



PROGRAMME GUIDE

2024-25



**AISECT ACADEMY FOR
ANIMATION MULTIMEDIA
& GAMING**
Infinite Imagination. Infinite Opportunities.

PROGRAMME GUIDE

- Scheme of Examination
- Detailed Syllabus
- Counseling and Study Structure
- Study Modules & Books Information

Supported By



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**DIPLOMA IN ANIMATION &
VISUAL EFFECTS (FS23DAVE)**

Diploma in Animation & Visual Effects (FS23DAVE)

डिप्लोमाइन एनिमेशन एण्ड विजुअलइफेक्ट्स(FS23DAVE)

(A) Duration : 12 Months (D) Courses : 12
(अ) अवधि : 12 माह (द) कोर्सेस : 12

(B) Eligibility : 12th Pass (E) Credit : 40
(ब) पात्रता : 12वीं पास (इ) क्रेडिट : 40

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
Semester I										
FS23DAVE101	History of Animation, Principles of Design and Typography Photography	4	100	50	20	20	8	30	12	<ul style="list-style-type: none">Understanding the basic concept of Animation and its historyKnowledge of Principles of Design and TypographyBasic Concept of photography and its application in animation
FS23DAVE102	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	4	100	50	20	20	8	30	12	<ul style="list-style-type: none">Knowledge of drawing and its fundamentals and its applicationUnderstanding of perspective of still life and color theory, use of primary colorsUnderstanding of Anatomy of human body and making of human body in animation formConcept of storyboarding and its

										use in animation
FS23DAVE10 3	Introduction to Computer Graphics, Digital Animation by Adobe Animate and Video Editing by Premiere, Audio Editing by Adobe Audition (Digital Video Editor2020/ME/NFDC03966)	4	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of user Interface of Adobe Photoshop, Basics (setting, color, resizing, canvas, brush), Selection tools (diff selection techniques, quick mask, color range, background eraser), • Basics of Layer management, Photo enhancement and corrections. • Knowledge of retouching photos and images, text effect in Photoshop, Filters and effects. • Knowledge of digital animation with the use of flash animation • Usage of editing in animation by premiere • Understanding of audio editing in animation with the use of sound forge
FS23DAVE10 4	Communication Skills & Personality Development	2	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming

FS23DAVE10 5	Modeling, Texturing and Lighting	4	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of Modeling of different objects, character animation and Maya Interface • Knowledge of Texture an old looking wooden house with broken window • Introduction to nature Lights & its properties, Maya Basic Lights, working with Maya Lights 1-Point, Direct, Spot, Ambient, Area, Volume, Making & Breaking Lights link
FS23DAVE10 6	Safety Practices in the Work Environment	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
Grand Total										
FS23DAVE10 7	Rigging and 3D Character Animation	4	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Introduction to Rigging, working with Connections, Joints and IK Handles, creating an Arm Set-up, • Understanding of Skin Binding and Painting Weights, Facial Rigging • Knowledge of Graph Editor & Dope Sheet, Bouncing ball with spacing, Understanding of Final correction with graph editor & Dope Sheet, concept of Self-expressions with different body parts, Use of camera angles & lights

FS23DAVE10 8	Dynamics and Maya TechAnimation	4	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Introduction to particle Menus & its attributes, to Fluid Effect, • Introduction to Rigid Body and Constraints, Understanding of Hair attributes, Hair Dynamics and Rendering, • Creating hair on a character, nCloth, Flag simulation with ncloth, nparticle&Cereal Bowl
FS23DAVE10 9	After Effects, Fusion and Nuke,Real Flow / Maya Bifrost(Roto Artist 2019/ME/MESC/3449)	4	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of Broadcasting its Formats., vfx movies, Compositing, Making of a compositing in Photoshop • Understanding of Animation principals how to create Parallax effects in 2D animation through transform properties, Interpolation • Understudying of Different masking tools; Animate a layer using mask path, 2D text effects; Fire fx, • Knowledge of Paint tools and basic wire removal. • Understanding of Workflow of Real flow creating mesh and Interaction with 3D Geo, • Use of Ultra motion water splash with Rigid body, • Introduction to Breaking Objects and optimizing Simulation

FS23DAVE110	Motion Builder &3D Equalizer	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Introduction and Overview, Exploring Motion Builder's navigation controls, • Understanding of Auxiliary Pivots, Motion capture data to a Character, Motion capture data to a Character, Rigid body dynamics, • Creating a custom camera, Rendering out movies for previews • Understanding of Maya Live Interface, Maya Live - 2D v/s 3D Tracking, • Knowledge of basics of auto tracking and solving, Manual tracking • Introduction to Tracking using Geometry, Object Tracking,
FS23DAVE111	Introduction to Entrepreneurship	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of entrepreneurship development concepts
FS23DAVE112	Show Reel Development Project	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the whole concept of animation and visual effects and developing a sample show reel • Knowledge of whole VFX pipeline

Note : For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
1200	480

Details Syllabus

Semester - I

FS23DAVE101: History of Animation, Principles of Design and Typography, Photography

- ☐ Understanding the basic concept of Animation and its history
- ☐ Knowledge of Principles of Design and Typography
- ☐ Basic Concept of photography and its application in animation
- ☐ Understanding the meaning of Visual design. Learning to draw frames.
- ☐ Introduction to frame composition; Understanding the meaning of different compositions.
- ☐ Printers, print media, fonts and their uses.
- ☐ Uses of different types of lenses, Filters and Accessories
- ☐ Compositions for photography (light, size, angles)

FS23DAVE102: Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding

- ☐ Knowledge of drawing and its fundamentals and its application
- ☐ Understanding of perspective of still life and color theory, use of primary colors
- ☐ Understanding of Anatomy of human body and making of human body in animation form
- ☐ Drawing cartoons with basic forms.
- ☐ Cartoon drawing.
- ☐ Learning human body proportions.
- ☐ Weight and balance of the figure.
- ☐ Drawing Stick figures & Drawing Stick figures in poses.
- ☐ Gesture drawings.
- ☐ Human Skeleton & Human skeleton in orthographic views.
- ☐ 1pt perspective concept, Definition; Drawing objects in 1pt persp.
- ☐ 2pt perspective concept, Definition; Drawing objects in 2pt persp.
- ☐ 3pt perspective concept, Definition; Drawing objects in 3pt persp.
- ☐ Composing the objects for Drawing.
- ☐ Understand the light behaviors with different materials.
- ☐ Pencil rendering, hatching and cross hatching.
- ☐ Creating light and shade.
- ☐ Monochromatic still life.
- ☐ Understanding Primary, Secondary and Tertiary colors.
- ☐ Creating color wheel of Primary, Secondary and Tertiary colors.
- ☐ Understanding the color tones and tints.

- ☐ Creating Color scale.
- ☐ Drawing human figure in Box form & in cylinder form
- ☐ Human muscle of Head, neck upper body and lower body
- ☐ Concept of storyboarding and its use in animation
- ☐ Story and storyboard design
- ☐ Camera angles for framing

**FS23DAVE103: Introduction to Computer Graphics, Digital Animation
by Adobe Animate and Video Editing by Premiere, Audio Editing by
Adobe Audition (Digital Video Editor 2020/ME/NFDC03966)**

- ☐ Introduction to Digital art and platform.
- ☐ User Interface of Adobe Photoshop.
- ☐ Basics (setting, color, resizing, canvas, brush)
- ☐ Selection tools (different selection techniques, quick mask, color range, background eraser)
- ☐ Layer management.
- ☐ Photo enhancement and corrections.
- ☐ Retouching photos and images
- ☐ Text effect in Photoshop.
- ☐ Filters and effects.
- ☐ Understanding the concept of Matte paint
- ☐ Matte painting
- ☐ Coloring the character.
- ☐ Coloring BG in Photoshop.
- ☐ Coloring BG in Photoshop. (without any BG drawing)
- ☐ Knowledge of digital animation with the use of adobe animate
- ☐ User Interface
- ☐ Drawing Shapes
- ☐ Layers and the Timeline
- ☐ External Images and the Library Panel
- ☐ Working with Text and Fonts
- ☐ Graphic Symbols
- ☐ Graphic Symbols
- ☐ Frame by Frame Animations
- ☐ Frame by Frame Animations
- ☐ Frame by Frame Animations
- ☐ Shape Tweens
- ☐ Shape Tweens
- ☐ Inverse kinematic Bone Tool

- ☐ Button Symbols
- ☐ Movie Clips
- ☐ Filters and Blend Modes
- ☐ Usage of editing in animation by adobe premiere
- ☐ Concept of Non Linear Editing
- ☐ Basic Editing
- ☐ Transitions & Integrating Audio
- ☐ Advanced Editing
- ☐ Titling & Superimposing
- ☐ Motion & Filters
- ☐ Understanding of audio editing in animation with the use of adobe audition
- ☐ Importing and recording in adobe audition
- ☐ Editing audio
- ☐ Cleaning and restoring audio

FS23DAVE104: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns: Countable and Uncountable, Pronouns: Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses: Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self-confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self-acceptance and self-growth

FS23DAVE105: Modeling, Texturing and Lighting

- ☐ Introduction to Maya interface
- ☐ Difference between EP & CV
- ☐ Curve Editing Tools
- ☐ Types of surface (loft, Revolve etc)
- ☐ Chessboard using Surface
- ☐ Modeling a Slipper
- ☐ Landscape / Mobile phone
- ☐ Introduction to Basic Primitives
- ☐ Stair case
- ☐ Polygon Spaceship
- ☐ Room Interior
- ☐ Hand Blocking
- ☐ Hand Modeling
- ☐ Face Blocking
- ☐ Torso Blocking
- ☐ Leg Modeling
- ☐ Sofa model
- ☐ Landscape model
- ☐ Complete Human Character
- ☐ Alien Character
- ☐ Basic overview of hypershades
- ☐ Working with Maya Surface Nodes-Blinn, Phong& Lambert
- ☐ Bump & Displacement Maps
- ☐ Working with Transparency, Reflection & Refraction
- ☐ Creating or making a wine bottle with glass
- ☐ Labeling to a bottle with layered shader
- ☐ Overview of 2D & 3D Texture
- ☐ Texture a Jacket using layered texturing
- ☐ Introduction to UV Mapping
- ☐ UV texture editor
- ☐ Overview to Planner Mapping & its use
- ☐ Match or Cigarette box texturing
- ☐ Character Face UV Unwrap
- ☐ 3D Character UV Unwrap
- ☐ Character Texture in Photoshop
- ☐ Overview to 3d Paint
- ☐ Introduction to Visor tool

- ☐ Creating 3D environment with Visor
- ☐ Texture an old looking wooden house with broken window
- ☐ Introduction to nature Lights & its properties
- ☐ Maya Basic Lights
- ☐ Working with Maya Lights 1-Point, Direct, Spot
- ☐ Working with Maya Lights 2-Ambient, Area, Volume
- ☐ Understanding Making & Breaking Lights link
- ☐ Introduction to Key, Fill & Rim Light
- ☐ Three-point Lighting to a Character
- ☐ Lighting 3d object with real footage
- ☐ Lighting to an Interior
- ☐ Environment lighting
- ☐ Camera attributes & its angles
- ☐ Render types & its parameters
- ☐ Render Passes
- ☐ Introduction to Mental Ray
- ☐ Working with Final Gather and GI
- ☐ Interior light in day time

FS23DAVE106: Safety Practices in the Work Environment

- ☐ **Safety Signs & Colour at work:** Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.
- ☐ **First Aid & Artificial Respiration:** First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.
- ☐ **Safe Lifting and Carrying Techniques:** Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.
- ☐ **Fire and Fire Extinguishers:** Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.
- ☐ **Safe working Measure:** Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.
- ☐ **Managing Health and Safety at Work:** Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipment's, Office safety procedures, Emergency action plan.

