also acquire knowledge of its theory, history and criticism.

Course Outcome: At the end of this course, students will be able to

CO-1 Identify the various techniques used and elements required in drawing.

CO-2 Compose layouts as per their own creative visualizations.

CO-3 Explore the possibilities of various media, and the diverse conceptual modes available to a painter.

CO-4 Understand basic principles of design and colour, concepts, media and formats, and the ability to apply them to a specific aesthetic intent.

SYLLABUS:

Module - I - Fundamentals of Art **(10 Hrs.)**

Fundamentals of Art – Introduction to fundamental principles of creating artworks.

Elements of Art – Understanding of line, shape, form, value, space, colour and texture.

Principles of Art - Balance, emphasis, movement, proportion, rhythm, unity, and variety of artworks.

Module - II - Fundamentals of Drawing **(20 Hrs.)**

Introduction with Basic Line Drawing - Drawing straight lines, circles & half circles and other basic exercises for free hand drawing.

Different Technique of Drawing - Techniques of holding pencils, brushes and use of other mediums and drawing materials.

Object Drawing – Understanding dimensions of different objects through basic geometric 3D objects such as squares, triangles, cones, circular objects and spheres.

Pictorial Design – Understanding of composition, colour & balance in a design.

Perspective – One point, two point and three-point perspective exercises in pencil and colour.

Composition – Create visual harmony and balance in a painting in any space, using rules of composition.

Colour Theory - Definitions (or categories) of colours based on the colour wheel: primary colour, secondary colour and tertiary colour.

Textbook:

1. Barrington Barber, The Fundamentals of Drawing, Arcturus publishing Limited, 2009.

Reference Books:

1. Victor Perard, Anatomy and Drawing, Grace Prakashan, 2011.
2. 3D Total Team, Gilles Beloeil, Andrei Riabovitchev, Roberto F. Castro, Publishing 3D Total; Art Fundamentals: Colour, Light, Composition, Antomy, Perception and Dep, 3D Total Publishing, 2013.

Lab: Drawing & Painting

Marks:100

Credits: 4

Total Hours: 60

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1. Drawing of straight lines, curve lines, horizontal lines, vertical lines, thick lines, thin lines, diagonal lines, dotted lines. (08 Hrs.)
2. Drawing of basic geometric 3d objects such as squares, triangles, cones, circular objects and spheres. (06 Hrs.)
3. Drawing of two objects by observation. (04 Hrs.)
4. Drawing of illustrative design. (08 Hrs.)
5. Drawing of objects from nature. (06 Hrs.)
6. Drawing using the rules of perspective. (04 Hrs.)
7. Drawing using the rules of composition. (06 Hrs.)
8. Using the different colour combinations to create visual art. (10 Hrs.)
9. Using the colour wheel: primary colour, secondary colour and tertiary colour to create visual art. (light to dark) (04 Hrs.)
10. Using the colour wheel: primary colour, secondary colour and tertiary colour to create visual art. (dark to light) (04 Hrs.)

Course Title: 3D Animation – I

Course Code: MDF-SK2

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To give an introduction to basic animation tools and techniques.
- To prepare the student for the advanced level course in the next semester.

Course Outcomes: At the end of this course, students will be able to

CO-1 Explore the basic tools and interfaces used to model a 3D animation character.

CO-2 Learn positioning of 3D objects.

CO-3 Create 3D object using splines tools and splines modifier.

CO-4 Manipulate and segregate 3D objects.

SYLLABUS

Module – I - Fundamentals of 3D Animation **(12 Hrs.)**

Introduction to 3D Animation - Learn to get around the animation software, providing overview of the entire package as well as essential workflows that require to create professional models and animations.

Exploring Interface - Complete overview of the interface, navigation, configure major parts of the interface, including the viewports, the timeline, the outliner, and the various other parts of the UI.

Controlling of Viewports - Creating and manipulating standard and extended primitives. Exploring modifiers and using them as the basis for modeling.

Working with Files & Hierarchy - Exploring the different 3D file extension, assembly, various file association, referencing and grouping techniques. Learn industry standard file types like FBX and alembic.

Module – II – Modeling in 3D **(9 Hrs.)**

Creating and Modeling, Editing Primitive - Overview of graphite modeling tools. Exploring functionality of connect tool, weld tool, extrude tool and various component tool.

Selecting Objects and Using Layers - Overview of modeling interface and modifier stacks, modifying objects, parameters and adjusting the workflow of modeling techniques. Preparing and understanding assets through poly modeling.

Transformation Tools – Learning rich tool set to view and manipulate vertex editing, edge and border editing.

Cloning and Array - Overview of breaking edit mesh and poly mesh models into different files for sub tool modeling techniques. Explore isolated, hidden, freeze, wire frame and adaptive degradation technique with proxy file assembly.

Module – III - Shapes and Splines **(9 Hrs.)**

Creating and Modeling, Editing Primitive - Creating common nurms and spline shapes primitive that allow to create 3d objects from 2D shapes. Shapes comprises of basic line, circle, and curved shapes, with their own set of parameters that can be further edited

Selecting Objects and Using Layers - Using selection sets and compile them. Discover layer base modeling and animatics with layer properties and parameters.

Transformation Tools - Explore the manipulation tools, translate, rotate and scale. In-depth parameters on manipulation gizmo and co-ordinate.

Textbooks:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012.

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Richard E. Williams, The Animator's Survival Kit, Faber, 2009.
3. https://www.autodesk.com/education/home

Lab: 3D Animation – I

Marks: 100

Credits: 04

Total Hours: 60

1.	Introduction to 3ds Max, opening and saving the files, adjusting workspace, exploring the menus.	(04 Hrs.)
2.	Creating and manipulating objects, adjusting the pivot, aligning, snapping, and adjusting the gizmos.	(08 Hrs.)
3.	Manipulating object using vertexes, lines, and faces. Create a crusher using polygon tools.	(06 Hrs.)
4.	Modelling of coke bottle and detailing with extrude.	(06 Hrs.)
5.	Modelling interior furniture using connect and weld tool.	(06 Hrs.)
6.	Modelling interior using chamfer tool.	(06 Hrs.)
7.	Modelling a ship using boolean modifier.	(06 Hrs.)
8.	Modelling shrine using duplicate option and array.	(06 Hrs.)
9.	Modelling a bicycle using spline.	(08 Hrs.)
10.	Create chess pieces using revolve modifier.	(04 Hrs.)

Course Title: Raster Graphics

Course Code: MDF-SK3

Marks: 50

Total Hours: 30

Credits: 02

Course Objectives:

- To introduce the student to the creative processes which combines art and technology to communicate ideas visually.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the software tools used to create graphics and manipulate images.

CO-2 Associate the interaction of the tools with the graphics or images to attain the intended result.

CO-3 Manipulate images to attain the desired result.

CO-4 Learn to use tools and techniques to be more efficient in your photo-editing skills.

SYLLABUS

Module – I - Introduction to Raster Graphics (03 Hrs.)

Introduction to digital image editing, creating a new file and the various tools in the software.

Module – II - Working with Selection, Layers & Channel (06 Hrs.)

The selection tool, menu & choosing selections based on colour.

Module – III - Using Paint, Paths, Shapes and Text Tools (06 Hrs.)

Paint brushing techniques and customizing paint brush settings, manipulation of shapes and parts. Adding text to images as vector objects.

Module – IV - Working with Camera Raw **(04 Hrs.)**

Examining raw file types and displaying images in camera Raw. Understanding Raw workspace, creating altered versions of your images and exporting from the raw format.

Module – V - Working with 3D Images **(05 Hrs.)**

Understanding the 3D workspace and using different 3D file formats. Creating 3D objects, importing 3D objects into Photoshop and working with them.

Module – VI - Working with Video and Animations **(04 Hrs.)**

Dealing with aspect ratio, opening video files and using a timeline panel. Trimming of video clips and rearranging video footage. Animating text and 3D objects using key frames.

Module – VII - Advanced Output Techniques **(02 Hrs.)**

Understanding colour management, calibrating colour profiles, configuring colour management to print accurate colours.

Textbook:

1. Andrew Faulkner and Conrad Chavez, Adobe Photoshop CC Classroom in a Book, Adobe Press, 2015.

References:

1. Lisa Danae Dayley and Brad Dayleyz, Adobe Photoshop CC Bible, Wiley India Pvt. Ltd., 2014.
2. https://helpx.adobe.com/in/photoshop/tutorials.html

Lab: Raster Graphics

Marks: 100

Credits: 4

Total Hours: 60

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1. Working with Software Layouts. (04 Hrs.)
2. Photo Manipulation using shapes and pen tool. (06 Hrs.)
3. Adjusting image brightness, contrasts, saturation and levels. (04 Hrs.)
4. Mixing of different photographs to create a single image. (10 Hrs.)
5. Working on transparent layers. (04 Hrs.)
6. Changing the view size of a document, resizing files and adjusting resolutions, printing on different mediums. (04 Hrs.)
7. Working with multiple shapes and objects. (08 Hrs.)
8. Working with images and audios. (08 Hrs.)
9. Working with objects in motion and animation of different shapes. (06 Hrs.)
10. Drawing and painting using different tools. (06 Hrs.)

SEMESTER – II

General Education Component

Course Title: Academic Writing

Course Code: MDF-G4

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To provide valuable practice of essential academic structures, vocabulary, and
- organizational patterns
- To ensure that students will attain a level of writing expected by an academic
- audience.
- To enable students to understand a variety of academic genres.
- To ensure that students understand how to document their sources appropriately i.e use of citations and works cited/references.
- To ensure that students learn to quote, paraphrase, and summarize information accurately and with confidence
- To help students develop a formal tone and style (registers) expected in academic writing

Learning Outcomes: At the end of the course students will be able to

CO-1 Gain a complete understanding of each stage of writing process

CO-2 Attain practical experience of writing essay outlines, editing drafts, and producing a completed essay for each of the three essay types.

CO-3 Learn to use sources and incorporate them effectively into an essay, adding valuable evidence and authority to an essay.

CO-4 Develop a strong academic vocabulary using transitional words and comparison and contrast phrases.

SYLLABUS

Module – I – Writing a Paragraph **(10 Hrs)**

Brainstorming, Writing a coherent paragraph, Editing a paragraph, Transitional words and phrases.

Module – II – Writing an Academic Essay **(10 Hrs)**

Generating thesis statement, From a Paragraph to an Essay, Essay Structure, Editing an Essay, Writing an Expository Essay.

Module – III – Writing an Argumentative Essay **(10 Hrs)**

Developing and Organizing Arguments, Supporting Arguments, Strengthening Arguments, Reporting Verbs and Tones, Editing an Argumentative Essay.

Module – IV – The Compare and Contrast Essay **(10 Hrs)**

Compare and Contrast Essay Structure, Useful Vocabulary and Style, Editing compare and contrast essays.

Module – V – Working with sources **(10 Hrs)**

Avoiding plagiarism, Selecting resources, Citing the sources of information, Citations, quotations and integration.

Module – VI – Working with drafts **(10 Hrs)**

Drafting, Revising and Proof reading

Primary References

1. Fowler, R.H., Aaron, J.E. & McArthur, M., 2005. The Little Brown Handbook. 4th ed. Toronto: Pearson Longman.
2. Harris, M., 2008. Prentice Hall Reference Guide. 7th ed. New Jersey: Pearson Prentice Hall.
3. Heather, A., Lucille, S., Karen, T. & Kathleen, J.-C., 1995. Thinking It Through: A Practical Guide To Academic Essay Writing. 2nd ed. Peterborough: Academic Skills Centre Trent University Peterborough.
4. Hurling, S. et al., 2007. Academic Writing Skills and Strategies II. Shinjuku-ku: Waseda University International Co., Ltd.
5. Troyka, L.Q. & Hesse, D., 2005. Simon & Schuster Handbook For Writers. 4th ed. Toronto: Pearson Prentice Hall.
6. Graff, G., & Birkenstein, C. (2006). "They Say/I Say". New York: W.W. Norton & Company Ltd.