- ❑ **Personal Hygiene:** Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?
- ❑ **Public and Home Safety:** Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.
- ❑ **Common Food Borne Diseases and Infections:** Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage–safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

Semester - II

FS23DAVE107: Rigging, 3D Character Animation

- ❑ Introduction to Rigging
- ❑ Working with Connections – 1: Connection Editor & SDK (Tripod)
- ❑ Working with Connections – 2: Constraints and Utility Nodes
- ❑ Deformers - Lattice, Wrap, Cluster
- ❑ Deformers - Sculpt, Jiggle, Wire, Blend Shapes
- ❑ Introduction to Joints and IK Handles
- ❑ Creating an Arm Set-up
- ❑ Arm Set-up: FK/IK Blend and Stretchy
- ❑ Creating a Leg Set-up
- ❑ Creating a Biped Rig 1: Setting up the Skeleton
- ❑ Creating a Biped Rig 2: Finishing the Rig with Controls
- ❑ Skin Binding and Painting Weights
- ❑ Facial Rigging
- ❑ Introduction to Muscle System
- ❑ Working with Muscle Rig
- ❑ Rigged Character for Pose
- ❑ Introduction to Animation (Timeline, Slider, Key Frames)
- ❑ Explain the concept of Graph Editor & Dope Sheet
- ❑ IK \ FK-ANIMATION
- ❑ Introduction to Animation Principles
- ❑ Follow Through \ Secondary Movement
- ❑ Acquainted with keys of Basic concept of bouncing ball
- ❑ Bouncing ball with spacing, Timing & distance
- ❑ Different materials bouncing balls together with Concept
- ❑ Understanding the usage of Graph Editor
- ❑ Progressive Bouncing Ball with timing, spacing & distance
- ❑ Previous session with Stretch and Squash
- ❑ Pendulum with Settlement

- ☐ Box with antenna
- ☐ Posing for understanding the body balance & arc
- ☐ Posing with self-reference
- ☐ Biped Walk cycle progressive with distance
- ☐ Quadrupeds Walk cycle progressive with distance
- ☐ Final correction with graph editor & Dope Sheet
- ☐ Pulling/Lifting/Pushing Heavy weight objects
- ☐ Run Cycle
- ☐ Jump with distance
- ☐ Various Jump with distance & prop
- ☐ Moving object from one place to another place
- ☐ Throwing ball on usage of hide & show
- ☐ Basic mouth expression with - A E I O U
- ☐ Lip - sync with dialogue
- ☐ Expressions with Joy, anger, shock, etc.
- ☐ Expressions with Joy, anger, shock, etc.
- ☐ Self-expressions with Head, Lips, Eyebrow, Eyes etc
- ☐ Work on personal show reel under the guidance of mentor
- ☐ Use of camera angles & lights

FS23DAVE108: Dynamics and Maya Tech Animation

- ☐ Introduction to particle Menus & its attributes
- ☐ Emitters & its Attributes
- ☐ Particle - Travel on Surface
- ☐ Particle Instancer
- ☐ Making Static Cloud with Particles
- ☐ Introduction to Fluid Effect
- ☐ Boat on an Ocean
- ☐ Particles into Glass
- ☐ Introduction to Soft Bodies & Soft body Surface Simulation
- ☐ Soft Body - Rope Simulation
- ☐ Introduction to Rigid Body and Constraints
- ☐ Rope bridge simulation
- ☐ Introduction to Fur & its attributes
- ☐ Fur on Character: Baldness/Length/Color Map Baking
- ☐ Grass in an Environment
- ☐ Introduction to Hair attributes
- ☐ Hair Dynamics and Rendering

- ☐ Creating hair on a character
- ☐ Introduction to nCloth
- ☐ Flag simulation with ncloth
- ☐ Introduction to nparticle
- ☐ Cereal Bowl

FS23DAVE109: After Effects, Fusion and Nuke, Real Flow / Maya Bifrost (Roto Artist-2019/ME/MESC/3449)

- ☐ **After Effect**
- ☐ UI & Workflow
- ☐ Basic of animation (Text and shape animation)
- ☐ Advanced Animation (Curve Editor)
- ☐ Creating Presets Like lower third and title animation
- ☐ Introduction of 3d layer
- ☐ Use of 3d Light Camera
- ☐ Creating 3d Motion Graphics & TVC
- ☐ Basic of compositing
- ☐ Rotoscoping Basic
- ☐ Advanced rotoscoping (Character roto)
- ☐ Keying Basic
- ☐ Keying Advanced
- ☐ Compositing a chroma shot
- ☐ Tracking and stablise footages
- ☐ Effects
- ☐ Particles Effects
- ☐ **Fusion**
- ☐ UI & Workflow
- ☐ Transform, Merge Node
- ☐ Basic Animation and Curve Editor
- ☐ Roto Node and Rotoscoping
- ☐ Rotoscope Advanced (Character, Hair & Motion Blur)
- ☐ 2D Tracking &Stablize Footage
- ☐ Keying with Differents Nodes
- ☐ Basic Compositing
- ☐ Intro 3d
- ☐ 3d Compositing
- ☐ Displacement Node & Effects
- ☐ Particles Nodes
- ☐ **Nuke**

- ☐ Nuke Workflow
- ☐ Creating Matte paint using Roto& Paint Node
- ☐ Transformation & Animation
- ☐ Rotoscope Basic
- ☐ Rotoscope Advanced (Character, Hair & Motion Blur)
- ☐ Shuffle & Shuffle Copy
- ☐ Merge Tools with basic Compositing
- ☐ Color Correction
- ☐ Keying Basic
- ☐ Keying Advanced
- ☐ Procedural Keying
- ☐ Tracking 2D, Planer Tracking
- ☐ Stabilize footage
- ☐ Introduction to 3D
- ☐ Import Geometry
- ☐ Camera & Lights
- ☐ Camera Projection
- ☐ 3D Tracking
- ☐ Set Extention Using 3d camera and Projection
- ☐ 3D Compositing
- ☐ Paint, Cloning, Wire Removal using Roto Paint Node
- ☐ Sequence paint in photoshop and final touch up & comp in Nuke
- ☐ Deep Compositing
- ☐ Relighting using Position Pass, Normal Pass
- ☐ Stereoscope
- ☐ Render Project
- ☐ Furnance Tool
- ☐ Workflow of Realflow
- ☐ Real Flow Emitter and Particles Types
- ☐ Object Emission in Real Flow
- ☐ Filling glass with water
- ☐ Importing & scaling 3D Geometry
- ☐ Creating mesh and Interaction with 3D Geo
- ☐ Importing Mesh into Maya and basic lighting, Shading
- ☐ Ultra - motion water splash with Rigid body
- ☐ Grapes interaction with Fluids
- ☐ Rigid Body and Soft Body Dynamics
- ☐ Breaking Objects and optimizing Simulation
- ☐ Real wave Surface

- ☐ Morph Daemon
- ☐ Hybrido
- ☐ Realflow render kit in Maya with example tsunami in city – I& II
- ☐ Use of wet map in Maya.
- ☐ Use entire real flow tools; How to optimize the project; Princess came from water. – I
- ☐ Princess came from water. – II
- ☐ Render passes and compositing for project princess came from water.
- ☐ Maya Live Interface
- ☐ Maya Live - 2D v/s 3D Tracking
- ☐ Maya Live - 3D Camera Tracking
- ☐ UI and basic workflow of Boujou
- ☐ Basic example with auto tracking and solving
- ☐ Complicated example with auto tracking and solving
- ☐ Manual tracking for the shot where auto tracking is not properly working.
- ☐ Auto tracking & Solving
- ☐ Solved Camera Zoom
- ☐ Solve Lens Distorted Footage
- ☐ Tracking using Geometry
- ☐ Object Tracking
- ☐ GD on various kind of camera moves and problems and their solution
- ☐ More Examples
- ☐ Generate Z - depth
- ☐ Track Stereo Footage
- ☐ Integration of Solved data with Various Applications
- ☐ Troubleshooting

FS23DAVE110 Motion Builder, Boujou / Syntheyes / Pftrack

- ☐ Introduction and Overview
- ☐ Exploring Motion Builder's navigation controls
- ☐ Working with the Transport Controls
- ☐ Animation with rigid bodies
- ☐ Parenting and Aligning objects
- ☐ The Control Rig
- ☐ Auxiliary Pivots
- ☐ Motion capture data to a Character
- ☐ Rigid body dynamics
- ☐ Keyframes Recording
- ☐ Understanding character setup
- ☐ working with skeletons

- ☐ Creating a custom camera
- ☐ Rendering out movies for previews Solve Lens Distorted Footage
- ☐ Workflow of Real flow
- ☐ Real Flow Emitter and Particles Types
- ☐ Object Emission in Real Flow
- ☐ Filling glass with water
- ☐ Importing & scaling 3D Geometry
- ☐ Creating mesh and Interaction with 3D Geo
- ☐ Importing Mesh into Maya and basic lighting, Shading
- ☐ Ultra-motion water splash with Rigid body
- ☐ Grapes interaction with Fluids
- ☐ Rigid Body and Soft Body Dynamics
- ☐ Breaking Objects and optimizing Simulation
- ☐ Real wave Surface
- ☐ Morph Daemon
- ☐ Hybrido
- ☐ Real flow render kit in Maya with example tsunami in city – I& II
- ☐ Use of wet map in Maya.
- ☐ Use entire real flow tools; How to optimize the project; Princess came from water. – I
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- ☐ GD on various kind of camera moves and problems and their solution
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- ☐ Troubleshooting

FS23DAVE111: Introduction to Entrepreneurship

Introduction to Entrepreneurship – Introduction and concept of Entrepreneurship

Theory of Entrepreneurship – Entrepreneurship in developing countries, Entrepreneurship stimulation, Entrepreneurship and economic growth, Entrepreneurship and Economic system, various theories of Entrepreneurship

Growth of Entrepreneurship – Role of Entrepreneurship, Growth of Entrepreneurs, Prospects for Entrepreneurship

Nature and Importance of Entrepreneurship – Entrepreneurship Qualities, Entrepreneurship Functions, Entrepreneurship Vs Entrepreneurs, Opportunity matrix, Entrepreneurship Decision, Role of Entrepreneurship, Growth of Entrepreneurship

Classification and types of Entrepreneurship – Business Entrepreneurs, Types of Entrepreneurship, Entrepreneurship and Motivation, Growth and Entrepreneurship

Nature and scope of management – Scope of Management, Meaning of Management, Characteristics of Management, Objectives of Management, Management as a profession, Organization and Management, Branches of Management, Importance of Management, managerial Skills

Planning – Concepts, processes and types – Importance of Planning, Characteristics of Planning, a Good Plan, Advantages of Planning.

Concepts of an Organization – Organization Concepts, organization theory, formal and informal organization, significance of organization, the organization process, analysis of organization, nature of organization, organization as an art, group dynamics, organization development.

Motivation – Introduction, Meaning, Kinds of Motivation, MC Gregor's Theory X and Theory Y, Coordination, Need Hierarchy theory of Motivation, Motivational Techniques, Financial and Non-Financial Incentives.

Leadership – Introduction, Characteristics of leadership, great man theory of leadership, role of leadership, leadership styles, techniques of leadership, functions of leadership, qualities of leadership, process of leadership, develop voluntary cooperation.

Communication – Introduction, features of communication, Need, Communication Process, communication Process models, Gestural or non - verbal communication, Models of Grapevine, Communication Networks, Barriers of Communication, Effective communication, Improve written communication.

Accounting in an small enterprise – Need, How accounts maintained? Objectives of accounting, Ledger, Trial Balance, Final accounts Balance sheet etc.

Entrepreneurship development institutions -

AISECT model of Entrepreneurship

How to setup and AISECT Centre

Training for self - employment

FS23DAVE112: Show Reel Development Project

- ☐ Understanding the whole concept of animation and visual effects and developing a sample show reel
- ☐ Knowledge of whole VFX pipeline

Counseling and Study Structure

S. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
Semester I								
1	FS23DAVE101	History of Animation, Principles of Design and Typography & Photography	4	60	08	22	12	18
2	FS23DAVE102	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	4	90	12	33	18	27
3	FS23DAVE103	Introduction to Computer Graphics, Digital Animation by Adobe Animate and Video Editing by Premiere, Audio Editing by Adobe Audition (Digital Video Editor 2020/ME/NFDC039)	4	120	16	44	24	36
4	FS23DAVE104	Communication & Personality Development	2	30	04	17	-	09
5	FS23DAVE105	Modeling, Texturing and Lighting	4	120	16			
6	FS23DAVE106	Safety Practices in the Work Environment	2	30	04	11	06	09
Semester II								
7	FS23DAVE107	Rigging and 3D Character Animation	4	120	16	44	24	36
8	FS23DAVE108	Dynamics and Maya Tech Animation	4	120	16	44	24	36
9	FS23DAVE109	After Effects, Fusion and Nuke, Real Flow / Maya Bifrost (Roto Artist 2019/ME/MESC/3449)	4	90	12	33	18	27
10	FS23DAVE110	Motion Builder, Boujou / Syntheyes / Pftrack	3	60	08	22	12	18
11	FS23DAVE111	Introduction to Entrepreneurship	2	30	04	17	-	09
12	FS23DAVE112	Show - Reel Development Project	3	90	-	-	90	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23DAVE10 1	History of Animation, Principles of Design and Typography, Photography	<p>1. A New History of Animation Illustrated Edition; Maureen Furniss ; Thames & Hudson</p> <p>2. Typography Essentials: 100 Design Principles for Working with Type; Ina Saltz</p> <p>3. The Beginner's Photography Guide: The Ultimate Step-by-Step Manual for Getting the Most from your Digital Camera Flexibound; DK, (Module referred from external web source)</p>
2	FS23DAVE10 2	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	<p>1. Masters of Anatomy Book One: The Ideal Male & Female Body; J. Scott Hughes, Adam; Madureira, Joe; Ramos, Humberto; Campbell, (Masters of Anatomy</p> <p>2. The Fundamentals of Drawing Still Life; Barrington Barber</p> <p>3. Color Theory: An Essential Guide to Color–From Basic Principles To Practical Applications (Artist's Library) ; Patti Mollica ; (Walter Foster Publishing</p> <p>4. Directing the Story: Professional Storytelling and Storyboarding Techniques for Live Action and Animation: Francis Glebas ; (Focal Press; 1st edition; (Module referred from external web source)</p>
3	FS23DAVE10 3	Introduction to Computer Graphics, Digital Animation by Adobe Animate and Video Editing by Premiere, Audio Editing by Adobe Audition	<p>1. Introduction to Computer Graphics Hardcover: James D. Foley; (Addison Wesley; Subsequent edition</p> <p>2. Adobe Animate Classroom in a Book 2022; Russell Chun, (Adobe Press</p> <p>3. Adobe Premiere Pro Classroom in a Book 2022, Maxim Jago ; (Adobe Press</p> <p>4. Adobe Audition CC Classroom in a Book : Adobe Creative Team (Author), Maxim Jago; (Adobe Press (Module referred from external web source)</p>
4	FS23DAVE10 4	Communication and Personality Development	S68-Effective Communication & Personality Development

5	FS23DAVE10 5	Modeling, Texturing and Lighting	<p>1. Digital Modeling ; William Vaughan Pearson Education</p> <p>2. 3D Art Essentials: The Fundamentals of 3D Modeling, Texturing, and Animation Paperback – Illustrated, Ami Chopine</p> <p>3. 3D Lighting: History, Concepts and Techniques (Graphics Series); Arnold Gallardo;S.Chand (G/L) & Company Ltd; Har/Cdr edition, (<i>Module referred from external web source</i>)</p>
6	FS23DAVE10 6	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
7	FS23DAVE10 7	Rigging and 3D Character Animation	<p>1. The Art of Rigging (A Definitive Guide to Character Technical Direction with Alias Maya, Volume 1) ;Kiaran Ritchie, Jake Callery , Karim Biri ;CG Toolkit</p> <p>2. Character Animation in 3D: Use traditional drawing techniques to produce stunning CGI animation (Visual Effects & Animation S.); Steve Roberts ; Focal Press; 1st edition</p>
8	FS23DAVE10 8	Dynamics and Maya Tech Animation	<p>1. Learning Maya Dynamics Paperback; Alias Wavefront ;Alias Wavefront</p> <p>2. Maya Studio Projects: Dynamics Paperback ; Todd Palamar ;Sybex; Pap/Dvdr edition (27 October 2009); (<i>Module referred from external web source</i>)</p>
9	FS23DAVE10 9	After Effects, Fusion and Nuke, Real Flow / Maya Bifrost	<p>1. Nuke 101: Professional Compositing and Visual Effects ;Ganbar ; Pearson Education India; first edition</p> <p>2. Adobe After Effects CC Classroom in a Book ;Adobe Creative Team; Adobe; Pap/Psc edition</p> <p>3. Digital Compositing with Blackmagic Fusion: Essential Techniques ;Lee Lanier Routledge; 1st edition</p> <p>4. Introduction to Sculpting Fluid Dynamics: Real Flow Techniques with Wayne England ;Wayne England ; The Gnomon Workshop</p> <p>5. Autodesk Maya 2020 Bifrost Extension;SerdarHakanDÜZGÖREN ;SerdarHakan DÜZGÖREN</p> <p>6.Autodesk Maya 2020: A Comprehensive Guide, 12th Edition;</p>

			<p>Prof Sham Tickoo ;Cadcim Technologies</p> <p>7. Nuke 101: Professional Compositing and Visual Effects; Ganbar</p> <p>Publisher: Pearson Education India; first edition (13 April 2011); (<i>Module referred from external web source</i>)</p>
10	FS23DAVE110	Motion Builder, Boujou / Syntheyes / Pftrack	<p>1. The Animator Toolkit for Motion Builder; Brad Clark ;Rigging Dojo - Brad Clark, Chad Moore; 1st edition</p> <p>2. The Art and Technique of Matchmoving: Solutions for the VFX Artist; Erica Hornung ;Routledge; 1st edition</p> <p>3. Matchmoving: The Invisible Art of Camera Tracking ; Tim Dobbert ;Sybex; 2nd edition (<i>Module referred from external web source</i>)</p>
11	FS23DAVE111	Introduction to Entrepreneurship	S56 : Introduction to Entrepreneurship
12	FS23DAVE112	Practical - Project/Intership: Show Reel Development Project	<p>1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson (<i>Module referred from external web source</i>)</p>

**CERTIFICATE IN 2D ANIMATION
(FS23CA)**

Certificate in 2D Animation (FS23CA)

सर्टिफिकेट इन 2D एनिमेशन (FS23CA)

(A) Duration : 06 Months (D) Courses : 09

(अ) अवधि : 06 माह (द) कोर्सेस : 06

(B) Eligibility : 10th Pass (E) Credit : 20

(ब) पात्रता : 10वीं पास (इ) क्रेडिट : 20

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CA101	Introduction to Adobe Animate	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Navigate the Adobe Animate interface and workspace efficiently. • Create basic shapes and vector graphics using Adobe Animate's drawing tools. • Understand the principles of animation, such as timing, spacing, and anticipation. • Create and use symbols to streamline your animation process. • Add sound effects and music to your animations.

FS23CA102	Drawing and Design Tools	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Create precise paths and shapes with Bézier curves, allowing for smooth and intricate designs. • Apply solid colors, gradients, or patterns to shapes and lines for visual depth and interest. • Convert frequently used elements into symbols for efficient reuse and reduced file size. • Experiment with different blending modes to create unique visual effects, like overlapping shadows or transparency.
FS23CA103	Adobe Illustrator	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understand the layout, panels, and tools available. • Create precise paths and shapes with Bézier curves, essential for intricate designs. • Rotate, scale, skew, and distort shapes to achieve desired compositions and effects. • Create, edit, and format text using various fonts, sizes, and styles. • Mix and match colors accurately using various color models and swatches.

FS23CA104	Animation Basics(Animator 2022/ME/MESC/05192)	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • To know about principles of animation. • To know about animation techniques. • To know about storyboarding and planning. • To know about software and tools.
FS23CA105	Communication & Personality Development	1	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming
FS23CA106	Motion Tweens , Shape Tweens , Morphing and Easing Animation	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • To know about motion tweens and shape tweens. • To know about the morphing. • Understand different easing functions. • Optimize tween performance.
FS23CA107	Character Rigging ,Frame-by-Frame Animation and Lip Syncing	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understand the skeleton system and advanced rigging techniques. • To know about the traditional animation principles. • Understand the audio analysis and phoneme identification.
FS23CA108	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene

FS23CA109	Show Reel Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Understanding the whole concept of 2D Animation and developing a sample show reel
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Note : For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23C2A101: Introduction to Adobe Animate

- ☐ Drawing cartoons with basic forms.
- ☐ Introduction to the software interface.
- ☐ Understanding the workspace: stage, timeline, and tools.
- ☐ Differentiating between vector and raster graphics.
- ☐ Setting up a new project.
- ☐ Adjusting document settings and properties.
- ☐ Saving and exporting projects in various formats.
- ☐ Exploring the drawing tools (pen, brush, pencil).
- ☐ Understanding shapes and lines.
- ☐ Using the color palette and gradients.
- ☐ Creating and managing symbols.
- ☐ Understanding instances and their significance.
- ☐ Using symbols for animation and interactivity.
- ☐ Understanding the timeline and frame-based animation.
- ☐ Keyframes, frames, and layers.
- ☐ Frame manipulation and navigation.
- ☐ Introduction to motion tweens.
- ☐ Creating smooth animations with classic tweens.
- ☐ Exploring shape tweens for morphing effects.
- ☐ Basics of frame-by-frame animation.
- ☐ When to use frame-by-frame vs. tweens.
- ☐ Creating realistic motion through frame-by-frame.
- ☐ Introduction to the Bone tool for skeletal animation.
- ☐ Rigging characters for movement.
- ☐ Understanding inverse kinematics (IK).
- ☐ Introduction to buttons and interactive components.
- ☐ Adding actions to frames and buttons.
- ☐ Creating simple interactive elements.
- ☐ Importing and syncing audio with animations.
- ☐ Integrating video files into projects.
- ☐ Adding basic audio and video controls.
- ☐ Previewing animations.
- ☐ Publishing projects for various platforms.
- ☐ Understanding masks and their applications.
- ☐ Integrating code into Adobe Animate projects.

FS23C2A102: Drawing and Design Tools

- ☐ User Interface
- ☐ Drawing Shapes
- ☐ Layers and the Timeline
- ☐ External Images and the Library Panel
- ☐ Working with Text and Fonts
- ☐ Graphic Symbols
- ☐ Frame by Frame Animations
- ☐ Shape Tweens
- ☐ Inverse kinematic Bone Tool
- ☐ Button Symbols
- ☐ Movie Clips
- ☐ 1Filters and Blend Modes

FS23C2A103: Adobe Illustrator

- ☐ Overview of Drawing and Design in Various Industries
- ☐ Importance of Drawing and Design Tools in Creative Fields
- ☐ Introduction to Digital Drawing Tools
- ☐ Understanding Different Design Software
- ☐ Basics of User Interface and Navigation in Design Tools
- ☐ Sketching and Freehand Drawing
- ☐ Understanding Lines, Shapes, and Forms
- ☐ Principles of Composition in Design
- ☐ Introduction to Color Theory
- ☐ Basic Typography in Design
- ☐ Introduction to Vector Graphics
- ☐ Using Vector Drawing Tools
- ☐ Creating Illustrations and Icons
- ☐ Working with Paths and Bezier Curves
- ☐ Color Gradients and Blending Modes
- ☐ Basics of Raster Graphics
- ☐ Photo Editing Techniques

FS23C2A104: Animation Basics (Animator 2022/ME/MESC/05192)

- ☐ Introduction to Adobe Animate CC interface.
- ☐ Understanding the workspace: Stage, Timeline, Tools panel, and Properties panel.
- ☐ Setting up a new project and document settings.
- ☐ Understanding keyframes and frames per second (FPS).