Course Title: Introduction to Digital Mass Media

Course Code: MDF-G5

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To give students an overview of Mass Media in today's world.
- To introduce them to the world of communication in Media, through the fields of Print Media, Radio, Television, Film, Digital Media/New Media.
- To develop an understanding of Mass Media and related concepts through a practical hands-on approach.
- To introduce students to the various equipment and software required in the field.
- To create a foundation and a broad base knowledge for further studies and careers in Media as an option for students.

Learning Outcomes: On completion of the course the student should be able to:

CO-1 To comprehend the field of Mass Media - from print to Digital Media.

CO-2 To understand a few theoretical perspectives behind mass media and the jargon associated with the field.

CO-3 To be comfortable around the various equipment and software required for various media.

CO-4 To demonstrate competence in the field of Mass Media – be it in the ideation or execution stage.

SYLLABUS

Module – I – Mass Communication & Media Studies **(05 Hrs)**

Concepts: Mass Communications; Other forms of Communications; Technologies and Communications; Mass Media and Contemporary Culture; Media Studies – Encoding messages; Audience responses; Agenda

Module – II – Advertising **(11 Hrs)**

Concepts: Brief History; Target Audience; Buying Motives; Advertising Message; Advertising Ethics; Advertisements in Different Media (Print; TV; Radio; New Media): Future in Advertising; Careers

Applied: Radio ad; Print ads – Newspapers/magazines – Product/info-ads; copy/layout/design; TV ad; Advertisements in New Media; PSA's

Module – III – Print Media – Newspapers & Magazines **(12 Hrs)**

Concepts: Brief history of Newspapers & Magazines; Types of Magazines & Newspapers; Layout/Design of Newspapers & Magazines; Reports – Different formats; Photography and Print

Applied: Creation of Magazine/Newspaper; Layout/composition

Module – IV – Radio & Music **(11 Hrs)**

Concepts: Brief History of Radio& Music; Radio Today: Internet and Music; Types of Radio Formats; Types of Music Formats; Digital Radio & Music; Future of Radio& Music; Careers

Applied: Radio Shows; Radio Editing; Radio Plays; Music and Composing

Module – V – Television, Cinema & Video **(11 Hrs)**

Concepts: Brief History of Broadcast TV & Cable TV; Cinematic History; Cinema & TV industry today; Future of TV & Cinema; Types of TV formats/shows etc; Types of Cinema; Internet and the Age of Streaming; Careers

Applied: TV Shows; Documentaries; Basic Shots; Editing; 3 Act movie; Short movie

Module – VI – Internet & New Media **(10 Hrs)**

Concepts: Brief History of Internet & New Media; Internet in the new age; Internet and Disruption; Mobile Phones; Blogging; Video games; New Media Careers; Future of the internet

Applied: New Media – Blogging, Podcasting, Social Media

Primary References:

1. Campbell, Richard. Martin, Christopher. Fabos, Bettina. Media & Culture – An Introduction to Mass Communication (8th Ed.). Bedford. 2012.
2. Dominick, Joseph. The Dynamics of Mass Communications (8thed.). Mcgraw-Hill, 2005.
3. Paxson, Peyton. Mass Communications and Media Studies – An Introduction. Continuum, 2010.
4. Thompson, Ray. Grammar of the Edit. Burlington: Focal Press,1993.

Secondary References:

1. Mcquail, Denis. Mass Communication Theory. Vistaar Publications. 2007.
2. The Associated Press Style Book and Libel Manuel Norm The A.P, 1994.
3. Hilliard, Robert. Writing for Television, Radio and New Media (Seventh Ed.). Wadsworth. 2006.
4. Pavlik, J.V. Media in the Digital Age. 2008.
5. Perry, David K. Theory and Research in Mass Communication. Lawrence Erlbaum Associates, 2002.
6. Ruberg, Michelle. Handbook of Magazine Article Writing. Writer's Digest. 2009
7. Stadler, Jane and McWilliam, Kelly. Screen Media – Analysing Film and Television. Allen & Unwin. 2009.
8. White, Ted. Broadcast News Writing, Reporting & Production. Macmillan.

Course Title: History of Western Art

Course Code: MDF-G6

Marks: 100

Credits: 04

Total Hours: 60

Course Objectives:

- To understand the functions of visual art in the periods covered in the course
- develop an understanding and appreciation of the art forms, media, iconography, styles, and techniques of western visual art as expressed in painting, sculpture, ceramics, and architecture
- To develop an appreciation of each work as an individual work with its own formal integrity
- To increase knowledge and understanding of yourself and others through your experience with western visual art

Course Outcomes:

CO1: Have an appreciation for the various art movements that happened through Europe

CO2: Identify artists with their works.

SYLLABUS

<u>Module – I – Ancient Art</u> **(08 Hrs)**

Art of ancient Egypt, Art of Pre-Dynastic Egypt (6000-3000 BC), Art of Dynastic Egypt, Characteristics of ancient Egyptian art, Art of Mesopotamia, Characteristics of Mesopotamian art, Prehistoric Mesopotamia, Historic Mesopotamia.

Module – II – Art of the classical civilizations **(14 Hrs)**

1230-100 BC: Greece: Ancient Greek art, 1900-1300 BC: The Minoan Period, 2000-1100 BC: The Mycenean Period, 1100-800 BC: The Greek Dark Ages, 800- 500 BC: The Archaic Period, 500-300 BC: The Hellenic Period, 300-50 BC: The Hellenistic Period, 700 BC-AD 325: Roman art, 700-500 BC: Etruscan, 150 BC-AD 150: Development of Greco-Roman Culture, 100-350: Early Christian Art, 150-350: The Late Roman Empire 325-1453: Byzantium: The Art of Byzantium

Module – III – The Art of the middle ages **(18 Hrs)**

Medieval Art 500–1400, Celtic art c. 1400 BCE, Viking Art c. 790-1100 CE, Romanesque Art 900-1200, Gothic Art 1100-1500, Late Gothic Art, Renaissance Art 1400–1600, Early Renaissance 1400-1494, High Renaissance 1494-1564, Mannerism 1527–1580, Northern Renaissance 1497, Dutch and flemish renaissance painting 1400–1523, Dutch Golden Age 1600, Baroque Art 1550-1700, Rococo 1699–1780, Neoclassicism 1750–1850, Romanticism 1790-1850.

Module – IV – The Art of the Modern Period

Realism 1850-1910, Art Nouveau 1890–1910, Impressionism 1865–1885, Post-impressionism 1885–1910, Fauvism 1900–1935, Expressionism 1905–1920, Cubism 1907–1914, Futurism, Supremativism, Constructivism, De Stijl, Dadaism, surrealism 1916–1950, Abstract Expressionism 1940s–1950s, Op Art 1950s–1960s, Pop Art 1950s–1960s, Minimalism 1960s–1970s, Conceptual Art 1960s–1970s, Contemporary Art 1970–present

Textbook:

1. Adams, Laurie. A History of Western Art. McGraw-Hill Education; 5 edition (October 15, 2010)

References:

1. Ward-Perkins, J. B. Roman Imperial Architecture. Yale University Press, 1994.
2. Henig, Martin. A Survey of the Visual Arts of the Roman World. Phaidon Press Ltd, 1983.
3. Robins, Gay. The Art of Ancient Egypt. Harvard University Press, 2008.

SEMESTER – II

Skill Component

Course Title: Vector Graphics

Course Code: MDF-SK4

Marks: 50

Credits: 02

Total Hours: 30

Course Objectives:

- To make the student learn to perceive, read and translate the visual world into digital forms.
- To train students to create small file size vector graphics.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the capabilities and functions of drawing, transformation and shape tools in a vector graphics software.

CO-2 Sketch virtual art using computer graphics software program.

CO-3 Apply skills in the combination of bitmapped and vector elements to create design work

CO-4 Create vector images using a graphic design software.

SYLLABUS

Module - I – Introduction to Vector Graphics **(10 Hrs.)**

Introduction to Vector Graphics - Overview of the software, core concepts and the essential workflows to create graphic illustrations.

Working with Documents –Create a document using preloaded templates or built in document profiles such as print, web & film.

Module – II – Working with Tools **(20 Hrs.)**

Working with Shapes & Symbols – Drawing basic shapes, working with drawing modes & perspectives. Selections, transforming shapes and working with symbols.

Working with Colours, Gradients & Patterns - Standard graphic tools for vector-based images. Creating point-based vector shapes and symbols. Colour wheel and gamut.

Working with Brushes, Styles & Effects - Tools palette and standard function. Defining and exploring brush parameters, styles setting and effects panels.

Working with Text - Exploring text and typography, base design workflow for designing object and subjects.

Automation Saving and Exporting - Learning core concept of various file association and parameter to control exporting illustrations for production.

Organizing Objects – Exploring the layer panel, creating new layers, sub layer, hiding and showing layers, merging layers, moving objects to another layer, isolation mode and working with ruler's guides and grids.

Textbook:

1. Adobe Press, Adobe Illustrator CC Classroom in a Book, Pearson Education India, 2014

References:

1. Kogent Learning Solution Inc., Illustrator CS6 Classroom in a Book, Pearson Education India, 2014.
2. https://helpx.adobe.com/illustrator/tutorials.html

Lab: Vector Graphics

Marks: 100

Credits: 04

Total Hours: 60

1.	Explore the workspaces; windows, panels and docks.	(02 Hrs.)
2.	Drawing shapes such as lines, rectangles, ellipses, polygons, stars, arcs, spirals and grids.	(08 Hrs.)
3.	Working with multiple artboards, tools and shapes.	(06 Hrs.)
4.	Working with colour and blending modes, RGB, CMYK, HSB, grayscale, colour spaces and gamut, spot and process colours.	(04 Hrs.)
5.	Working with gradients and strokes, layers, brushes, graphic styles and effects.	(08 Hrs.)
6.	Change the definition of a default character and paragraph styles, remove style overrides, delete character or paragraph styles.	(04 Hrs.)
7.	Importing, exporting and saving artwork into file formats, compressing – PDF, SWF, JPEG, PSD, PNG, TIFF, EPS, SVG.	(04 Hrs.)
8.	Use the shape builder tool to create new complex new shapes by merging simple shapes.	(06 Hrs.)
9.	Draw an object, assign either fill or stroke or both to it, paint similarly, and layer each new object on top of the previous ones.	(08 Hrs.)
10.	Create an envelope using either preset wrap shape or rectangular grid, and reshape the envelope.	(10 Hrs.)

Course Title: 3D Animation - II

Course Code: MDF-SK5

Marks: 50

Total Hours: 30

Credits: 02

Course Objectives:

- Use the basic knowledge acquired in combination with advanced level 3D modelling.
- Compose advance 3D animation characters for architecture, games, videos. Etc.

Course Outcomes: At the end of this course, students will be able to

CO-1 Identify the various modeling techniques.

CO-2 Associate how the different modeling techniques are used to model a 3D character.

CO-3 Model advanced 3D characters.

SYLLABUS:

Module – I - Advance Modeling in 3d Animation **(10 Hrs.)**

3D Assets Modeling - Creating different 3D asset types and function for modeling scene hierarchy. Understand core concept of developing inter portability asset modelling.

Nurbs Modeling - Exploring the non-rational B-spline techniques to build 3D objects from line projections. Understanding nurb isoparms, hulls and control vertex.

Patch Modeling - Overview of quad based patch geometric data for advance nurbs modeling. Explore the parameters and various operation like lathe, revolve, birail and planer.

Polygon Modeling - Create 3D advance objects with use of quad surface poly. Exploring different parameter of component level modeling like vertex edge and face. Learning the tools for sub level polygon operation like extrude bevel and various definitive.

Module – II - Material & Texturing and Virtual Camera **(10Hrs.)**

Standard Materials - Overview of shade materials to give colour perception to 3d objects. Using nodes and connectors to channel colour data for illuminating surface parametric representation.

Slate Material Editor - Explore one of the material controller sets of preset assembly. Learn to use compact node stack workflow for editing and making materials.

Compact Material Editor - Explore advanced material controller sets of preset assembly. Learn to use nonlinear node workflow for editing and making materials.