- ☐ Creating simple animations using basic shapes.
- ☐ Exploring the motion tween and shape tween features.
- ☐ Working with the onion skin tool for frame-by-frame animation.
- ☐ Introduction to symbols: graphic symbols, movie clips, and buttons.
- ☐ Creating reusable assets with symbols.
- ☐ Understanding instances and their role in animation.
- ☐ Exploring the library and managing symbols.
- ☐ Basics of character design for animation.
- ☐ Rigging characters for animation using the bone tool.
- ☐ Creating walk cycles and other character animations.
- ☐ Understanding the principles of squash and stretch.
- ☐ Importing audio files into Adobe Animate.
- ☐ Syncing animations with sound.
- ☐ Adjusting volume and using basic sound editing tools.
- ☐ Adding visual effects using filters.
- ☐ Exploring blur, glow, and other filter options.
- ☐ Creating animated effects for emphasis.
- ☐ Introduction to basic interactivity in Adobe Animate.
- ☐ Overview of ActionScript and its role in animation.
- ☐ Creating simple interactive animations.
- ☐ Exporting animations in various formats (SWF, GIF, video).
- ☐ Publishing animations for web and other platforms.
- ☐ Best practices for optimizing and compressing animations.
- ☐ Advanced motion tweening techniques.
- ☐ Exploring shape morphing and advanced character animation.
- ☐ Working with masks and blending modes.

FS23C2A105: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns : Countable and Uncountable, Pronouns : Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses : Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self acceptance and self growth

FS23C2A106: Motion Tweens, Shape Tweens, Morphing and Easing Animation

- ☐ Definition of Motion Tween
- ☐ Applying Motion Tween to animate objects
- ☐ Keyframing and setting motion paths
- ☐ Exploring properties such as position, scale, rotation
- ☐ Working with the timeline for precise control
- ☐ Introduction to easing and timing functions
- ☐ Customizing motion with easing effects
- ☐ Creating smooth transitions between keyframes
- ☐ Understanding Shape Tween as a tool for morphing shapes
- ☐ Key differences between Motion Tween and Shape Tween
- ☐ Transforming one shape into another using Shape Tween
- ☐ Adjusting parameters for optimal results
- ☐ Handling complex shapes and vector graphics
- ☐ Troubleshooting common issues in Shape Tweening
- ☐ Definition and purpose of morphing in animation
- ☐ Real-world examples of morphing effects
- ☐ Techniques for achieving smooth morphing transitions
- ☐ Integrating morphing into animations for storytelling

FS23C2A107: Character Rigging,Frame-by-Frame Animation and Lip Syncing

- ☐ Importance of character rigging in animation.
- ☐ Overview of bones, joints, and IK (Inverse Kinematics).
- ☐ Rigging a simple character with basic movements.
- ☐ Rigging characters with multiple joints and complex structures.

- ☐ Exploring additional features like constraints and deformers.
- ☐ Best practices in character rigging for efficient animation.
- ☐ Understanding the concept of frame-by-frame animation.
- ☐ Creating keyframes and in-between frames for smooth animation.
- ☐ Techniques for animating characters using frame-by-frame approach.
- ☐ Step-by-step guide to creating a walk cycle.
- ☐ Animating other character movements (run, jump, etc.).
- ☐ Adding personality to character animations through nuanced movements.
- ☐ Importance of lip syncing in character animation.
- ☐ Introduction to phonemes and their association with lip movements.
- ☐ Manual lip-syncing techniques for basic dialogue.
- ☐ Lip syncing with automatic audio detection.
- ☐ Refining lip sync animations for realistic results.
- ☐ Tips and tricks for syncing character expressions with dialogue.
- ☐ Bringing rigged characters and animations into a project.
- ☐ Exporting animations in different formats for various platforms.
- ☐ Integration with other Adobe Creative Cloud applications.

FS23C2A108: Safety Practices in the Work Environment

Safety Signs & Colour at Work: Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.

First Aid & Artificial Respiration: First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.

Safe Lifting and Carrying Techniques: Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.

Fire and Fire Extinguishers: Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.

Safe Working Measure: Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.

Managing Health and Safety at Work: Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipments, Office safety procedures, Emergency action plan.

Personal Hygiene: Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?

Public and Home Safety: Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.

Common Food Borne Diseases and Infections: Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage–safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23C2A109: Show - Reel Development

- ☐ Understanding the whole concept of Animation and developing a sample show reel

Counseling and Study Structure

Sl. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23C2A101	Introduction to Adobe Animate	3	90	12	33	18	27
2	FS23C2A102	Drawing and Design Tools	2	60	08	22	12	18
3	FS23C2A103	Adobe Illustrator	2	60	08	22	12	18
4	FS23C2A104	Animation Basics(Animator 2022/ME/MESC/05192)	2	60	08	22	12	18
5	FS23C2A105	Communication & Personality Development	1	30	04	17	-	09
6	FS23C2A106	Motion Tweens, Shape Tweens, Morphing and Easing Animation	2	60	08	22	12	18
7	FS23C2A107	Character Rigging ,Frame-by-Frame Animation and Lip Syncing	2	60	08	22	12	18
8	FS23C2A108	Safety Practices in the Work Environment	1	30	04	11	06	09
9	FS23C2A109	Show Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23C2A101	Introduction to Adobe Animate	<ol style="list-style-type: none"> 1. Adobe Animate CC Classroom in a Book: Blanchard on Leadership and Creating High Performing Organizations Russell Chun (Author) 2. Adobe Animate Classroom in a Book (2023 Release) by Russell Chun (Author) 3. Beginning Adobe Animate CC: Learn to Efficiently Create and Deploy Animated and Interactive TOM GREEN (Author), Joseph Labrecque (Author)
2	FS23C2A102	Drawing and Design Tools	<ol style="list-style-type: none"> 1. DESIGN DRAWING, 3RD EDITION Paperback – Illustrated, by Francis D. K. Ching (Author), Steven P. Juroszek 2. Design Drawing Experiences 2000 Paperback by William Kirby Lockard (Author) 3. Successful Drawing Hardcover by Andrew Loomis (Author)
3	FS23C2A103	Adobe Illustrator (Animator 2022/ME/MESC/05192)	<ol style="list-style-type: none"> 1. Adobe Illustrator CC for Dummies 1st Edition by David Karlins (Author) 2. Adobe Illustrator CC Classroom in a Book 1st Edition by Brian Wood (Author) 3. Adobe Illustrator Classroom in a Book (2023 release): The Official Training Workbook from Adobe by Brian Wood (Author))
4	FS23C2A104	Animation Basics	<ol style="list-style-type: none"> 1. Adobe Animate CC Classroom in a Book: Blanchard on Leadership and Creating High Performing Organizations Russell Chun (Author) 2. Adobe Animate Classroom in a Book (2023 Release) by Russell Chun (Author) 3. Beginning Adobe Animate CC: Learn to Efficiently Create and Deploy Animated and Interactive TOM GREEN (Author), Joseph Labrecque (Author)
5	FS23C2A105	Communication & Personality Development	S68-Effective Communication & Personality Development

6	FS23C2A106	Motion Tweens , Shape Tweens , Morphing and Easing Animation	<ol style="list-style-type: none"> 1. Adobe Animate CC Classroom in a Book: Blanchard on Leadership and Creating High Performing Organizations Russell Chun (Author) 2. Adobe Animate Classroom in a Book (2023 Release) by Russell Chun (Author) 3. Beginning Adobe Animate CC: Learn to Efficiently Create and Deploy Animated and Interactive TOM GREEN (Author), Joseph Labrecque (Author)
7	FS23C2A107	Character Rigging ,Frame-by-Frame Animation and Lip Syncing	<ol style="list-style-type: none"> 1. Adobe Animate CC Classroom in a Book: Blanchard on Leadership and Creating High Performing Organizations Russell Chun (Author) 2. Adobe Animate Classroom in a Book (2023 Release) by Russell Chun (Author) 3. Beginning Adobe Animate CC: Learn to Efficiently Create and Deploy Animated and Interactive TOM GREEN (Author), Joseph Labrecque (Author)
8	FS23C2A108	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9	FS23C2A109	Show - Reel Development	1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson ; ↑Kindle Edition, <i>(Module referred from external web source)</i>

**CERTIFICATE IN 3D ANIMATION
(FS23CTDA)**

Certificate in 3D Animation (FS23CTDA)

सर्टिफिकेट इन 3D एनिमेशन (FS23CTDA)

(A) Duration : 06 Months

(अ) अवधि : 06 माह

(B) Eligibility : 10th Pass

(ब) पात्रता : 10वीं पास

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवं परीक्षा योजना

(D) Courses : 09

(द) कोर्सेस : 09

(E) Credit : 20

(इ) क्रेडिट : 20

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CTDA101	Basics of 3D Modeling & Fundamentals of Texturing Technique (Modeller 2019/ME/MESC/3443)	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Understanding the fundamental tools and techniques for prop modelling in Autodesk Maya Understanding the overview of hypershades, MAYA surface Nodes-Blinn, Phong & Lambert Knowledge of working with transparency, reflection & refraction
FS23CTDA102	Lighting and Camera Setup	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Understanding the concept of nature lights and its properties, Key, Fill & Rim light Basic knowledge of MAYA lights, direct, spot, ambient, area and volume Familiarity with making and breaking light links with camera attributes and its

										angles.
FS23CTDA103	Introduction to Rigging and Skinning	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of basics of Rigging, connections and deformers • Basic knowledge of Joints and IK handles • Familiarization with skinning, paint skinning, weight tool and component editor.
FS23CTDA104	Principles of Character Animation	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Basic introduction of Animation including timeline, slider, key frames along with its principles • Knowledge of follow through secondary movement, acquainted with keys of basic concepts of bouncing ball with spacing, time and distance. • Understanding the different materials of bouncing balls used together with concept. • Understanding the usage of Graph editor with progressive bouncing balls, stretch, squash.
FS23CTDA105	Communication & Personality Development	1	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality Grooming
FS23CTDA106	Fundamentals of Maya Dynamics, Introduction to Hair Fur and Cloth Simulation	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with the particles Menus & its attributes along with emitters and its attributes • Understanding the concept of fluid effects, field, soft bodies, rigid body and constraints • Knowledge of basics of fur, hair and their attributes. • Familiarity with the basics of n Cloth and flag simulation with

										n Cloth
FS23CTDA107	Basics of Adobe After Effects	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the concept of Broadcasting, its format and VFX movies • Knowledge of compositing, Photoshop, work area, panels, etc. • Basics of animation principles, parallax effects in 2D animation, • Knowledge of color theory, chrome, 2.5D layer system, lighting parameters
FS23CTDA108	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
FS23CTDA109	Show-Reel Development	1	100	-	-	100	40	-	-	<ul style="list-style-type: none"> • Understanding the whole concept of 3D Animation and developing a sample show reel

Note: For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23CTDA 1: Basics of 3D Modeling & Fundamentals of Texturing Technique (Modeller 2019/ME/MESC/3443)

- ☐ Introduction to Maya interface
- ☐ Difference between EP & CV. Curve Editing Tools
- ☐ Types of surface (loft, Revolve etc)
- ☐ Chessboard using Surface
- ☐ Modeling a Slipper
- ☐ Introduction to Basic Primitives
- ☐ Stair case
- ☐ Room Interior
- ☐ Hand Blocking
- ☐ Hand Modeling
- ☐ Face Blocking
- ☐ Face Modeling
- ☐ Torso Blocking
- ☐ Torso Modeling
- ☐ Leg Blocking
- ☐ Leg Modeling
- ☐ Sofa model
- ☐ Basic overview of hypershades
- ☐ Working with Maya Surface Nodes - Blinn, Phong & Lambert
- ☐ Bump & Displacement Maps
- ☐ Working with Transparency, Reflection & Refraction
- ☐ Creating or making a wine bottle with glass
- ☐ Overview of 2D & 3D Texture
- ☐ Texture a Jacket using layered texturing
- ☐ Introduction to UV Mapping
- ☐ UV texture editor
- ☐ Overview to Planner Mapping & its use
- ☐ Match or Cigarette box texturing
- ☐ Character Face UV Unwrap
- ☐ 3D Character UV Unwrap
- ☐ Character Texture in Photoshop
- ☐ Overview to 3D Paint
- ☐ Introduction to Visor tool

FS23CTDA 2: Lighting and Camera Setup

- ☐ Introduction to nature Lights & its properties
- ☐ Maya Basic Lights
- ☐ Working with Maya Lights 1-Point, Direct, Spot
- ☐ Working with Maya Lights 2-Ambient, Area, Volume
- ☐ Understanding Making & Breaking Lights link
- ☐ Introduction to Key, Fill & Rim Light
- ☐ Three-point Lighting to a Character
- ☐ Lighting to an Interior
- ☐ Environment lighting
- ☐ Camera attributes & its angles
- ☐ Render types & its parameters
- ☐ Creating and Illuminating a Stage Show
- ☐ Interior light in day time Drawing Stick figures in poses

FS23CTDA 3: Introduction to Rigging and Skinning

- ☐ Introduction to Rigging
- ☐ Working with Connections-1: Connection Editor & SDK (Tripod)
- ☐ Working with Connections-2: Constraints and Utility Nodes
- ☐ Deformers-Lattice, Wrap, Cluster
- ☐ Deformers-Sculpt, Jiggle, Wire, Blend Shapes
- ☐ Introduction to Joints and IK Handles
- ☐ Creating an Arm Set-up
- ☐ Arm Set-up: FK/IK Blend and Stretchy
- ☐ Creating a Leg Set-up
- ☐ Creating a Biped Rig 1: Setting up the Skeleton
- ☐ Creating a Biped Rig 2: Finishing the Rig with Controls
- ☐ Skin Binding and Painting Weights
- ☐ Facial Rigging
- ☐ Introduction to Muscle System artoons with basic forms.

FS23CTDA 4: Principles of Character Animation

- ☐ Introduction to Animation (Timeline, Slider, Key Frames)
- ☐ Explain the concept of Graph Editor & Dope Sheet
- ☐ IK \ FK - Animation
- ☐ Introduction to Animation Principles
- ☐ Follow Through \ Secondary Movement
- ☐ Acquainted with keys of Basic concept of bouncing ball

- ☐ Bouncing ball with spacing, timing & distance
- ☐ Different materials bouncing balls together with concept
- ☐ Understanding the usage of Graph Editor
- ☐ Progressive Bouncing Ball with timing, spacing & distance
- ☐ Previous session with Stretch and Squash
- ☐ Pendulum with Settlement
- ☐ Box with antenna
- ☐ Posing for understanding the body balance & arc
- ☐ Biped Walk cycle progressive with distance
- ☐ Quadrupeds Walk cycle progressive with distance
- ☐ Final correction with graph editor & Dope Sheet
- ☐ Pulling / Lifting / Pushing Heavy weight objects
- ☐ Run Cycle
- ☐ Jump with distance
- ☐ Moving object from one place to another place
- ☐ Throwing ball on usage of hide & show
- ☐ Basic mouth expression with - A E I O U
- ☐ Lip-sync with dialogue
- ☐ Expressions with Joy, anger, shock, etc

FS23CTDA 5: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns : Countable and Uncountable, Pronouns : Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses : Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking

- ☐ Techniques in Personality development I a) Self-confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self-acceptance and self-growth

FS23CTDA 6: Fundamentals of Maya Dynamics, Introduction to Hair Fur and Cloth Simulation

- ☐ Introduction to particle Menus & its attributes
- ☐ Emitters & its Attributes
- ☐ Particle - Travel on Surface
- ☐ Particle Instancer
- ☐ Making Static Cloud with Particles
- ☐ Introduction to Fluid Effect
- ☐ Boat on an Ocean
- ☐ Particles into Glass
- ☐ Introduction to Soft Bodies
- ☐ Soft Body - Rope Simulation
- ☐ Introduction to Rigid Body and Constraints
- ☐ Rope bridge simulation
- ☐ Introduction to Fur & its attributes
- ☐ Fur on Character: Baldness/Length/Color Map Baking
- ☐ Grass in an Environment
- ☐ Introduction to Hair attributes
- ☐ Hair Styling
- ☐ Hair Dynamics and Rendering
- ☐ Creating hair on a character
- ☐ Introduction to nCloth
- ☐ Flag simulation with ncloth
- ☐ Creation of Character Cloth
- ☐ Introduction to nparticle
- ☐ Cereal Bowl

FS23CTDA 7: Basics of Adobe After Effects

- ☐ Drawing "1; What is Broadcasting?
- ☐ Broadcasting Formats.
- ☐ General Discussion about VFX movies
- ☐ What is Compositing? Make a compositing in Photoshop; Brief description of work area and panels.
- ☐ Preferences settings; Project settings; Create a basic compositing with compare to Photoshop.

- ☐ Shortcut for trimming, split layer, jump to next-previous frames, etc.
- ☐ Animation principals; How to create Parallax effects in 2D animation through transform properties.
- ☐ Create Curtain, Clouds, etc using different Filters.
- ☐ What is Precompositing? Make Solar system with Precompositing.
- ☐ Describe Different masking tools; Animate a layer using mask path; Vegas and Stroke effects on mask path with simple motion graphics.
- ☐ Roto Principals; Mask an image using roto principal.
- ☐ Roto on a moving character.
- ☐ Color Theory; Brightness-Contrast, Level, Curves, Color Balance, HSB, etc with Photoshop
- ☐ Basic chroma removal filter with some simple examples; How to create hollow man effects.
- ☐ 2.5D layer system with an example; Lighting parameters with an example.
- ☐ 2D text effects; Fire FX, dancing text, etc; 3D text effects and how to use animation presets.
- ☐ Simple tracking and stabilizing (one point and two point)
- ☐ Paint tools and basic wire removal; Complicate wire/rig removal using Photoshop and after fx.
- ☐ Fire effects; Particle for motion graphics.

FS23CTDA 8: Safety Practices in the Work Environment

Safety Signs & Colour at Work: Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.

First Aid & Artificial Respiration: First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.

Safe Lifting and Carrying Techniques: Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.

Fire and Fire Extinguishers: Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.

Safe Working Measure: Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.

Managing Health and Safety at Work: Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipments, Office safety procedures, Emergency action plan.

Personal Hygiene: Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?

Public and Home Safety: Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.

Common Food Borne Diseases and Infections: Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage-safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23CTDA 9: Show-Reel Development

- ☐ Understanding the whole concept of 3D Animation and developing a sample show reel

Counseling and Study Structure

Sl. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CTDA101	Basics of 3D Modeling & Fundamentals of Texturing Technique (Modeller 2019/ME/MESC/3443)	3	90	12	33	18	27
2	FS23CTDA102	Lighting and Camera++ Setup	3	60	08	22	12	18
3	FS23CTDA103	Introduction to Rigging and Skinning	3	60	08	22	12	18
4	FS23CTDA104	Principles of Character Animation	3	120	16	44	24	36
5	FS23CTDA105	Communication & Personality Development	1	30	04	17	-	09
6	FS23CTDA106	Fundamentals of Maya Dynamics, Introduction to Hair Fur and Cloth Simulation	3	60	08	22	12	18
7	FS23CTDA107	Basics of Adobe After Effects	2	60	08	22	12	18
8	FS23CTDA108	Safety Practices in the Work Environment	1	30	04	11	06	09
9	FS23CTDA109	Show-Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CTDA101	Basics of 3D Modeling & Fundamentals of Texturing Technique (Modeller2019/ME/ME SC/3443)	1. Digital Modeling ; William Vaughan ; Pearson Education 2. 3D Art Essentials: The Fundamentals of 3D Modeling, Texturing, and Animation Paperback – Illustrated ; Ami Chopine;† Routledge; 1st edition (28 April 2011) <i>(Module referred from external web source)</i>
2	FS23CTDA102	Lightening and Camera Setup	1. 3D Lighting: History, Concepts and Techniques (Graphics Series); Arnold Gallardo ;S.Chand (G/L) & Company Ltd; Har/Cdr edition (1 October 2000), <i>(Module referred from external web source)</i>
3	FS23CTDA103	Introduction to Rigging and Skinning	1. The Art of Rigging (A Definitive Guide to Character Technical Direction with Alias Maya, Volume 1); Kiaran Ritchie, Jake Callery, Karim Biri ;†CG Toolkit (January 1, 2005), <i>(Module referred from external web source)</i>
4	FS23CTDA104	Principles of Character Animation	1. Character Animation in 3D: Use Traditional Drawing Techniques to Produce Stunning CGI Animation (Visual Effects & Animation S.); Steve Roberts;†Focal Press; 1st edition (16 June 2004) 2. The Animators Survival Kit; Richard Williams ;†Farrar, Straus and Giroux; Fourth Edition, Revised (September 25, 2012)., <i>(Module referred from external web source)</i>
5	FS23CTDA105	Communication and Personality Development	S68-Effective Communication & Personality Development
6	FS23CTDA106	Fundamentals of Maya Dynamics, Introduction to Hair Fur and cloth simulation	1. Learning Maya Dynamics Paperback; Alias Wavefront ;Alias Wavefront (1 July 2002) 2. Maya Studio Projects: Dynamics Paperback; Todd Palamar ;Sybex; Pap/Dvdr edition 3. Beginning VFX with Autodesk Maya; Abhishek Kumar; Publisher: Apress 4. Breathe life into a 3D character with Maya's cloth and hair tools ; Creative Bloq Staff (3D World) <i>(Module referred from external web source)</i>
7	FS23CTDA107	Basics of Adobe After Effects	1. Adobe After Effects CC Classroom in a Book, Adobe Creative Team; Adobe; Pap/Psc

			edition (10 July 2013) <i>(Module referred from external web source)</i>
8	FS23CTDA108	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9	FS23CTDA109	Practical - Project/ Internship: Show Reel Development Project	1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson, ; Kindle Edition February 1st 2021 <i>(Module referred from external web source)</i>

**CERTIFICATE IN VISUAL EFFECTS
(FS23CIVE)**

Certificate in Visual Effects (FS23CIVE)

सर्टिफिकेट इन विजुअल इफेक्ट्स (FS23CIVE)

(A) Duration : 06 Months (D) Courses : 09**(अ) अवधि : 06 माह (द) कोर्सेस : 09****(B) Eligibility : 10th Pass (E) Credit : 20****(ब) पात्रता : 10वीं पास (इ) क्रेडिट : 20****(C) Contents and Scheme of Examination****(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना**