Material Modifier - Explore modifier functionality for controlling material look and development. Apply set of world space and object spec modifier to enhance colour data.

UV Mapping - Overview of processing 3D objects to retain and apply 3D image or procedural texture in 0 and 1 space of quad poly adaptation. Learn the workflow of setting and manipulating face coordinate to create world space UV coordinate for material and shading.

Concept of Virtual Cameras - Exploring the parameters and operation of cameras for rendering and final output. Overview of camera properties to control depth, colour, blur, material and scene content.

Module – III - Lighting, Rendering and Export **(10 Hrs.)**

Lighting Techniques - Overview of light panel with in depth study of standard and photo metric lights. Creating light lister and referencing for advance light probe techniques.

Standard and Photometric Lights - Core concept of virtual light paradigms operation and relation. Explore the illumination model in various spaces.

Atmospheric and Render Effects - Create background FX with render atmospheric tools. Learning the effects parameter functionality to control various effects for final render.

Rendering with Mental Ray - Overview of interface and operative nodes of Mental ray render engine. Learning advanced render algorithms Final Gather and Global illumination techniques. Explore core concept for calculating and finalising render outputs.

Composting with Video Elements - Exploring render data composition in various formats and assembly. Learn to manipulate and modify editable video data from composite render elements.

Video Post and Export - Learn video post dialogue parameter to modify edit and deliver for final production output.

Textbook:

1. Kelly L. Murdock, 3ds Max Bible 2012, John Wiley & Sons Inc., 2012

References:

1. Jeffrey M. Harper, Mastering Autodesk 3ds Max, John Wiley & Sons Inc., 2013.
2. Isaac V. Kerlow, The Art of 3D Computer Animation and Effects, John Wiley & Sons, 2009.
3. https://www.autodesk.com/education/home

Lab: 3D Animation – II

Marks: 100

Credits: 04

Total Hours: 60

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1. Converting spline modelling into polygon modelling. (04 Hrs.)
2. Creating of complex model using advance modelling tools. (10 Hrs.)
3. Building an exterior using NURBS, patch and polygon modelling. (06 Hrs.)
4. Understanding material editor in slate mode and compact material. (04 Hrs.)
5. Solving UV and create a map for a given model. (06 Hrs.)
6. Use max cameras to get the shot render from different angles. (06 Hrs.)
7. Light up the interior scene using standard light in MAX. (08 Hrs.)
8. Illuminate scene using photometric lights. (04 Hrs.)
9. Create a daylight system using mental ray. (04 Hrs.)
10. Take video output of a ten second after composting final scene. (04 Hrs.)

Course Title: Project - First Year End

Course Code: MDF-SK6

Marks: 150

Credits: 06

Hours: 90

Project - First Year End – Part A – (75 Marks)

- **Logo Creation:** The student should create a logo based of his choice.
- **Corporate Branding:** The student should create layouts and design a company's letterhead, envelopes, business cards, brochure, and banner stand.
    - Logo – 1 nos.
    - Corporate Branding – 5 nos.
        - Letterhead
        - Envelope
        - Business Card
        - Brochure
        - Banner Stand
- Creating a Design – 15 Marks
- Colour Scheme – 10 Marks
- Comprehension – 10 Marks
- Placements - 5 Marks
- Concept - 15 Marks
- Presentation - 20 Marks

Project - First Year End – Part B – (75 Marks)

Model a building architecture. Map the project and take the final output into photo realistic JPEG file.

- Creating a design – 10 Marks
- Modelling – 10 Marks
- Solving UVs – 10 Marks
- Texturing – 10 Marks
- Lighting – 10 Marks
- Rendering – 5 Marks
- Final Presentation – 20 Marks

SEMESTER III

General Education Component

Course Title: Art Appreciation
Course Code: MDF-G8
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

1. This course is an exploration of visual art forms and their cultural connections for the student with little experience in the visual arts. It includes a brief study of art history and in-depth studies of the elements, media, and methods used in creative processes and thought.
2. In this course, students will learn how to develop a system for understanding visual art in all forms.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Interpret works of art based on a system of analysis
CO-2 Demonstrate an understanding of the terminology and conventions of visual expression.
CO-3 Explain the processes involved in the artistic production, themes, and the political, social, cultural and aesthetic issues that artists examine in their work
CO-4 Explain the role and effect of visual arts in societies, history, and other world cultures.

SYLLABUS

Module – I – Definitions, Artistic roles, and Visual thinking **(06 Hrs)**

Form and content, Aesthetics, Subjective and Objective perspectives, Artistic roles, Artistic categories, Artistic styles, Cultural styles, Ideas of perception and Visual awareness.

Module – II – Process and Training **(08 Hrs)**

The Artistic process, The individual Artist, Artistic training methods, Art as a social activity

Module – III – How Art speaks - Finding meaning **(12 Hrs)**

Introduction: Objective VS Subjective meaning, The first level of meaning: Formal, The second level of meaning: Subject, The third level of meaning: Context, The forth level of meaning: Iconography, Critical Perspectives

Module – IV – How Art works **(10 Hrs)**

The Elements of Art, The Principles of Design

Module – V – Artistic media **(10 Hrs)**

Two - Dimensional media, The Camera, Three - Dimensional media, Architecture, Public Art, Performance

Module – VI – Our World **(12 Hrs)**

Identity, Self – Portraits, The Natural World, Social and Collaborative Art, Politics, Conflict and, War, Memorials, Peace

Module – VII – Other Worlds **(08 Hrs)**

Myths, Dreams, Spirituality

Textbook:

1. Fichner-Rathus, L. (2017). Understanding art. Australia: Cengage Learning.

References:

1. Rynck, P. D., & Alkins, T. (2004). How to read a painting: Lessons from the old masters. New York: Abrams.
2. An eye for art: Focusing on great artists and their work. (2013). Washington, D.C.: Presented by the National Gallery of Art.

Course Title: Business Communication
Course Code: MDF-G9
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- To develop and enhance communication skills that are required for the modern work-place
- To learn the dynamics involved in spoken communication, including non-verbal interaction
- To understand the essential elements of Written Communication as required in business activities.

Course Outcomes:

CO-1 To apply creative thinking abilities necessary for effective communication in the modern workplace situation
CO-2 To demonstrate clarity, precision, conciseness and coherence in use of language
CO-3 To learn how to make one's writing better, faster and more successful
CO-4 To produce successful documents in any given situation in different formats, while considering the writer's objectives, the reader's needs, the reader-writer relationship and the context.
CO-5 To increase personal confidence in delivering speeches to small & large audiences
CO-6 To understand and gain non-verbal skills essential to effective oral communication.
CO-7 Make proper presentations that disseminate information, conduct negotiation and use persuasion.

SYLLABUS

Module – I – Overview of Business Communication – I **[7Hrs]**
Process of Communication, Levels of Communication, Communication Networks (formal & informal)

Module – II – Overview of Business Communication – II [7Hrs]
Barriers to Communication, strategies to avoid miscommunication.

Module – III - Non-verbal communication [7Hrs]
Non-verbal communication, Interpretation & Effectiveness

Module – IV – Interpersonal communication [8Hrs]
Small Talk & Group communication

Module – V – Rhetorical communication **[6Hrs]**
Negotiation & Persuasion skills

Module – VI – Public Speaking & Presentation **[10Hrs]**
Public Speaking: Preparation for Public Speaking, Speech Writing, Delivery of Speech, Types of Speeches, Professional Presentations, Anxiety Management.

Module – VII – Written Communication **[7Hrs]**
Effective Writing: Principles & strategies, Technical Writing

Module – VIII – Business Writing **[8Hrs]**
Business communication: Emails, Memos, Letters, Reports, Proposal

Textbooks:

1. K. K. Sinha - Business Communication - Galgotia Publishing Company, New Delhi.
2. C. S. Rayudu - Media and Communication Management - Himalaya Publishing House, Bombay.

Reference Books

1. Rajendra Pal and J. S. Korlhalli -Essentials of Business Communication - Sultan Chand & Sons, New Delhi.
2. Nirmal Singh - Business Communication (Principles, Methods and Techniques) Deep & Deep Publications Pvt. Ltd., New Delhi.
3. Dr. S.V. Kadvekar, Prin. Dr. C. N. Rawal and Prof. Ravindra Kothavade -Business Communication - Diamond Publications, Pune.
4. R. Sharma, Krishna Mohan Business Correspondence and Report Writing - Tata McGraw-Hill Publishing Company Limited, New Delhi

Course Title: Cyber Security
Course Code: MDF-G10
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- To develop awareness and understand the concept of Cyber Security.
- To understand the aspects related to Cyber Security.
- To take measures to protect individual privacy and prevent loss/theft of data.

Course Outcomes:

CO-1 Understand the working of a computer network.
CO-2 Be aware of the various measures that need to be taken in order to protect data.
CO-3 Able to understand various forms of crimes in cyber world.
CO-4 Gain knowledge about various rights given to the individual to protect their intellectual property.

SYLLABUS

Module – I – Basics of Computer Networking **[12Hrs]**

Networking basics, why networking of computer is needed, Introduction to Wireless networks, Internet – role and importance, IP Addressing– public Vs Private, Static Vs Dynamic, www & related protocols.

Module – II – Emerging threats in Cyber Space **[12Hrs]**

Threats in Cyber Space, Classification of threats, BYOD and portable devices threats, 0-day attacks, insider threats, Cyber Warfare, Malware threats, mobile apps threats. Social media and its safe usages: Social media- its usages, Social Networking - types, usages, importance, social networking safety.

Module – III – Online Privacy **[10Hrs]**

Privacy – basic concepts, Sensitive personal information, Privacy policies (case study of Google/Facebook or any other privacy policies), Privacy laws, IPR, Ethics & safe practices.

Module – IV – Cyber Crimes – An Introduction **[10Hrs]**

Introduction – Types of cyber crimes (Phishing, Social Engineering, Denial of Service, Cyber stalking, ID-theft, etc), How to report cyber crimes, its impact– social, personal, financial; Cyber Terrorism.

Module – V – Cyber Laws **[8Hrs]**

Evolution and purpose, offense; defense, bailable and non-bailable offenses, provisions related to e-commerce, provisions for cyber crimes, adjudicating officers, CERT-IN-its role and powers

Module – VI – Cyber Forensic **[8Hrs]**

Data recovery, evidence collection, cloning of devices, media sanitization

List of suggested Activities

1. Connecting to Network, Sharing directories.
2. Connecting to shares, Set up a common storage.
3. Advanced Networking: Identify IP address, ping
4. Set up a basic firewall, Setup a wireless n/w, Set up a security level, Setup free online backup
5. Setting up and maintaining the laptop, data storage devices and smart phone.
6. Ensuring secure-environments wrt online shopping, wi-fi networks, passwords, social networking and online banking)

Reference Books:

1. Rick Lehtinen and G.T. Gangemi, Computer Security Basics, O'Reillly Media, Inc.,2nd edition, 2006

2. Wall, David, Cybercrime: The Transformation of Crime in the Information Age. Polity Publishing, 2007.

3. Michael Cross, Scene of the Cyber Crime: Cyber Forensics Handbook, Syngress Publishing, 2ndEdition, 2002.

4. Chander, Harish, CyberLaws and IT Protection, Prentice Hall IndiaLearning, 2012

SEMESTER III

Skill Component

Course Title: Digital Photography
Course Code: MDF-SK7
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. The course in Photography is specifically designed to equip with the comprehensive knowledge and skills that are essential in order to achieve your photographic goals.
2. The course is geared towards aspiring professionals and passionate enthusiasts. This course starts you on the path to a successful career in the field of photography and develop to craft your skill as an enthusiast.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Plan and execute the creation of photographic imagery following an iterative process of research, ideation, visualization, analysis, production and evaluation.
CO-2	Develop visual communication concepts for specific purposes and audiences.
CO-3	Incorporate the knowledge of photography theories, principles and historical practices into the conceptualization and development of effective photographs.
CO-4	Create a business plan to support the development and on-going operation of a photography business.