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CIVE101	Fundamentals of Drawing, Perspective and Color Theory	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Understanding the fundamental drawing, cartoon with basic forms Knowledge about the human body proportions, weight and balance of figure, human skeleton in orthographic views Familiarity with drawing stick figures and gesture drawings Understanding the concept of perspective drawing and drawing perspective

FS23CIVE10 2	Introduction to Computer Graphics	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the concept of digital art, platform, user interface of Adobe Photoshop • Basic understanding of selection different techniques, quick mask, color range, etc. • Understanding of layer management, photo enhancement, corrections, filters, text effect in Photoshop and matte painting
FS23CIVE10 3	Video Editing by Premiere, Audio Editing by Adobe Audition	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the concept of nonlinear editing, transition & Integrating audio • Basic knowledge of advance editing, tilting & superimposing, motion and filters • Familiarity with importing and recording in sound forge audio editing, cleaning and restoring
FS23CIVE10 4	Basics of MAYA	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding of basics of Maya interface, curves & nurbs modeling. • Familiarization with basic of overview of hypershades, Maya surface, nodes-blinn, phong & lambert • Overview of 2D & 3D texturing, UV mapping, unwrapping and

										texturing <ul style="list-style-type: none"> • Basic introduction of nature lights & its properties, Maya basic lights, key fills & Rim lights to character and rendering
FS23CIVE10 5	Communication & Personality Development	1	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming
FS23CIVE10 6	Dynamics and Maya Tech Animation	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Basic introduction of particle Menus & Emitters & its attributes • Knowledge of fluid effects, boat on an ocean • Understanding the concept of fur, its attributes, character • Familiarity with hair dynamic, rendering ncloth, nparticles and cereal bowl
FS23CIVE10 7	After Effects and Fusion (Compositor 2022/ME/MESC/05200)	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Basic introduction of VFX Broadcasting and its formats • Understanding the concept of compositing, animation principles, parallax effects in 2D animation • Familiarity with the basics simple character roto, check errors, hair, motion blur roto • Knowledge of 3D tools, render 3D space, shadow for chrome shot,

										lighting and camera projection
FS23CIVE10 8	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
FS23CIVE10 9	Show- Reel Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> Understanding the whole concept of visual effects and developing a sample show reel Knowledge of whole VFX pipeline

Note: For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23CIVE101: History of Fundamentals of Drawing, Perspective and Color Theory

- ☐ Drawing cartoons with basic forms.
- ☐ Cartoon drawing.
- ☐ Learning human body proportions.
- ☐ Weight and balance of the figure.
- ☐ Drawing Stick figures.
- ☐ Drawing Stick figures in poses.
- ☐ Gesture drawings.
- ☐ Human Skeleton.
- ☐ Human skeleton in orthographic views.
- ☐ Understanding the concept of Perspective Drawing.
- ☐ 1pt perspective concept, Definition. Drawing objects in 1pt persp.
- ☐ Drawing structure 1pt persp.
- ☐ 2pt perspective concept, Definition. Drawing objects in 2pt persp.
- ☐ Drawing structure 2pt persp.
- ☐ 3pt perspective concept, Definition. Drawing objects in 3pt persp.
- ☐ Drawing structure 3pt persp.
- ☐ Understanding Primary, Secondary and Tertiary colors.
- ☐ Creating color wheel of Primary, Secondary and Tertiary colors.
- ☐ Understanding the color tones and tints. Creating Color scale.

FS23CIVE102: Introduction to Computer Graphics

- ☐ Introduction to Digital art and platform.
- ☐ User Interface of Adobe Photoshop.
- ☐ Basics (setting, color, resizing, canvas, brush)
- ☐ Selection tools (diff selection techniques, quick mask, color range, background eraser)
- ☐ Layer management.
- ☐ Photo enhancement and corrections.
- ☐ Text effect in Photoshop.
- ☐ Filters and effects.
- ☐ Understanding the concept of Matte paint
- ☐ Matte painting

FS23CIVE103: Video Editing by Premiere, Audio Editing by Adobe Audition

- ☐ Concept of Non Linear Editing
- ☐ Basic Editing
- ☐ Transitions & Integrating Audio
- ☐ Advanced Editing
- ☐ Titling & Superimposing
- ☐ Motion & Filters
- ☐ Importing and recording in Sound forge
- ☐ Editing audio
- ☐ Cleaning and restoring audio

FS23CIVE104: Basics of MAYA

- ☐ Introduction of Maya Interface
- ☐ Introduction to Curves & Nurbs modeling
- ☐ Introduction to Polygon modeling
- ☐ Basic Polygonal modeling
- ☐ Inorganic modeling
- ☐ Image based modeling.
- ☐ Basic overview of hypershades
- ☐ Working with Maya Surface Nodes-Blinn, Phong & Lambert
- ☐ Bump & Displacement Maps
- ☐ Working with Transparency, Reflection & Refraction
- ☐ Overview of 2D & 3D Texture
- ☐ UV mapping & unwrapping
- ☐ Texturing
- ☐ Introduction to nature Lights & its properties
- ☐ Maya Basic Lights
- ☐ Working with Maya Lights 1-Point, Direct, Spot
- ☐ Working with Maya Lights 2-Ambient, Area, Volume
- ☐ Introduction to Key, Fill & Rim Light
- ☐ Three-point Lighting to a Character
- ☐ Understanding Rendering

FS23CIVE105: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns : Countable and Uncountable, Pronouns : Personal, Relative and Others, Articles

- ☐ The Parts of Speech, The Prepositions, Clauses : Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self acceptance and self growth

FS23CIVE106: Dynamics and Maya Tech Animation

- ☐ Introduction to particle Menus & its attributes
- ☐ Emitters & its Attributes
- ☐ Particle - Travel on Surface, particle Instancer
- ☐ Introduction to Fluid Effect
- ☐ Boat on an Ocean
- ☐ Introduction to Soft Bodies & Soft body Surface Simulation
- ☐ Soft Body - Rope Simulation
- ☐ Introduction to Rigid Body and Constraints
- ☐ Rope bridge simulation
- ☐ Introduction to Fur & its attributes
- ☐ Fur on Character : Baldness/Length/Color Map Baking
- ☐ Introduction to Hair attributes
- ☐ Hair Dynamics and Rendering
- ☐ Introduction to nCloth
- ☐ Flag simulation with ncloth
- ☐ Introduction to nparticle
- ☐ Cereal Bowl

**FS23CIVE107: After Effects and Fusion (Compositor
2022/ME/MESC/05200)**

- ☐ What is Broadcasting? Broadcasting Formats; General Discussion about VFX movies
- ☐ What is Compositing? Make a compositing in Photoshop.
- ☐ Brief description of work area and panels. Preferences settings, Project settings. Create a basic compositing with compare to Photoshop."
- ☐ Animation principles. How to create Parallax effects in 2D animation through transform properties.
- ☐ Create Curtain, Clouds, etc using different Filters.
- ☐ What is Precompositing? Make Solar system with Precompositing; Various use of Precompositing; Make Lava effect with the use of Precompositing; Time remapping - Freeze, Reverse, Stretch and how to play with time vs time graph.
- ☐ Describe Different masking tools; Animate a layer using mask path.
- ☐ Vegas and Stroke effects on mask path with simple motion graphics; Mask an image using roto principal."
- ☐ Make some Double Role with steady camera.
- ☐ Roto on a moving character; Hair roto, motion blur roto.
- ☐ Sin city effects and simple day to night.
- ☐ Basic Chroma removal filter with some simple examples.
- ☐ How to create hollow man effects."
- ☐ 2D text effects. fire fx, dancing text, etc. 3D text effects and how to use animation presets.
- ☐ Simple tracking and stabilizing. (one point and two point)
- ☐ Basic Interface, Custom Preferences, use of Bins.
- ☐ Show some work of movie/project in Fusion; Fusion Pipeline.
- ☐ Introduce tools; Create a basic compositing with reference to after effects/Photoshop and with their workflow.
- ☐ How to apply keys on a property with basic example; Displace a text on curtain.
- ☐ Understanding Timeline; Interpolation, looping using Spline.
- ☐ Define various tools for masking; Use of pre-mask and post-mask.
- ☐ Simple character Roto& check errors
- ☐ Hair, motion blur roto.
- ☐ Introduction to color correction tools with sin city fx example; Day to Night (extract luma matte)
- ☐ Compose 3D render passes
- ☐ How to use text tool?
- ☐ Tools to remove Chroma, Basic Chroma remove, garbage masking for keying
- ☐ One point, two point and four-point tracking
- ☐ Stabilize shot, extend the tracking information
- ☐ Introduction to 3D tools; Render 3D space; Interaction 3D tools with 2D tools.
- ☐ Create shadow for a Chroma shot using camera and lighting.

- ☐ Camera projection using 3D tools in fusion.

FS23CIVE108: Safety Practices in the Work Environment

Safety Signs & Colour at Work: Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.

First Aid & Artificial Respiration: First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.

Safe Lifting and Carrying Techniques: Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.

Fire and Fire Extinguishers: Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.

Safe Working Measure: Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.

Managing Health and Safety at Work: Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipments, Office safety procedures, Emergency action plan.

Personal Hygiene: Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?

Public and Home Safety: Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.

Common Food Borne Diseases and Infections: Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage-safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23CIVE109: Show - Reel Development

- ☐ Understanding the whole concept of visual effects and developing a sample show reel
- ☐ Knowledge of whole VFX pipeline

Counseling and Study Structure

S. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CIVE101	Fundamentals of Drawing, Perspective and Color Theory	2	60	08	22	12	18
2	FS23CIVE102	Introduction to Computer Graphics	2	60	08	22	12	18
3	FS23CIVE103	Video Editing by Premiere, Audio Editing by Adobe Audition	2	60	08	22	12	18
4	FS23CIVE104	Basics of MAYA	2	60	08	22	12	18
5	FS23CIVE105	Communication & Personality Development	1	30	04	17	-	09
6	FS23CIVE106	Dynamics and Maya Tech Animation	2	60	08	22	12	18
7	FS23CIVE107	After Effects and Fusion (Compositor 2022/ME/MESC/05200)	3	90	12	33	18	27
8	FS23CIVE108	Safety Practices in the Work Environment	1	30	04	17	-	09
9	FS23CIVE109	Show- Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CIVE101	Fundamentals of Drawing, Perspective and Color Theory	1. The Fundamentals of Drawing Still Life; Barrington Barber; ¶Arcturus Publishing Ltd 2. Color Theory : An Essential Guide to Color--From Basic Principles To Practical Applications (Artist's Library); Patti Mollica; ¶Walter Foster Publishing, (<i>Module referred from external web source</i>)
2	FS23CIVE102	Introduction to Computer Graphics	1. Introduction to Computer Graphics Hardcover; James D. Foley; ¶Addison Wesley; Subsequent edition (<i>Module referred from external web source</i>)
3	FS23CIVE103	Video Editing by Premiere, Audio Editing by Adobe Audition	1.Editing Digital Video (Digital Video and Audio Series); Robert Goodman, Patrick McGrath ;¶McGraw-Hill Education TAB; Pap/Cdr edition), (<i>Module referred from external web source</i>)
4	FS23CIVE104	Basics of MAYA	1.Autodesk Maya 2020 Basics Guide Kelly L. Murdock;¶SDC Publications; 1st edition (<i>Module referred from external web source</i>)
5	FS23CIVE105	Communication and Personality Development	S68-Effective Communication & Personality Development
6	FS23CIVE106	Dynamics and Maya Tech Animation	1. Learning Maya Dynamics Paperback; Alias Wavefront ;¶Alias Wavefront 2. Maya Studio Projects: Dynamics Paperback ; Todd Palamar ; Sybex; Pap/Dvdr edition (<i>Module referred from external web source</i>)
7	FS23CIVE107	After Effects and Fusion (Compositor 2022/ME/MESC/05200)	1. Adobe After Effects CC Classroom in a Book; Adobe Creative Team; ¶Adobe; Pap/Psc edition) 2. Digital Compositing with Blackmagic Fusion: Essential Techniques; Lee Lanier; ¶Routledge; 1st edition (<i>Module referred from external web source</i>)
8.	FS23CIVE108	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9.	FS23CIVE109	Practical - Project/ Internship: Show Reel Development Project	1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson ; ¶Kindle Edition, (<i>Module referred from external web source</i>)

**CERTIFICATE IN GRAPHICS
DESIGN (FS23CGD)**

Certificate in Graphics Design (FS23CGD)

सर्टिफिकेट इन ग्राफिक्स डिजाइन (FS23CGD)

(A) Duration : 06 Months (D) Courses : 09

(अ) अवधि : 06 माह (द) कोर्सेस : 09

(B) Eligibility : 10th Pass (E) Credit : 20

(ब) पात्रता : 10वीं पास (इ) क्रेडिट : 20

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CGD101	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Drawing cartoons with basic forms • Learning human body proportions. • Gesture drawings. • Human Skeleton & Human skeleton in orthographic views • 1pt,2pt,3pt perspective concept Composing the objects for Drawing.