SYLLABUS

Module - I - Fundamentals of Photography **(05 Hrs)**

History of Photograph – History and origin of photography. Knowing the working of old cameras.

Introduction to Photography – General functioning and features of cameras.

Exposure - ISO, aperture, shutter speed, metering and composition

A Guide to Manual Settings - Using all the functions of a camera in manual mode with emphasis on focus and exposure.

Module - II – Advanced Technique in Photography **(15 Hrs)**

Characteristics of Light - Knowing the behavior of light on different materials, its implications in clicking a good photo

Lighting – Different types of lighting such as studio lighting, lighting for portraits. Use of pro light equipment to capture images

Travel Photography – Detailed checklist and type of kit used for travel. Planning and Shooting on location.

Product Photography – Compose beautiful and structured food captures that make best use of lighting, surfaces, accents, and more.

Module - III – Photo Editing Techniques **(10 Hrs)**

Digital Editing Photography Software – Understanding & working with photo editing software

Portrait Photography - Extreme close-up photo retouching. With the help of a software students will learn to clean & smoothen out portrait images.

Photo Manipulation Techniques - Compiling many images into one using editing software

Fashion Photography – Using photo editing software for saturation, hue and luminance of color.

Photography Marketing Business – Understanding the marketing concepts of photography. Market demand for wedding and magazine photos.

Textbook:

1. Luck, S. (2017). Illustrated Practical Guide to Digital and Classic Photography. London: Anness Publishing.

References:

1. Peterson, B. (2016). Understanding exposure: How to shoot great photographs with any camera. Berkeley, CA: Am Photo Books, an imprint of the Crown Publishing Group.
2. Hunter Fil, Biver Steven, & Fuqua Paul. (2015). Light: Science & Magic. New York: Focal Press.

Lab: Digital Photography
Marks: 100
Credits: 4
Total Hours: 60

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1. Shooting on auto mode and understanding the functions of camera. (02 Hrs)
2. Working on ISO shutter speed and aperture (10 images on each topic). (06 Hrs)
3. Light metering – Spot meter, centre meter and overall metering. (04 Hrs)
4. Shooting candid pictures (10 photos). (08 Hrs)
5. Shooting product with presentation (10 pictures). (08 Hrs)
6. Adjusting levels, curves, saturation, brightness and contrast. (06 Hrs)
7. Shooting 10 portraits and retouching in photo editing software. (08 Hrs)
8. Shooting multiple images and compiling in the software. (06 Hrs)
9. Model shoot and editing for saturation, hue and luminance. (06 Hrs)
10. Composing group pictures and changing background. (06 Hrs)

Course Title: Digital Cinematography - I
Course Code: MDF-SK8
Marks: 50
Credits: 02
Total Hours: 30

Course Objectives:

1. This course is aimed at developing a fundamental understanding of videography, the different techniques and rules involved and the workings of a camera, both indoor and outdoor.
2. The course also aims at laying a foundation to students' understanding of the vocabulary of cinematography, thus allowing them to transform a written script into a visual story.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Understand the basic rules and methods used in film production in various film industries
CO-2 Analyze story structure and the screenwriting process for use in the critique and creation of film.
CO-3 Understand and apply cinematography practices to tell a visual story.

SYLLABUS:

Module – I: Fundamentals of Digital Cinematography (10 Hrs)

Types of Cameras - Understanding different types of video cameras and selection process for different types of shoots.

Shooting Methods – Following the film production rules based on Hollywood and Bollywood.

Visual Language – Understanding angles and visual composition. Understanding bog and low shots

Language of the Lens - Understanding all cine lens with different apertures. Knowing when to replace your lens according to the shot.

Cinematic Continuity - Maintaining the continuity by following the 180 rule. Understanding cross over shoots.

HD Cinematography - Understanding resolution and quality of video. Which format to use on the camera.

File Format – Understanding all the types of video formats eg.4k, 2K, UHD with pixel and lines.

Module – II: Exposure and Composition (20 Hrs)

Exposure - ISO, Aperture and Shutter, Metering. This will help students get proper metering for images.

Camera Movement –Understanding the use of tripod, track, dolly and crane. Understanding pan, tilt, pull in and out.

Image Control – Balancing the ratio and rules, rule of thirds and learning perspective.

Color Balance – Learning Hue, Saturation and White Balance. Getting proper color by balancing the whites of your image.

Textbook:

1. Malkiewicz, J. K., & Mullen, M. D. (2005). Cinematography. London: Simon & Schuster

References:

1. Wheeler, P. (2013). Digital Cinematography. Oxford: Focal Press.
1. BROWN, B. (2016). Cinematography: Theory and practice: Image making for cinematographers & directors. New York: Routledge.

Lab: Cinematography - I
Marks: 100
Credits: 4
Total Hours: 60

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1. 30 second video clip to be shot on mobile phones. (02 Hrs)
2. Making ad film on two different types of cameras, DSLR and camcorder. (06 Hrs)
3. Shooting interview with different angles such as over shoulder, two shot, close up, mid shot, low shot. (08 Hrs)
4. Shooting a scene using different lenses. (06 Hrs)
5. Shooting a scene using gimble and trolley. (06 Hrs)
6. Shooting a documentary using different camera formats. (08 Hrs)
7. Making a 1-minute short film. (08 Hrs)
8. Taking shots using a crane. (08 Hrs)
9. Shooting a day time scene with different light temperatures. (04 Hrs)
10. Shooting a night time scene with different light temperatures. (04 Hrs)

Course Title: Video Editing
Course Code: MDF-SK9
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. The course will familiarize students with what editors do. Video editing has moved from time-consuming tape-to-tape linear video editing systems to powerful computer hardware and video editing software.
2. Video editing is essentially the process of editing segments of motion video production footage by cutting, trimming and overlaying them, and adding special effects and sound recordings.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Acquire basic skill set to build presentable sequences with video clips provided and export to compressed video files for upload to various media
CO-2	Understand fundamental concepts of creating and editing videos for different media
CO-3	Be familiarized with the user interface and work efficiently with video editing software
CO-4	Edit and compress video for use in various delivery modes of digital media using standard digital video editing software.

SYLLABUS

Module – I: Fundamentals of Video Editing **(05 Hrs)**

Understanding different shot, scene, sequence, rules of video editing.

Type of Shots –Standard, jump, L cut & J cut, Wide Shots, Mid shots, Close ups, Cutaways and more.

Understanding Rules of Videography – Framing of the video, rule of thirds, types of shots, cropping and framing, subject headroom.

Different Types of Editing Techniques – Types of Edits and significance. Techniques such as montage, cross dissolve, wipe, and parallel editing.

Module – II: Fundamentals of Video Editing **(15 Hrs)**

Introduction to video editing software - Creating a new file and the various tools of the software.

Setting up a Project & importing footage – Creating a new project, choosing a sequence preset and editing. Learning to import footage from original source clips.

Essentials of Video Editing – Working with clips & creating sequences in the source monitor. Using of essential editing commands and understanding tracks.

Working with Clips, Markers, Files and Formats – Using markers, comparing program monitor with source monitor. Removing clips from a sequence and understanding the various output files and formats.

Transitions and Video Effects – Adding video transitions and applying fine-tuned transitions to multiple clips, using the effect presets and working with key framing effects.

Working with Motion Clips – Adjusting motion effects for clips and changing clip size for adding rotation. Enhancing motion with shadows and bevelled edges. Working with key frame interpolation.

Multi-Camera Edit – Synchronizing clips based on audio. Creating multi-camera target sequences, switching between multi camera edit and finalizing a multi camera-editing project.

Module - III – Advanced Video Editing **(10 Hrs)**

Compositing Techniques – Different compositing techniques using the alpha channel. Working with opacity and green screens.

Audio Mixing and Balancing – Working in the audio workspace, adjusting clip audio volume. Using audio levels in a sequence and using the audio clip mixer.

Creating Titles – Working with Video typography, using the titler window and creating titles. Working with shapes, logos, text roll and stylizing text.

Exporting Frames, Clips & Sequences – Exporting single frames, creating movie image sequence and audio files, exporting to final cut pro and avid media composer.

Textbook:

1. Jago, M. (2019). Adobe Premiere Pro CC Classroom in a Book (2019 Release). Adobe Press.

References:

1. Ken Dancyger, The Technique of Film and Video Editing: History, Theory, and Practice, Focal Press, 2010.
2. Murch, W. (2001). In the blink of an eye: A perspective on film editing. Los Angeles: Silman-James Press.

SEMESTER IV

General Education Component

Course Title: Film Appreciation
Course Code: MDF -G12
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. To enhance the students' understanding of the filmmaking process in all its dimensions including aesthetic, creative, communicative and commercial.
2. To impart skills in appreciating an audio-visual work, grasping the impact of its diverse elements and understanding its importance to the story being told.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Recognize types of films, their impact on society, and their roles in our lives
CO-2	Recall concepts such as sound, lighting techniques, script, editing, etc. and how they impact a film
CO-3	List the roles of directors, critics in the film industry
CO-4	Identify the works of prominent film directors of different genres and various editing styles.

SYLLABUS

Module -I – Understanding Cinema **(08 Hrs)**

Genres of Films, Cultural significance in relation to Film, how the medium is influenced by other mediums, Film Screening.

Module-II – Study of Iconic Film Directors and their styles **(10 Hrs)**

Case Studies on the works of: Satyajit Ray, V Shantaram, Ingmar Bergman, George Lucas, Fredrico Fellini, Steven Spielberg, Majid Majidi, Akira Kurosava, etc.

Module-III – Introduction to Film theories & Important Movements **(12 Hrs)**

Feminist film theory, Realism Movement, Neo Realism movement., new wave, white telephone. Understanding audience psychology, History of cinematography- cameras, type of shots, script writings, some case studies of scripts Charulata- by Ray, Short film trends and digital Film making as an overview

Textbook:

1. Manchel, F. (1990). Film study: An analytical bibliography. Rutherford: Fairleigh Dickinson University Press

References:

1. Doraiswamy, R., & Padgaonkar, L. (2010). Asian film journeys: Selections from Cinemaya. New Delhi: Wisdom Tree.
2. Kawin, B. F. (1992). How Movies Work. Berkeley, CA: University of California Press.
3. Cavell, S. (1995). The world viewed: Reflections on the ontology of film. Cambridge, MA: Harvard Univ. Press.

Course Title: Print Advertisement
Course Code: MDF-G13
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

1. To understand advertising in the form of traditional print media and recognize the impact of advertising on society.
2. To assess the import of print advertising in the age of digital media and leveraging the digital space for traditional advertising techniques.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Learn the different phases involved in a print campaign
CO-2 Identify and foresee the various existing and upcoming avenues available in the field of print advertising
CO-3 Learn how to effectively use this information to create and sustain a brand image.

SYLLABUS

Module – I – Introduction to Print Advertisement **(06 Hrs)**

Introduction to print media, identifying the different forms of print media currently available and the influence of advertisement on the modern society.

Module – I – History of Print Media **(08 Hrs)**

The history, designs and techniques used in early printing and the impact print media has had on advertising.

Module – II – Types of Print Advertisement Mediums **(06 Hrs)**

Identifying the different types of advertising mediums in print media available and measuring their effectiveness in the market.

Module – III – Key Players in Print Advertising **(08 Hrs)**

Identifying the different stake holders involved in print advertising and understanding the roles played by them in creating an advertisement.

Module – IV – The Impact of Digital Media on Print Advertisement **(10 Hrs)**

The advantages and disadvantages of Digital Media with respect to print advertisement. How to identify potential avenues to publish print advertisement.

Module – V – Steps involved in Development of an Advertisement **(10 Hrs)**

Identifying the different phases involved right from conceptualization to developing a print campaign.

Module – VI – Printing and Publishing **(12 Hrs)**

This section covers graphics, illustrations, composition & layout for print design.

Textbook:

1. James S. Norris, Advertising, Prentice-Hall, 4nd edition, 1991.

References:

2. Belch, Advertising and Promotion: An Integrated Marketing Communications Perspective, McGraw Hill Education; Ninth edition, 2017.
3. William Wells, John Burnett, Sandra Ernst Moriarty, R. Charles Pearce, Advertising: Principles and Practice, Prentice Hall, 1989.

Course Title: Personality Enhancement
Course Code: MDF -G14
Marks: 100
Credits: 04
Total Hours: 60

Course Objective:

- Enable students to develop and enhance their presentation skills that are required for the present day work environment themselves well and help them build their self confidence.
- To enhance their soft skills of confidence building, self esteem and self image through personal grooming & social etiquette.
- To understand and learn techniques of non verbal communication to maintain healthy relationships at workplace.
- Develop skills required for self motivation and managing stress in a competitive environment.

Course Outcomes:

CO-1 To learn to present themselves well and positively influence other people's perceptions of them in a business environment.
CO-2 To project the right self image and behavioral etiquette by being well groomed.
CO-3 To learn soft skills like good manners, empathy, ability to collaborate and negotiate and develop etiquettes that are needed in a social and business setting.
CO-4 To build a positive body language to appear more approachable, confident and professional.
CO-5 To understand and learn techniques required to sustain good mental health for everyday functioning.

SYLLABUS

Module – I - Self Assessment, Self Acceptance, Self Esteem and Confidence [4Hrs]

Building a positive image of yourself, knowing yourself, gaining self confidence and self esteem.

Module – II – Body Language-Posture and Gestures **[6Hrs]**

Presenting a positive image through non-verbal communication

Module – III – Etiquette/Protocol, Dressing-up, Hygiene, Diet and Exercise **[10Hrs]**

Expected etiquettes in a business setting

Module – IV – Team Work and Character building **[8Hrs]**

Skills development for a team player, leadership and developing good values

Module – V – Motivation **[8Hrs]**

Positive and negative motivation; Internal and external, motivated performance and

Reinforcement

Module – VI – Conflicts and Stress Management **[12Hrs]**

The art of prioritizing and scheduling. Causes and consequences of conflicts; methods of conflict resolution. Causes of stress at workplace; Stress (its effects, causes and ways of coping with stress), Recognizing emotions and values of regulating emotions.

Module – VII – Understanding Emotions **[12Hrs]**

Emotions: Feeling, Thinking, and Communicating, Theories of emotion: James-Lange, Cannon Bard, Schachter-Singer and Lazarus. Motivation: Nature and types; need hierarchy model.

Textbooks:

1. Barun Mitra "Personality Development and Soft Skills", Oxford Second Edition (2016).

2. Elizabeth Hurlock "Personality Development" McGraw Hill Education (2017)

SEMESTER IV

Skill Component

Course Title: Digital Cinematography – II
Course Code: MDF SK-10
Marks: 50
Credits: 02
Total Hours: 30

Course Objectives:

1. To understand the nature of light with respect to foreground and background.
2. To master the art of creating visually appealing shots using advanced cinematography techniques.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Understand characteristics of light and use of various lighting techniques to compose a visually appealing shot
CO-2	Acquire skills needed to successfully transform a storyboard into a shot.
CO-3	Gain understanding of fundamental aesthetic and conceptual approaches to digital cinematography.
CO-4	Critically observe, analyse and translate between real world lighting and motion picture lighting.

SYLLABUS

Module – I - Lighting Technique **(18 Hrs)**

Lighting Basic: learning the characteristic of motion light, understanding the location and vision and also learning fill light, directional light and more.

Lighting Sources: Learning about natural light and artificial light and use at the locations.

Types of Light: Learning about Day light and Tungsten light and the appropriate situations to use them, understanding the mood of the shot and different light equipment for various locations.

Tools of Lighting: Learning to use various tools like the diffuser, reflectors and cutters. These tools help the students to modify the light sources.

Technique for Indoor and Outdoor Lighting: Lighting design process.

Module – II - Advance Cinematography **(12 Hrs)**

Advanced lighting techniques, concepts of Color Temperature, Light metering, Transferring file and Function of storyboarding

Textbook:

2. Malkiewicz, J. K., & Mullen, M. D. (2005). Cinematography. London: Simon & Schuster

References:

2. Wheeler, P. (2013). Digital Cinematography. Oxford: Focal Press.
2. BROWN, B. (2016). Cinematography: Theory and practice: Image making for cinematographers & directors. New York: Routledge.

Lab: Cinematography-II
Marks: 100
Credits: 4
Total Hours: 60

1.	Analysis of light using Spotlight (backlighting, One-point & Key lighting)	(06 Hrs)
2.	Analysis of light using Kino flo (Face, ambient and interview lighting)	(04 Hrs)
3.	Analysis of light using Solar & Multi20 (Ambient & long-distance lighting)	(06 Hrs)
4.	Time based light metering.	(04 Hrs)
5.	Taking shots using day light and tungsten lights.	(08 Hrs)
6.	Monitoring changes to temperature using day light and tungsten filters.	(06 Hrs)
7.	Maintaining light metering for motion pictures.	(04 Hrs)
8.	Using storyboard to conduct photoshoot.	(10 Hrs)
9.	Studying effects of frame rates on pictures. (24fps, 50fps, 60fps, 120fps)	(08 Hrs)
10.	Creating backups and maintaining files post shoot.	(04 Hrs)

Course Title: Audio Editing
Course Code: MDF SK-11
Marks: 50
Credits: 02
Total Hours: 30

Course Objective:

1. To expose students to the technology adopted in construction of music for films, TV, advertisements, music albums, etc**.**
2. To give the students hands-on experience with the workings of an audio studio and the process of creating sound files for films and animation.

Course Outcomes: At the end of the course, the students will be able to:

CO-1	Get familiarized with a digital audio interface (DAW) to facilitate efficient editing
CO-2	Learn to record, edit and superimpose audio files on video presentations and animations.
CO-3	Demonstrate critical decision making as used in a mixdown session
CO-4	Make informed judgements as to the quality of a sound recording through analysis of the audio signal.

SYLLABUS

Module – I - Sound Editing in Audio Editing software **(06 Hrs)**

Introduction to Audio Editing software – Basic to intermediate features, including tips and techniques using the software for a wide variety of projects.

Module - II - Audio Interfacing **(08 Hrs)**

Software Environment – Create custom workspaces, arrange panels, using the media browser and using markers in waveform editor or a session in the multi-track editor.

Basic Sound Editing – Select a portion of a waveform; cut, copy, paste, mix and remove silence audio; extend and shorten pieces of music and create loops with music files.

Signal Processing – The effects rack, apply effects to audio, adjust parameters & simulate different instrument amps.

Audio Restoration – Remove hiss or preamp noise, reduce level of clicks, undesired artefacts. Using restoration tools to modify instrument loops.

Module - III - Sound Developing **(06 Hrs)**

Mastering – Effects to improve sound output, applying EQ to reduce "mud", Applying dynamics and altering stereo imaging.

Sound Design – Learn to apply extreme processing to sounds, create special effects, use pitch shifting and use the Doppler effect

Recording Multiple Files – Learn record files in waveform editor, multi-track editor and create custom templates.

Multitrack Editor Orientation – Integrating waveform and multi-track editors. Edit track level and apply EQ, effects. Mapping of effects channels and setting up side change effects.

Multitrack Mixer View – Learn how to switch from the multitrack editor to the mixer view, adjust mixer feeder, differentiate among channel types and rearrange the mixer channel order.

Module - IV - Sound Mixing and Enhance **(10 Hrs)**

Editing Sound Clips – Learn how to use crossfading, expert mixes, pan individual clips and apply global clip stretching. Extending clips via looping.

Recoding in the Multitrack Editor – Assigning track to audio interface inputs to record into a multi-track editor. Monitoring interface input while recording. Setting up the metronome, recording and overdub.

Automation – Automating Volume, pan and effect changes within clips. Using key frames to edit automation envelopes. Automating mixer fader and pan control moves.

Scoring Audio to Video - Loading video preview files into audition. Alter software tempo to create "hit points". Creating a soundtrack music bed. Synchronize ADR (dubbed) dialogue with original dialogue.

Audio Dubbing – Overview of fundamentals and techniques to record vocals, music and instrument for post-production. Vocal production technique or dubbing introduces editing and

mixing popular DAWS, doubling effect for additional texture, vibes, auto-tunes, melodyne and isotope VSTS. Exploring the application and implementation of EQ, compression, reverb, delay, and automation.

Final Mixing and Exporting- Test room acoustics, optimize tracks to mesh, setting up the mixing environment, creating clip groups and exporting the completed tracks in various formats.

Textbook:

1. Anderton, C. (2013). Adobe Audition CC: Classroom in a book. San Jose, CA: Adobe Press.

Reference Books:

1. Riley, R. (2008). Audio editing with Adobe Audition. Merton: PC Publishing.

Lab: Audio Editing
Marks: 100
Credits: 4
Total Hours: 60

1.	To get familiarized with an audio studio set up	(02 Hrs)
2.	Managing audio studio equipment	(04 Hrs)
3.	Create a basic recording setup and signal flow	(04 Hrs)
4.	To get familiarized with DAW	(06 Hrs)
5.	To record a voiceover using DAW	(06 Hrs)
6.	Applying EQ, Compression, Limiter	(06 Hrs)
7.	Applying Gate, Reverb, Delay and Automation	(08 Hrs)
8.	Editing, Mixing and enhancing audio file.	(10 Hrs)
9.	Mastering the audio file	(08 Hrs)
10.	How to mix down the project file	(06 Hrs)

Course Title: Project - First Year End
Course Code: MDF-SK12
Marks: 150
Credits: 06
Hours: 90

- **Short Film:**
  Students have to capture raw footage from various angles and lighting conditions and then convert it into a short film with dubbing, mixing & background score.

Semester	Course Title	Existing (Indicate only the unit where the change	Changes Proposed	Specify the reason for the change
I	**VFX-SK1 / MDF-SK1**	Course titled "**Drawing and Painting**"	Removed topics: Content, Aesthetics, Art Criticism, Symbolism	Removed from "Drawing and Painting" to void repetition of course content in "Art Appreciation"
I	**VFX-SK1 / MDF-SK1**	Course titled "**Drawing and Painting**"	Removed module - III - Digital Painting	Removed to Accommodate more time for module - II - Fundamentals of Drawing
I/II	**VFX-SK3A / MDF-SK3A**	Course titled "**Vector Graphics - Illustrator**"	Removed from syllabus, replaced with Raster Graphics	Removed from syllabus, replaced with Raster Graphics; now shifted to VFX-SK5A / MDF-SK5A as "Vector Graphics"
I/II	**VFX-SK5A / MDF-SK5A**	Course titled "**Creative Design & 2D Animation**"	Removed from syllabus, replaced with Vector Graphics	Removed from syllabus, replaced with Vector Graphics
Course Structure			Rearrangement of courses all across the semesters	To accommodate common courses with B.Voc. Software Development; adequate placement of courses.