FS23CGD102	Exploring the Adobe Photoshop interface and Working Method of Vector & Rasterize Graphics	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Introduction Photoshop • Describe the different color modes in Photoshop • Describe the working of Layer comps • List the different types of Shape tools • Explain different types of conversion methods between modes
FS23CGD103	Exploring the Adobe Illustrator interface and Working Method of Vector Graphics	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Working with Adobe Illustrator • Working with Shape, Gradients, Drawing tools • Brush Tool, Painting, and Working with Effects • Working with Graphics, Symbols, and 3D Effects • Exporting, Creating Web Graphics, and Print Graphics
FS23CGD104	Creating Graphics for Print Media in Corel Draw (GRAPHIC DESIGNER 2019/ME/MESC/3418)	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Describe the basic features of CorelDraw • Draw lines, insert calligraphy, and use reshaping tools in CorelDraw • Work with layers and symbols in CorelDraw

										<ul style="list-style-type: none"> • Apply perspective, bevel, and powerclip effects in CorelDraw • Convert objects to bitmaps and apply different effects to bitmaps
FS23CGD105	Communication & Personality Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming
FS23CGD106	Creating Brochure, Books and Magazine graphics and Publishing Process	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Introduction – Media Publishing • Work with documents and master pages • Work with table and cell styles • Create a book and export a book to Interactive PDF file using form fields
FS23CGD107	Web-based Platform Canva& Social Media	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Basic understanding of new Web-based graphics, • Create a design. • The Canva editor • Collaborate on Canva designs • Working in the Projects Page • Upload and import to Canva • Create student activities and assignments in Canva

										<ul style="list-style-type: none"> ● Getting started with Canva for design ● Print Advertising ● Canva Design Skills for Students ● Typography & Layout ● Creating a logo ● Canva on your mobile ● Presentations to impress from the experts ● Graphic Design Basics ● Social media mastery ● Canva for the classroom ● Branding your business ● Introduction of Social Media Platform ● Creating Post on Facebook, Twitter, Instagram ● Size and resolution ● Basic knowledge of Multiple File Text, Images and Videos ● Understand the Social Media Platforms and How They Can Be Used ● Create A Professional Social Media Profile Image Using Just a Smartphone
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										<ul style="list-style-type: none"> • Master the Art of Posting on Social Media Platforms • Source and Store Social Media Posting Ideas So That You Always Have Something to Share • Create A Social Media Marketing Post to A High Standard That Gets Engagement • Understand the Power of Social Media Communities and How Powerful They Can Be for Brand Building
FS23CGD108	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
FS23CGD109	Show - Reel Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the whole concept of graphic design and developing a sample show reel

Note : For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23CGD101: Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding

- ☐ Knowledge of drawing and its fundamentals and its application
- ☐ Understanding of perspective of still life and color theory, use of primary colors
- ☐ Understanding of Anatomy of human body and making of human body in animation form
- ☐ Drawing cartoons with basic forms.
- ☐ Cartoon drawing.
- ☐ Learning human body proportions.
- ☐ Weight and balance of the figure.
- ☐ Drawing Stick figures & Drawing Stick figures in poses.
- ☐ Gesture drawings.
- ☐ Human Skeleton & Human skeleton in orthographic views.
- ☐ 1pt perspective concept, Definition; Drawing objects in 1pt persp.
- ☐ 2pt perspective concept, Definition; Drawing objects in 2pt persp.
- ☐ 3pt perspective concept, Definition; Drawing objects in 3pt persp.
- ☐ Composing the objects for Drawing.
- ☐ Understand the light behaviors with different materials.
- ☐ Pencil rendering, hatching and cross hatching.
- ☐ Creating light and shade.
- ☐ Monochromatic still life.
- ☐ Understanding Primary, Secondary and Tertiary colors.
- ☐ Creating color wheel of Primary, Secondary and Tertiary colors.
- ☐ Understanding the color tones and tints.
- ☐ Creating Color scale.
- ☐ Drawing human figure in Box form & in cylinder form
- ☐ Human muscle of Head, neck upper body and lower body
- ☐ Concept of storyboarding and its use in animation
- ☐ Story and storyboard design
- ☐ Camera angles for framing

FS23CGD102: Exploring the Adobe Photoshop interface and Working Method of Vector & Rasterize Graphics

- ☐ Explain the various tools in the toolbox
- ☐ Use Preset Manager
- ☐ Describe the different color modes in Photoshop
- ☐ Describe the Preference panel

- ☐ Work with layers
- ☐ List the features of blending modes
- ☐ Create an Adjustment layer
- ☐ Describe the working of Layer comps
- ☐ Describe Smart Objects
- ☐ Describe Smart Filters
- ☐ Explain Painting tools
- ☐ Describe brush presets
- ☐ List the different types of Shape tools
- ☐ Describe Path Selection tools
- ☐ Create a work path
- ☐ Create a clipping path
- ☐ Crop images using different Crop tools
- ☐ Describe the Retouching tools
- ☐ Explain the commands used for color correction
- ☐ Describe the Histogram palette
- ☐ Use the Liquefy command and apply effects to an image
- ☐ Explain Lens Correction filter
- ☐ Describe Vanishing Point
- ☐ Explain the Filter Gallery
- ☐ Describe the features of in-built filters
- ☐ Discuss about Typefaces
- ☐ Describe channels, bit depths, and spot channels
- ☐ Explain different types of conversion methods between modes
- ☐ Define actions
- ☐ Use the Batch command
- ☐ Explain the Photo merge feature
- ☐ Use the Automate commands available in Photoshop
- ☐ Create data-driven graphics
- ☐ Explain slices
- ☐ Save files for Web
- ☐ Explain the Zoomify feature
- ☐ Create a rollover
- ☐ Create a Web Photo Gallery
- ☐ Create an animated GIF file
- ☐ Work with 3D files
- ☐ Create a 3D model
- ☐ Edit textures in a 3D model
- ☐ Describe the Timeline palette

- ☐ Create images for videos
- ☐ Edit videos

FS23CGD103: Exploring the Adobe Illustrator interface and Working Method of Vector Graphics (Graphic Designer 2019/ME/MESC/3418)

- ☐ Illustrator Workspace Environment
- ☐ Working with Documents
- ☐ Working with Objects
- ☐ Modifying Fill and Stroke Attributes
- ☐ Saving Documents
- ☐ Learner's Guide &
- ☐ Work Assignments
- ☐ Layers, and Text
- ☐ Session Contents:
- ☐ Gradients and Patterns
- ☐ Drawing Tools
- ☐ Working with Groups, Layers, and Transparencies
- ☐ Working with Text
- ☐ Learner's Guide &
- ☐ Work Assignments
- ☐ Session Contents:
- ☐ Measuring Objects
- ☐ Live Paint Tool and Live Paint Bucket Tool
- ☐ Working with Brushes
- ☐ Adding Effects
- ☐ Compound Paths
- ☐ Clipping Mask
- ☐ Tracing Raster Graphics
- ☐ Converting Tracing to Paths
- ☐ Graphic Styles
- ☐ Applying Appearance Attributes
- ☐ Symbols
- ☐ Working with Three Dimensions in Illustrator
- ☐ Perspective Grids
- ☐ Actions
- ☐ Learner's Guide &
- ☐ Work Assignments
- ☐ Creative Illustrations
- ☐ Printing

- ☐ Exporting Files
- ☐ Illustrator for the Web
- ☐ Slices
- ☐ Save for the Web
- ☐ Scalable Vector Graphics
- ☐ Data-driven Graphics and Variables
- ☐ Printing

FS23CGD104: Creating Graphics for Print Media in Corel Draw (Graphic Designer 2019/ME/MESC/3418)

- ☐ Describe the basic features of CorelDraw and the common features between CorelDraw and Illustrator
- ☐ Perform actions like drawing, selecting, changing order, transforming, duplicating, and organizing objects in CorelDraw
- ☐ Navigate around CorelDraw document and save it
- ☐ Draw lines, insert calligraphy, and use reshaping tools in CorelDraw
- ☐ Apply fills and outlines to illustrations in CorelDraw
- ☐ Use pages and layout tools and different viewing modes
- ☐ Work with layers and symbols in CorelDraw
- ☐ Use artistic and paragraph text in CorelDraw
- ☐ Edit and format artistic and paragraph text in CorelDraw
- ☐ Perform actions such as text wraps and linking of text
- ☐ Find and replace text and special characters, insert formatting codes, and identify fonts in CorelDraw
- ☐ Apply envelopes, distortion effects, blends, and contours in CorelDraw
- ☐ Apply transparency, drop shadow effect, extrude, and lens effect in CorelDraw
- ☐ Apply perspective, bevel, and powerclip effects in CorelDraw
- ☐ Create boundaries to objects and copy and clone the effect of one object to another in CorelDraw
- ☐ Import and export projects
- ☐ Work with bitmap images
- ☐ Describe the importance of Internet toolbar
- ☐ Set the behavior of an object to a Web page
- ☐ Save documents created on CorelDRAW as PDF files
- ☐ Print objects/documents created on CorelDRAW
- ☐ Convert objects to bitmaps and apply different effects to bitmaps
- ☐ Publish files to PDFs
- ☐ Merge documents

FS23CGD105: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns: Countable and Uncountable, Pronouns: Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses: Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self-confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self-acceptance and self-growth

FS23CGD106: Creating Brochure, Books and Magazine graphics and Publishing Process

- ☐ Describe workspace
- ☐ Work with panels
- ☐ Customize the workspace
- ☐ Work with documents
- ☐ Create pages
- ☐ Work with master pages
- ☐ Create liquid layouts
- ☐ Create alternate layouts
- ☐ Create templates
- ☐ Work with text frames
- ☐ Format text using different styles
- ☐ Create tables
- ☐ Modify tables

- ☐ Work with table and cell styles
- ☐ Create a text wrap around objects
- ☐ Create text on path
- ☐ Apply strokes and colors
- ☐ Import and place graphics
- ☐ Working with image layers
- ☐ Link graphics
- ☐ Create clipping paths
- ☐ Create a book
- ☐ Export a book to Interactive PDF file using form fields