ANNEXURE – II

Parvatibai Chowgule College of Arts and Science

(Autonomous)

DEPARTMENT OF APPLIED AND PROFESSIONAL STUDIES

B. Voc(Multimedia – Digital Filmmaking)

Program Structure

(Multimedia – Digital Filmmaking)

2020 – 2021

Parvatibai Chowgule College of Arts and Science
Autonomous

DEPARTMENT OF B.VOC

COURSE STRUCTURE

THREE YEAR B.VOC DEGREE COURSE IN MULTIMEDIA AND DIGITAL FILMMAKING
2020-2021

Semester	General Education Component			Skill Component		
I	**MDF-G1** Language Paper	Theory Credits 4	Practical ---	**MDF-SK1** Drawing & Painting	Theory Credits 2	Practical Credits 4
	MDF-G2 Introduction to Creative Writing	Theory Credits 4	Practical ---	**MDF-SK2** 3D Animation-I	Theory Credits 2	Practical Credits 4
	MDF-G3 History of Indian Art	Theory Credits 4	Practical ---	**MDF-SK3** Raster Graphics	Theory Credits 2	Practical Credits 4
II	**MDF-G4** Academic Writing	Theory Credits 4	Practical ---	**MDF-SK4** Vector Graphics	Theory Credits 2	Practical Credits 4
	MDF-G5 Introduction to Digital Mass Media	Theory Credits 4	Practical ---	**MDF -SK5** 3D Animation-II	Theory Credits 2	Practical Credits 4
	MDF -G6 History of Western Art	Theory Credits 4	Practical ---	**MDF -SK6** Project - First Year-End	Theory ---	Practical Credits 6
Outcome	1) Art Setter 2) Graphic Designer 3) DTP Operator 4) 2D Animator 5) 3D Animator 6) 3D Visual Architect					

Semester	General Education Component			Skill Component		
III	**MDF -G7** Environmental Studies-I	Theory Credits 2	Practical ---	**MDF -SK7** Digital Photography	Theory Credits 2	Practical Credits 4
	MDF -G8 Art Appreciation	Theory Credits 2	Practical ---	**MDF -SK8** Digital Cinematography-I	Theory Credits 2	Practical Credits 4
	MDF -G9 Business Communication	Theory Credits 4	Practical ---	**MDF -SK9** Video Editing	Theory Credits 2	Practical Credits 4
	MDF -G10 Cyber Security	Theory Credits 4	Practical ---			
IV	**MDF -G11** Environmental Studies-II	Theory Credits 2	Practical ---	**MDF -SK10** Digital Cinematography-II	Theory Credits 2	Practical Credits 4
	MDF -G12 Film Appreciation	Theory Credits 2	Practical ---	**MDF -SK11** Audio Editing	Theory Credits 2	Practical Credits 4
	MDF -G13 Print Advertising	Theory Credits 4	Practical ---	**MDF -SK12** Project - Second Year-End	Theory ---	Practical Credits 6
	MDF -G14 Personality Enhancement	Theory Credits 4	Practical ---			
Outcome	1) Video Editor 2) Studio Coordinator 3) Studio Recordist 4) Sound Designer 5) VFX/SFX Engineer 6) Graffer 7) Focus Puller 8)Audio –Visual Supervisor					

Semester	General Education Component			Skill Component		
V	**MDF -G21** Intellectual Property Rights	Theory Credits 4	Practical ---	**MDF -SK13** Motion Graphics-I	Theory Credits 2	Practical Credits 4
	MDF -G16 Film Studies	Theory Credits 4	Practical ---	**MDF -SK14** Pre-Production	Theory Credits 2	Practical Credits 4
	MDF -G17 Digital Marketing	Theory Credits 4	Practical ---	**MDF -SK15** Production & Distribution	Theory Credits 2	Practical Credits 4
VI	**MDF-G20** Entrepreneurship	Theory Credits 4	Practical ---	**MDF -SK16** Internship	Theory ---	Practical Credits 6
	MDF -G22 Production Management	Theory Credits 4	Practical ---	**MDF -SK17** Motion Graphics-II	Theory Credits 2	Practical Credits 4
	MDF -G23 Direction for Acting and Films	Theory Credits 4	Practical ---	**MDF -SK18** Advance Video Production	Theory Credits 2	Practical Credits 4
Outcome	1) Roto Artist 2) Production Designer 3) Junior 3D Compositor 4) Motion Graphics Designer 5) Screenplay artist 6) Storyboard artist 7) Script/ Story Writer					

Internship to be undertaken during end semester breaks. (End of 5th Semester onwards)

Parvatibai Chowgule College of Arts and Science (Autonomous)

Course Structure

B.Voc. Multimedia – Digital Filmmaking

2020-21

Parvatibai Chowgule College of Arts and Science
Autonomous

DEPARTMENT OF B.VOC

COURSE STRUCTURE – SEMESTER V & VI

THREE YEAR B.VOC. DEGREE COURSE IN MULTIMEDIA - DIGITAL FILMMAKING
2020-2021

Semester	General Education Component			Skill Component		
V	**MDF -G21** Intellectual Property Rights	Theory Credits 4	Practical ---	**MDF -SK13** Motion Graphics-I	Theory Credits 2	Practical Credits 4
	MDF -G16 Film Studies	Theory Credits 4	Practical ---	**MDF -SK14** Pre-Production	Theory Credits 2	Practical Credits 4
	MDF -G17 Digital Marketing	Theory Credits 4	Practical ---	**MDF -SK15** Production & Distribution	Theory Credits 2	Practical Credits 4
VI	**MDF-G20** Entrepreneurship	Theory Credits 4	Practical ---	**MDF -SK16** Internship	Theory ---	Practical Credits 6
	MDF -G22 Production Management	Theory Credits 4	Practical ---	**MDF -SK17** Motion Graphics-II	Theory Credits 2	Practical Credits 4
	MDF -G23 Direction for Acting and Films	Theory Credits 4	Practical ---	**MDF -SK18** Advanced Video Production	Theory Credits 2	Practical Credits 4
Outcome	1) Roto Artist 2) Production Designer 3) Junior 3D Compositor 4) Motion Graphics Designer 5) Screenplay artist 6) Storyboard artist 7) Script/ Story Writer					

Internship to be undertaken during end semester breaks. (End of 5th Semester onwards)

Parvatibai Chowgule College of Arts and Science
(Autonomous)

Department of B.Voc Multimedia-Digital Filmmaking - MDF
Syllabi of Semester V & VI
2020-21

SEMESTER V

T.Y.B.Voc in MDF – Semester V– General Education Component
Course Title: Intellectual Property Rights
Course Code: MDF-G21
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To introduce fundamental aspects of Intellectual property Rights to students who are going to play a major role in the development and management of innovative projects in industries.
- To disseminate knowledge on patents, the patent regime in India and abroad and registration aspects.
- To disseminate knowledge on copyrights and its related rights and registration aspects.
- To disseminate knowledge of trademarks and registration aspects.
- To disseminate knowledge on Design, Geographical Indication (GI), Plant Variety and Layout Design Protection, and their registration aspects.
- To be aware of current trends in IPR and Govt. steps in fostering IPR.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Know about patent and copyright for their innovative & research works.
CO-2 Know the use of patent documents and providing useful insight into the novelty of ideas from state-of-the-art search.
CO-3 Pave the way to choose Intellectual Property (IP) as a career option.
CO-4 Gain knowledge for developing ideas or innovations

Syllabus:

Unit I: Overview of Intellectual Property **(15 hours)**

Introduction and the need for intellectual property right (IPR) - Kinds of Intellectual Property Rights: Patent, Copyright, Trade Mark, Design, Geographical Indication, Plant

Varieties and Layout Design – Genetic Resources and Traditional Knowledge – Trade Secret - IPR in India: Genesis and development – IPR in abroad - Major International Instruments concerning Intellectual Property Rights: Paris Convention, 1883, the Berne Convention, 1886, the Universal Copyright Convention, 1952, the WIPO Convention, 1967, the Patent Co-operation Treaty, 1970, the TRIPS Agreement, 1994.

Unit II: Patents **(15 hours)**

Patents - Elements of Patentability: Novelty, Non-Obviousness (Inventive Steps), Industrial Application - Non - Patentable Subject Matter - Registration Procedure, Rights and Duties of Patentee, Assignment and license, Restoration of lapsed Patents, Surrender and Revocation of Patents, Infringement, Remedies & Penalties - Patent office and Appellate Board.

Unit III: Copyrights & Trademarks **(15 hours)**

Nature of Copyright - Subject matter of copyright: original literary, dramatic, musical, artistic works; cinematograph films and sound recordings - Registration Procedure, Term of protection, Ownership of a copyright, Assignment, and license of copyright - Infringement, Remedies & Penalties – Related Rights - Distinction between related rights and copyrights.

Trademarks

Concept of Trademarks - Different kinds of marks (brand names, logos, signatures, symbols, well-known marks, certification marks, and service marks) - Non-Registrable Trademarks-Registration of Trademarks-Rights of holder and assignment and licensing of marks - Infringement, Remedies & Penalties - Trademarks registry and appellate board.

Unit IV: Other forms of Intellectual property **(15 hours)**

i. Design: meaning and concept of the novel and original - Procedure for registration, the effect of registration and term of protection
ii. Geographical Indication (GI) Geographical indication: meaning, and the difference between GI and trademarks - Procedure for registration, the effect of registration, and term of protection.
iii. Plant variety protection: meaning and benefit-sharing and farmers' rights – Procedure for registration, the effect of registration and term of protection
iv. Layout Design Protection Layout Design protection: meaning – Procedure for registration, the effect of registration and term of protection

Current Contour

India`s New National IP Policy, 2016 – Govt. of India step towards promoting IPR – Govt. Schemes in IPR – Career Opportunities in IP - IPR in the current scenario with case studies.

References:
Mandatory:

1. Nithyananda, K V. (2019). *Intellectual Property Rights: Protection and Management*. India, IN Cengage Learning India Private Limited.
2. Neeraj, P., & Khusdeep, D. (2014). *Intellectual Property Rights*. India, IN:PHI Learning Private Limited.

Supplementary:

1. Ahuja, V K. (2017). *Law relating to Intellectual Property Rights*. India, IN: Lexis Nexis.

Web-Based:

1. Subramanian, N., & Sundararaman, M. (2018). Intellectual Property Rights – An Overview. Retrieved from http://www.bdu.ac.in/cells/ipr/docs/ipr-eng- ebook.pdf
2. World Intellectual Property Organisation. (2004). WIPO Intellectual property Handbook. Retrieved from https://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo_pub_489.pdf
3. Cell for IPR Promotion and Management (http://cipam.gov.in/)
4. World Intellectual Property Organisation (https://www.wipo.int/about-ip/en/)

Journals:

1. Journal of Intellectual Property Rights (JIPR):NISCAIR

T.Y.B.Voc in MDF - Semester V– General Education Component
Course Title: Film Studies
Course Code: MDF-G16
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To know the history of Indian and international cinema.
- To learn different type of film genres.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Gain knowledge in different types and duration of films and documentaries.
CO-2 Gain knowledge of the world of cinema.
CO-3 Analyse ethics & aesthetics of films.
CO-4 Learn to appreciate different genres of films.

Syllabus:

Unit I: History of Cinema (15 hours)

Early Cinema, Development of Indian & Hollywood Cinema, History of global films, Origin of classic Narrative cinema – soundless film.

Unit II: Film Ethics & Aesthetics (15 hours)

Different genres of films and realize the aesthetics required in making these films. Film Theories, Film Genres (Silent Movie, Documentary, Comedy, musical, Sci. fi.)

Unit III: Film Appreciation (15 hours)

Movies and their Roles in our Lives, Deconstructing, Understanding, and Appreciating the Magic of Cinema; while learning about the spectacle, struggles, & power of this Art form.

Unit IV: Film Analysis **(15 hours)**

Different sections and components of a film and how to analyse each in detail. Critical Analysis (Regional, National, and International Films) Components of Movie Review.

References:

Mandatory:

1. Barnouw Erik. *Documentary: A History of the non-fiction film*.
2. Cook A. David. *History of Narrative Film.*
3. Gazetas Aristides. *An Introduction to World Cinema*. Mcfarland& Company
4. Saran Ranu. *History of Indian Cinema.*

Supplementary:

1. Cook A. David. *History of Narrative Film.*

Reference Films:

1. *Documentary Display: Re-visiting Non-fiction Film and Video* by Keith Beattie
2. *Documentary Films in India: Critical Aesthetics at Work* by Aparna Sharma

Web Based:

https://www.youtube.com/watch?v=Arwso3fy50M&list=PLS47JmLo27M3ZFiPvsr6NTIsh_3w9dB6t

T.Y.B.Voc in MDF – Semester V– General Education Component
Course Title: Digital Marketing
Course Code: MDF-G17
Marks: 100
Credits: 04
Duration: 60 hours

Course Objectives:

- To build Accessible Websites that are optimized for the Search Engines.
- To study various online Marketing Strategies.
- Analyse and research the Internet to improve the quality and marketability of the Websites.

Course Outcomes: At the end of the course, students will be able to:

CO-1	Optimize the website for various search engines.
CO-2	Market the company/product using Search Engine and Social Media.
CO-3	Analyse the Web for improving the marketing strategy.
CO-4	Know how to advertise company/product on the internet platform.

Syllabus:

Unit I: Search Engine Optimisation (SEO) (15 hours)

Introduction to Online Search; Function of Search Engines; Google Page Rank; Introduction to Search Engine Optimization; Building Accessible Site; Keyword Research and Optimization; Link Building Strategies; Useful Tools for SEO; The Past, Present, and Future of SEO.

Hands-on Session: Using Search Engine Optimization tools (like Google & Bing search console, HubSpot, web CEO, Google page speed).

Unit II: Search Engine Marketing (SEM): (15 hours)

Introduction to Internet and Search Engine Marketing; Google Ad words; Ad words Account Structure; Navigating in Google Ad words; Working with Keywords; Creating Ads in Google Ad words; Creating and Managing your First Ad Campaign; Ad words Reporting and Account Performance Reports.

Hands-on session: Using Search Engine Marketing tools (like Google ad words, Google ad words certifications, search, display, remarketing formats, Facebook marketing, linked in advertising).

Unit III: Social Media Marketing (SMM): (15 hours)

Introduction to the World of SMM; Why Social Media? Getting Started with Social Media; Building Relationships via Facebook, Twitter, LinkedIn, YouTube; Handling Positive and Negative Comments; Social Media Content Base Creation.

Hands-on session: Using Social Media Marketing tools (like Hootsuite, buffer, sprout social, klear, twitonomy, social mention, Google alerts, mention)

Unit IV: Marketing and Analysis (15 hours)

Email Marketing:

Importance of Email Marketing; Email Marketing Software; Subscriber List; Email Marketing Campaign; Newsletters; Measuring the results.

Hands-on session: Using Email Marketing tools (campaign monitor, mail gun, mandrill, phplist, amazonses).

WEB Analytics:

Web Analytics and Intelligence Tools; Basic Metrics Demystified; Introduction to Google Analytics; Goals and Actionable Insights; Data Management; Social Media Analytics; Social Media Goals and KPI's; Tools for Social Media Analytics.

Hands-on Session: Using Web Analytics tools (like Google Analytics, compete.com, crazy egg, Facebook insights, twitter insights)

Marketing Automation:

Introduction to Marketing Automation. Advantages of using Marketing Automation Software, Issues with Marketing Automation.

Marketing and Distribution of Content

Understand how your creations make it to your local cinema, television screen, through various distribution channels, promotion of your content through Online Film Festivals, Channels, YouTube Uploading Films and Creating Traffic, Studying of various web-based entertainment practices, portals, Web Series – Content, Style, Techniques, and difference with other forms of media.

References:

Mandatory:

1. Damian Ryan. (2014). *Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation*. Kogan Page Publisher (3rd eds).

Supplementary:

1. Jones Calvin and Damian Ryan. *The Best Digital Marketing Campaigns in the World*.
2. Kaushik Avinash. (2013). *Web Analytics 2.0: The Art of Online Accountability & Science of Customer Centricity (Sybex).* Wiley Publishing. (2nd eds)
3. Odden Lee. (2012). *Optimize: How to Attract and Engage More Customers by Integrating SEO, Social Media, and Content Marketing*. Wiley Publishing(1st ed) Publisher.
4. Smith Nick. (2013). *Successful SEO and Search Marketing in a Week*: *Teach Yourself*

Web-Based:

https://www.youtube.com/watch?v=nU-IIXBWlS4

https://adespresso.com/guides/facebook-ads-beginner/facebook-manager-campaign-setup/

https://neilpatel.com/what-is-google-adwords/

https://www.spyfu.com/blog/tutorial-start-adwords-campaign-scratch/

T.Y.B.Voc in MDF - SEMESTER V – Skill Component
Course Title: Motion Graphics-I
Course Code: MDF-SK13
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To educate students in Visual effects which involve the integration of live-action footage and generated imagery to create environments which look realistic, but would be dangerous, expensive, impractical, or impossible to capture on film.
- To create computer-generated imagery using easy to use and affordable animation and compositing software.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Develop an understanding of the visual effects' software interface and tools.
CO-2 Design visual effects sequences using storyboarding and pre-visualization that meet production requirements.
CO-3 Integrate live-action sequences with virtual environments seamlessly using masking techniques.
CO-4 Demonstrate an in-depth knowledge of VFX principles, practice, and system capabilities.

Syllabus:

Unit I: Fundamental of Motion Graphics (15 hours)

Introduction to Motion Graphics software

The Project, Composition, & Timeline panels – In-depth study & familiarization of different environments.

i. **Splitting Layers –** Cutting of layers according to time indicator, on audio, video, or image layers.

ii. **Color Grading -** Working in the color grading workspace using waveforms and color grading effects, fixing color balance issues, and working with special effects.

iii. **Previewing in real-time –** Real-time preview of clips imported with sound files

iv. **Fade-Ins & Working with Text**
Creating a fade-in by animating the Opacity property, creating & animating text, adjusting clip lengths in the Timeline, using Title Safety to ensure viewers can see the text with copying & pasting styles.

v. Null Objects & Hold Keyframes

Scaling up multiple child layers using a Null Object, creating a color wedge using a shape layer, animating the Rotation property, changing text values using hold Keyframes

vi. Anchor Points & Working with Images

Resizing images to fit the Composition frame, setting layer in points using the in column, aligning still images & changing anchor points and adjusting animation timing

Unit II: Animation in Motion Graphics (15 hours)

i. Cross-Dissolves & Working with Logos

Make pre-comps to apply effects and fading layers. Creating cross-dissolves ("fade-ups") between layers, pre-composing layers, scaling up vector layers, adding a fade to black using a solid color layer, and how to find missing project files.

ii. Styling Text & Rendering

Stylize text and creating a vignette effect for composition. Styling the main & secondary text, adding a cross-fade between the video & title text, working in the Render Queue, and using masks to create a vignette.

iii. Alpha Mattes & Animated colors

Working with Transparent layers and Title Safe. Using an alpha matte to hide/show the text based on the wedge's movement, bringing back the coloured wedge, animating instantaneous colour changes.

iv. Concept of Masking

Create Masks **–** Creating masks and animating the mask to cut out an object from the background or foreground**.**

Create masks from text - Creating a trace to get shape from the text to animate**.**

Mask modes – Using mask modes, you can create complex compound masks with multiple transparent areas.

References:

Mandatory:

Gyncild, B., & Fridsma, L. (2019). *Adobe After Effects CC: 2019 release*. San Jose, CA, USA: Adobe Press.

Supplementary:

1. BROWN, B. (2016). *Cinematography: Theory and Practice: Image making for cinematographers & directors*. New York: Routledge.
2. Wheeler, P. (2013). *Digital Cinematography*. Oxford: Focal Press.

Web-Based:

https://www.youtube.com/watch?v=9anmdLHV_DA

https://www.youtube.com/watch?v=MA2kVwJPBkg

https://www.youtube.com/watch?v=6tR3fpv4Aco

Lab:
Course Title: Motion Graphics-I
Course Code: MDF-SK13
Marks: 100
Credits: 04
Duration: 60 hours

1. To animate a simple DVD title sequence using vfx software (6 hours)
2. To create basic Animations using effects and presets. (6 hours)
3. To create animated text and text styles. (6 hours)
4. To create animated backgrounds using shapes and presets. (6 hours)
5. To animate a multimedia presentation. (6 hours)
6. To Animate layers to match audio. (6 hours)
7. To animate multiple layers and create a CG background. (6 hours)
8. To create a logo animation in vfx software (6 hours)
9. To create a bulletin montage using logos and dissolve. (6 hours)
10. To separate background and foreground for using mask tool. (6 hours)

T.Y.B.Voc in MDF - SEMESTER V – Skill Component
Course Title: Pre-Production
Course Code: MDF-SK14
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- Students will be specially trained for producing a new generation of digital filmmaking.
- Enabling filmmakers to blend art and digital media and speed up the process of filmmaking as well as be more creative and enterprising.

Course Outcomes: At the end of the course students will be able to:

CO-1 Learning of hands-on methods to develop their story into a film.

CO-2 Learning various phases of scripting and screenplay

CO-3 To create filmmakers with the necessary digital film making skills.

CO-4 To understand the film industry and its workings.

Syllabus:

Unit I: Story Development **(15 hours)**

i. **Ideas:**
Understanding the concept of playing with different story ideas and how to develop the same. One-minute Movie: 1 Character, 1 minute, 1 Location

ii. **Script Writing**
Students can learn various phases of scripting and screenplay. This will include making a story outline and storyboarding. Followed by the creation of a first draft, second draft, additional draft, and a final draft. The script of fiction film, the Understanding sequence in films Principle of storyboarding, Function of storyboarding

iii. **Screenplay**
Students will learn how to develop screenplays of different genres and translate it into a film. Understanding Dialogues and their importance Dialogue Exercises, Direction Script, Understanding Interior and Exterior Scene

Unit: II Crew, Location, Props **(15 hours)**

Understanding the techniques for arranging the crew, props, location, how to prepare technical documents like call sheets, continuity sheets, etc, Low to prepare different logbooks, and how to maintain logs.

References:

Mandatory:

1. Barnouw Erik. *Documentary: A History of the non-fiction film*.
2. Hart John. *The Art of the Storyboard*. Focal Press.
3. Hunter Lew. *Lew Hunter's Screenwriting*. The Berkley Publishing Group.

Supplementary:

1. Beattie Keith. *Documentary Display: Re-visiting Nonfiction Film and Video*.
2. Bordwell David & Thompson. *Kristin Film Art: An Introduction*.
3. Chaudhuri Diptakirti. *Written by Salim-Javed: The Story of Hindi Cinema's Greatest Screenwriters*.
4. Field Syd. *The Definitive Guide to Screen Writing.*
5. Field Syd. *The Screenwriter's Workbook.*

Web-Based:

https://www.youtube.com/watch?v=tdFDFI2e2Ns

https://www.youtube.com/watch?v=NHjtHK9mTe8

Lab:
Course Title: Pre-Production
Course Code: MDF- SK14
Marks: 100
Credits: 04
Duration: 60 hours

1. Writing 3 different fiction stories. (6 hours)
2. Combination 3 stories into one story. (6 hours)
3. Develop documentary films two topics. (6 hours)
4. Develop a Short silent film (6 hours)
5. Writing Dialogue for a fiction film (6 hours)
6. Prepare monologue for a short story. (6 hours)
7. Prepare a Direction script for a nonfiction film (6 hours)
8. Prepare a storyboard for a short film. (6 hours)
9. Prepare a call chart for a fiction film (6 hours)
10. Preparing log book (6 hours)

T.Y.B.Voc in MDF - SEMESTER V – Skill Component
Course Title: Production & Distribution
Course Code: MDF-SK15
Marks: 50
Credits: 02
Duration: 30 hours

Course Objective:

- To educate students towards an Advanced level of film production.
- To learn how to marketing films in different counties & different festivals.

Course Outcomes: At the end of the course students will be able to:

CO-1	Gain in-depth knowledge of the film Production Process.
CO-2	Develop skills of pre-visualization.
CO-3	Develop techniques for Film Production.
CO-4	Knowledge of the Film Distribution Process

Syllabus:

Unit I: Production **(15 hours)**

i. **Visualization**
Visualizing complex scenes in a movie before filming. The advantage of previsualization is that it allows a director, cinematographer or VFX Supervisor to experiment with different staging and art direction options—such as lighting, camera placement and movement, stage direction, and editing—without having to incur the costs of actual production.

ii. **Script Breakdown**: Analysis of a screenplay in which all of the production elements are reduced into action plans

iii. **Budgeting Basics:** Basic budgeting principles and low budget movie schedules.

iv. **Production Management**
Production management consists of managing the work, tasks, logistics, and processes that contribute to the successful completion of a movie. Knowledge of Production schedule, prep schedule, one-liner, shooting schedule. Production schedule, production report, Pre-calculate Scenes & Pre-calculate estimated costs

Unit II: Film Distribution **(15 hours)**

Techniques of Distribution: Different techniques of film promotion and various methods of distribution. Film Distribution, Methods of distribution, Campaign, and Advertising for film promotion.

Film Promotion: Digital marketing for Film promotion & Distribution Rights.

References:

Mandatory:

1. Cleve Bastian. *Film Production Management*. Focal Press.
2. Parks Stacey. *The Insider's Guide to Independent Film Distribution*. Focal Press.

Supplementary:

1. Mamer Bruce. Film Production Technique. (Cengage Learning).
2. Patz S. Deborah. *Film Production Management 101, 2nd Edition: Management & Coordination in a Digital Age.*

Web-Based:

https://www.youtube.com/watch?v=1ENPR5ZMvWk

https://www.youtube.com/watch?v=lfGvpVedT-k

https://www.youtube.com/watch?v=Pxfh5CtUSI4

Lab:
Course Title: Production & Distribution
Course Code: MDF- SK15
Marks: 100
Credits: 04
Duration: 60 hours

1. Prepare a pre-visualization of Advertisement. (6 hours)
2. Budgeting of a fiction film. (6 hours)
3. Scheduling of short film (6 hours)
4. Prepare all nursery letters for shooting a fiction films. (6 hours)
5. Pre-calculate the required estimated costs of: number of scenes to shoot per day; number of pages to shoot per day; and number of minutes to shoot per day (6 hours)
6. Prepare a call sheet for 1 day of workshop production schedule (6 hours)
7. Prepare a production report form for the workshop production (6 hours)
8. Pre-calculate estimated costs of 1-hour of overtime and 1-day of overtime for 2 locations of the workshop production schedule (6 hours)
9. Calculate budget for a film distribution. (6 hours)
10. Prepare all applications for location and shooting permission. (6 hours)

SEMESTER VI

T.Y.B.Voc in MDF – Semester VI– General Education Component
Course Title: Production Management
Course Code: MDF-G22
Marks:100
Credits: 04
Duration: 60 hours

Course Objectives:

- To learn the basic skills required of a Line Producer to plan and complete a project through Pre-Production, Production, and Post Production. Including building calendars, hiring cast and crew, working with unions, shooting on location, problem-solving.

Course Outcomes: At the end of the course, students will be able to:

CO-1 Earn the basics of scheduling projects by using critical thinking skills and understand a project's particular needs.
CO-2 Learn the basics of budgeting projects by using critical thinking skills and understand a project's particular needs.
CO-3 Identify production challenges and find solutions and resources for solving them.
CO-4 Prepare a preliminary project plan that includes a calendar, shooting schedule, budget, and list of assumptions.

Syllabus:

Unit I: Production plan (15 hours)

Difference between a Line Producer, Executive Producer, and Producer the Basic Principles of Line Producing, creating a Production plan with all the necessary documentation and permission.

Unit II: Production Fundamentals (15 hours)

Prepare a concept note, set designing and Planning of a shoot, Location scouting and Planning for outdoor shoots & scheduling of workforce as per shoot timeline

Unit III: Budget Plan & Proposal (15 hours)

Seeking approvals & permissions, creating a project plan, Budgeting Principles, how to use your calendar and schedule for a more accurate budget, Introduction to Movie Magic budgeting software, building a budget, building cash flow, and how to read a cost report.

Unit IV: Crew & Casting **(15 hours)**

Work with Casting Directors, create character breakdowns, Contracts, and resources, negotiating with agents and managers, filling outcast forms and paperwork, determining the best candidates for your project, labor Laws, crew forms, and paperwork.

References:

Mandatory:

1. Honthaner, E. L. (n.d.). *The Complete Film Production. Routledge* (4 edition).

Supplementary:

1. Singleton, R. (n.d.). *Film Scheduling 2nd* edition. Lone Eagle. (2nd edition).

Web-Based:

https://www.youtube.com/watch?v=BHQjkWJJPgU

https://www.studiobinder.com/tutorials/

http://www.learnmoviemagic.com/tutorials.html

T.Y.B.Voc in MDF – Semester VI– General Education Component
Course Title: Direction for Acting & Films
Course Code: MDF-G23
Marks: 100
Credits: 04

Course Objective:

- Prepare students to enter the workplace with a high level of competence to lead successfully the production team through the entire production of a motion picture.
- Preparing students who aspire to lead a production team. By analysing the work of classic and contemporary directors, the course investigates the art and language of filmmaking.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Learn basic terminology associated with cinematography and filmmaking, learn various directing styles of filmmakers.
CO-2 Compose effective treatments and scripts for use in common video and film genres including documentaries, dramas, commercials, news, and public service announcements.
CO-3 Demonstrate the preparation needed for film and video production, management budgeting, supervision of personnel, permitting, scheduling and post-production supervision.
CO-4 Demonstrate the skills necessary to direct a production crew.

Unit I: Artistic Identity (15 hours)

The role of director, Identifying the story and theme, the finer details that are involved in the production of feature films.

Unit II: Story Development (15 hours)

Seeing with a Moviemaker's eye and recognizing Screenplay, how to create drama, analysing a Screenplay, Director's Development Strategies, Alternative Story Sources, Setting Creative Limitations.

Unit III: Aesthetics **(15 hours)**

Point of Views, Genres, Structure, Plot, Space, Stylized Environments, and Performances, Form and Style, Narrative, Dramatic, and Poetic Visual Styles, & the Variety of Dramatic Structures

Unit IV: Costumes & Visualization **(15 hours)**

Make-Up and Costume types and its Role in Film Production Straight, Character, Prosthetics, surface modeling, medical and wounds, Natural makeup. Visualizing of characters for story and sketching of costumes to match the character's progress through the storyline.

References:

Mandatory:

1. Katz Douglas Steven. *Film Directing Shot by Shot: Visualizing from Concept to Screen*. Sheridan Books.

Supplementary:

1. Irving K. David. *Fundamentals of Film Directing*. Jefferson Press.

2. Proferes T. Nicholas. *Film Directing Fundamentals: See Your Film Before Shooting*. Focal Press.

Web-Based:

https://www.youtube.com/watch?v=00E3r0is-K8

https://study.com/how_to_be_a_film_director.html

https://actioncutprint.com/filmmaking-articles/7stepfilmdirectingformula/

http://filmschoolonline.com/sample_lessons/sample_lessons.htm

T.Y.B.Voc in MDF - SEMESTER VI – SKILL COMPONENT
Course Title: Motion Graphics-II
Course Code: MDF-SK17
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To learn how to import layered files and paths and how to animate flat vector artwork in both 2D and 3D space and explore options to generate an output for your animations.
- To familiarize students with the workings of audio files and blending within a project.

Course Outcomes: At the end of the course, the students will be able to:

CO-1 Integrate 2D and/or 3D computer-generated imagery and live-action elements using compositing techniques.
CO-2 Analyze images and physical sets to digitally re-create lights, cameras, locations, and objects.
CO-3 Recreate natural phenomena by using appropriate particle & dynamic effects.
CO-4 Create photo-real images to match live-action footage by the application of advanced rendering techniques.

Syllabus:

Unit I: 2D Animation & audio in Motion Graphics (15 hours)

i. Vector Layouts & the Graph Editor

Graph Editor: Property values using a two-dimensional graph

ii. Animating vector shapes: Animating vector shapes using trim paths.

iii. 2D Animation & Motion Graphics
Animating Infographics, Charts & Graphs – Animating different components to animate infographics charts and graphs

iv. Animating 2D Characters - Rigging character to animate using Puppet Tool

v. Designing Motion Graphics & Logos - Create full motion graphics videos and professional logos.

vi. Putting It All Together & Adding Audio
Sequencing multiple compositions: Importing multiple compositions and blending using different blending modes.

vii. Animating like an editor: Overlapping shots & using blending modes.

viii. Adding audio to a composition - Detail background audio sound imports in a composition.

ix. Understanding motion graphics and motion trackers such as fixed camera blob tracking, correlation matching & Histogram tracking.

Unit II: Analyzing & Rendering (15 hours)

i. Hard Ease Fashion Reveal
Setting Keyframe Velocity for fine-tuned ease control, understanding basic motion paths, sequencing the "stripes" and adding a Drop Shadow effect.

ii. More Reveals from Different Directions
The learning layer, the text reveals and animating sequences. The benefits of a composition with modular parts, creating three more reveals, more keyframe influence, animation sequencing, & drop shadows

iii. Rendering & Exporting options
Render uncompressed and Alpha type (Transparent images). Rendering uncompressed files, video with transparency, creating a render template and exporting images

References:

Mandatory:

1. Gyncild, B., & Fridsma, L. (2019). *Adobe After Effects CC: 2019 release*. San Jose, CA,

USA: Adobe Press.

Supplementary:

1. Davidson, Gack (2017). *Adobe After Effects CC 2017: The Complete Beginner's Guide*. CreateSpace Independent Publishing Platform.

Web-Based:
https://www.youtube.com/watch?v=9anmdLHV_DA

https://www.youtube.com/watch?v=MA2kVwJPBkg

https://www.youtube.com/watch?v=6tR3fpv4Aco

Lab:
Course Title: Motion Graphics-II
Course Code: MDF-SK17
Marks: 100
Credits: 04
Duration: 60 hours

1. Color neutralization and enhancement for a video clip	(6 hours)
2. Adding animation elements to a video scene	(6 hours)
3. Generate special effects to video scenes.	(6 hours)
4. To create an animated object with the Puppet Tools	(6 hours)
5. To separate foreground object from background using Roto Brush Tool	(6 hours)
6. Creating a 3D Environment	(6 hours)
7. To track a virtual environment using a 3D virtual camera.	(6 hours)
8. To Stabilize shaky camera shots using tracking techniques.	(6 hours)
9. To track single & multiple point motion tracking techniques	(6 hours)
10. To create visual effects using particle simulation	(6 hours)

T.Y.B.Voc in MDF - SEMESTER VI – Skill Component
Course Title: Advance Video Production
Course Code: MDF-SK18
Marks: 50
Credits: 02
Duration: 30 hours

Course Objectives:

- To educate in Advance level editing techniques and live streaming visuals.
- To learn how to record different types of sound on-location shooting.

Course Outcomes: At the end of the course, students will be able to:

CO-1	Gain in-depth knowledge of advanced video effects.
CO-2	Develop the skill of on-location Sound recording.
CO-3	Learn techniques of advanced lighting.
CO-4	Learn the process of displaying live visuals.

Syllabus:

Unit I: Audio & Video Production (15 hours)

i. Field sound recording techniques:
Record sound on location and ambient sound and master tracks, operate a boom mic and recording devices on location.

ii. Advanced Lighting Techniques:
lighting for video production and identifying the type of lighting for shooting video.

Unit II: Advance Post- Production (15 hours)

i. Advance Effective Video Editing: video effects for enhancing video.

ii. Non-Linear Editing Techniques: broadcast multiple live videos.

iii. Audio & Video final linking.: match video with audio.

iv. Final Cut & Render: export from different file formats.

References:

Mandatory:

1. *Adobe Premiere Pro CC Classroom in a book 2019.*
2. Bruce & Bartlett Jenny. *Practical Recording Techniques*.
3. Malkiewicz Kris. *Film Lighting*. (Simon & Schuster)

Supplementary:

1. McGrath Patrick & Goodman M. Robert. *Editing Digital Video: The Complete Creative and Technical Guide* by

Web-Based:
https://www.youtube.com/watch?v=O6ERELse_QY

Lab:
Course Title: Advance Video Production
Course Code: MDF- SK18
Marks: 100
Credits: 04
Duration: 60 hours

1. Shooting a music video. (6 hours)
2. Live streaming debate or talk show on YouTube channel. (6 hours)
3. Sound recording on location for a short film. (6 hours)
4. Editing music videos using 5 different video effects. (6hours)
5. Creation of a blue ray and DCP file. (6 hours)
6. Recording multiple Audio and video source. (6 hours)
7. Shooting live projection. (6 hours)
8. Live Recording with multi cam setup. (6 hours)
9. Audio-video synchronization for a two minute video. (6 hours)
10. Ambient sound recording for a short film. (6 hours)