FS23CGD107: Web-based Platform Canva& Social Media

- ☐ Basic understanding of new Web-based graphics,
- ☐ Create a design.
- ☐ The Canva editor
- ☐ Collaborate on Canva designs
- ☐ Working in the Projects Page
- ☐ Upload and import to Canva
- ☐ Create student activities and assignments in Canva
- ☐ Getting started with Canva for design
- ☐ Print Advertising
- ☐ Canva Design Skills for Students
- ☐ Typography & Layout
- ☐ Creating a logo
- ☐ Canva on your mobile
- ☐ Presentations to impress from the experts
- ☐ Graphic Design Basics
- ☐ Social media mastery
- ☐ Canva for the classroom
- ☐ Branding your business
- ☐ Introduction of Social Media Platform
- ☐ Creating Post on Facebook, Twitter, Instagram
- ☐ Size and resolution
- ☐ Basic knowledge of Multiple File Text, Images and Videos
- ☐ Understand the Social Media Platforms and How They Can Be Used
- ☐ Create A Professional Social Media Profile Image Using Just a Smartphone
- ☐ Master the Art of Posting on Social Media Platforms
- ☐ Source and Store Social Media Posting Ideas So That You Always Have Something to Share
- ☐ Create A Social Media Marketing Post to A High Standard That Gets Engagement

- Understand the Power of Social Media Communities and How Powerful They Can Be for Brand Building

FS23CGD108: Safety Practices in The Work Environment

- **Safety Signs & Color at Work:** Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Color- Sign categories, Sign types.
- **First Aid & Artificial Respiration:** First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.
- **Safe Lifting and Carrying Techniques:** Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipment/instruments, Basic steps of safe lifting and handling.
- **Fire and Fire Extinguishers:** Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.
- **Safe Working Measure:** Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.
- **Managing Health and Safety at Work:** Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipment, Office safety procedures, Emergency action plan.
- **Personal Hygiene:** Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?
- **Public and Home Safety:** Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.
- **Common Food Borne Diseases and Infections:** Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage–safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23CGD109: Show - Reel Development

- Understanding the whole concept of graphic design and developing a sample show reel

Counseling and Study Structure

S. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CG D101	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	3	60	08	22	12	18
2	FS23CG D102	Exploring the Adobe Photoshop interface and Working Method of Vector & Rasterize Graphics	3	90	12	33	18	27
3	FS23CG D103	Exploring the Adobe Illustrator interface and Working Method of Vector Graphics	3	60	08	22	12	18
4	FS23CG D104	Creating Graphics for Print Media in Corel Draw (GRAPHIC DESIGNER 2019/ME/MESC/3418)	3	60	08	22	12	18
5	FS23CG D105	Communication & Personality Development	1	30	04	17	-	09
6	FS23CG D106	Creating Brochure, Books and Magazine graphics and Publishing Process	3	90	12	33	18	27
7	FS23CG D107	Web-based Platform Canva& Social Media	2	30	04	11	06	09
8	FS23CG D108	Safety Practices in the Work Environment	1	30	04	11	06	09
9	FS23CG D109	Show - Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CGD101	Fundamentals of Drawing, Perspective, Still Life and Color Theory, Anatomy Study, Storyboarding	<ol style="list-style-type: none"> 1. LEARN PENCIL DRAWING AND SHADING - Book 1&2: Education Based Art Book; ¶Notion Press; 1st edition 2. Drawing: A Complete Guide (Art of Drawing); ¶Search Press; Illustrated edition 3. Basic Human Anatomy: An Essential Visual Guide for Artists; Monacelli Studio, (<i>Module referred from external web source</i>)
2	FS23CGD102	Exploring the Adobe Photoshop Interface and Working Method of Vector & Rasterize Graphics	<ol style="list-style-type: none"> 1. Adobe Photoshop Classroom in a Book (2021 release); Adobe Press; 1st edition 2. Adobe Photoshop: The Complete Tutorial for Beginners to Learn; ¶Adan Kalcanto 3. Photoshop CC Bible ; ¶Wiley; 1st edition, (<i>Module referred from external web source</i>)
3	FS23CGD103	Exploring the Adobe Illustrator Interface and Working Method of Vector Graphics	<ol style="list-style-type: none"> 1. Learn Adobe Illustrator CC for Graphic Design and Illustration: Adobe Certified Associate Exam Preparation; ¶Pearson Education; Second edition; Pearson Education 2. Adobe Illustrator Classroom in a Book (2022 release); Pearson Education (US); 1st edition 3. Adobe Illustrator CC A Complete Course and Compendium of Features; ¶Rocky Nook; Illustrated edition, (<i>Module referred from external web source</i>)
4	FS23CGD104	Creating Graphics for Print Media in Corel, Draw (GRAPHIC DESIGNER 2019/ME/MESC/3418)	<ol style="list-style-type: none"> 1. CorelDraw Training Guide; ¶BPB; First edition 2. Corel Draw: The Official Guide; ¶McGraw Hill Education; First edition 3. CorelDraw 2017 & Home and Student Suite X8 - Training Book with many Exercises ; ¶Lindeman Group, (<i>Module referred from external web source</i>)
5	FS23CGD105	Communication & Personality Development	S68-Effective Communication & Personality Development
6	FS23CGD106	Creating Brochure, Books and Magazine Graphics and Publishing Process	<ol style="list-style-type: none"> 1. Adobe InDesign Classroom in a Book; ¶Pearson Education (US); 1st edition 2. Adobe InDesign Keyboard Shortcuts; ¶U. C-Abel Books; 1st edition 3. Adobe InDesign Classroom in a Book; ¶Adobe Press; 1st edition, (<i>Module referred from external web source</i>)

7	FS23CGD10 7	Web-based Platform Canva	<ol style="list-style-type: none"> 1. Social Media Modeling and Computing; Springer; 2011th edition 2. Instagram Marketing: The Guide Book for Using Photos on Instagram; Newstone Publishing 3. Social Media Marketing 2021: The Ultimate Mastery to use the secrets of digital Business and become an Influencer ; Andrai Ventures LLC, (<i>Module referred from external web source</i>)
8	FS23CGD10 8	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9	FS23CGD10 9	Practical - Project/ Internship: Show Reel Development Project	<ol style="list-style-type: none"> 1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson ; Kindle Edition, (<i>Module referred from external web source</i>)

**CERTIFICATE IN BLENDER
(FS23CB)**

Certificate in blender (FS23CB)

सर्टिफिकेट इन ब्लेण्डर (FS23CB)

(A) Duration : 06 Months (D) Courses : 09

(अ) अवधि : 06 माह (द) कोर्सेस : 09

(B) Eligibility : 10th Pass (E) Credit : 20

(ब) पात्रता : 10वीं पास (इ) क्रेडिट : 20

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवं परीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CB101	Introduction blender interface	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Navigating the interface • Menus, search, and shortcuts • Creating and Modifying objects • Making a scene and adding lights • Rendering your scene
FS23CB102	Modeling and Sculpting (Modeller 2022/ME/MESC/05210)	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Overview of character creation tools • Creating concepts with Grease Pencil • Creating sculpture • Optimizing model • 3D modelling edit mode

FS23CB103	Texturing and shading	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Overview of texturing • Creating different types of materials • Shader Editor • Unwrapping • Pain texture,Paint Gourdy
FS23CB104	Rigging and lighting	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Bone Basics - Bone Parenting, Hierarchy & the Mirror Command • Naming & Orientation Joints • Constraint • IK & Parenting • Binding the model • Weight Painting • Introduction to Lighting • Main/Keylight • Fill light • Background + rimlight • The position of the light • Hard and soft lighting • The Point Lamp • The Spot Lamp • The Area Lamp • The Sun Lamp • Lighting with Emmisive Surfaces • Lighting With HDRI
FS23CB105	Communication & Personality Development	1	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming

FS23CB106	Animation	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Overview of animation • Creating armature and refining armature • Shape keys and drivers • Set keyframe • Common animation tools • Animate Gourdy
FS23CB107	Visual effects and simulation	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Overview of visual effects in Blender • Geometry Nodes magic • Creating cloth • Hair simulation • Fluids • Creating fire • Add an effect • Camera setting and render animation • Render Layers & Render Passes
FS23CB108	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
FS23CB109	Show - Reel Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the whole concept of blender and developing a sample show reel

Note : For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23CB101: Introduction blender interface

- ☐ Navigating the interface
- ☐ Menus, search, and shortcuts
- ☐ Creating and Modifying objects
- ☐ Making a scene and adding lights
- ☐ Rendering your scene

FS23CB102: Modeling and Sculpting (Modeller 2022/ME/MESC/05210)

- ☐ Overview of character creation tools
- ☐ Creating concepts with Grease Pencil
- ☐ Creating sculpture
- ☐ Optimizing model
- ☐ 3D modelling edit mode

FS23CB103: Texturing and shading

- ☐ Overview of texturing
- ☐ Creating different types of materials
- ☐ Shader Editor
- ☐ Unwrapping
- ☐ Pain texture, Paint Gourdy

FS23CB104: Rigging and lighting

- ☐ Bone Basics - Bone Parenting, Hierarchy & the Mirror Command
- ☐ Naming & Orientation Joints
- ☐ Constraint
- ☐ IK & Parenting
- ☐ Binding the model
- ☐ Weight Painting
- ☐ Introduction to Lighting
- ☐ Main/Keylight
- ☐ Fill light
- ☐ Background + rimlight
- ☐ The position of the light
- ☐ Hard and soft lighting
- ☐ The Point Lamp
- ☐ The Spot Lamp
- ☐ The Area Lamp

- ☐ The Sun Lamp
- ☐ Lighting with Emmisive Surfaces
- ☐ Lighting with HDRI

FS23CB105: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns : Countable and Uncountable, Pronouns : Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses : Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Model Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self acceptance and self growth

FS23CB106: Animation

- ☐ Overview of animation
- ☐ Creating armature and refining armature
- ☐ Shape keys and drivers
- ☐ Set key frame
- ☐ Common animation tools
- ☐ Animate Gourdy

FS23CB107: Visual effects and simulation

- ☐ Overview of visual effects in Blender
- ☐ Geometry Nodes magic
- ☐ Creating cloth

- ☐ Hair simulation
- ☐ Fluids
- ☐ Creating fire
- ☐ Add an effect
- ☐ Camera setting and render animation
- ☐ Render Layers & Render Passes

FS23CB108: Safety Practices in the Work Environment

Safety Signs & Colour at Work: Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.

First Aid & Artificial Respiration: First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.

Safe Lifting and Carrying Techniques: Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.

Fire and Fire Extinguishers: Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.

Safe Working Measure: Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.

Managing Health and Safety at Work: Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipments, Office safety procedures, Emergency action plan.

Personal Hygiene: Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?

Public and Home Safety: Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.

Common Food Borne Diseases and Infections: Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage-safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23CB109: Show - Reel Development

- ☐ Understanding the whole concept of blender and developing a sample show reel.

Counseling and Study Structure

Sl. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CB101	Introduction blender interface	3	90	12	33	18	27
2	FS23CB102	Modeling and Sculpting (Modeller 2022/ME/MESC/05210)	3	60	08	22	12	18
3	FS23CB103	Texturing and shading	3	60	08	22	12	18
4	FS23CB104	Rigging and lighting	3	60	08	22	12	18
5	FS23CB105	Communication & Personality Development	1	30	04	17	-	09
6	FS23CB106	Animation	2	60	08	22	12	18
7	FS23CB107	Visual effects and simulation	3	60	08	22	12	18
8	FS23CB108	Safety Practices in the Work Environment	1	30	04	11	06	09
9	FS23CB109	Show - Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CB101	Introduction to Blender Interface	1. Blender 3D for Beginners: The Complete Guide: The Complete Beginner's Guide to Getting Started with Navigating, Modeling, Animating, Texturing, Lighting, Compositing and Rendering within Blender; DananThilakanathan; (Createspace Independent Pub, (<i>Module referred from external web source</i>))
2	FS23CB102	Modeling and Sculpting (Modeller 2022/ME/MESC/05210)	1. Blender Master Class – A Hands-On Guide to Modeling, Sculpting, Materials, and Rendering ; Ben Simonds; No Starch Press; 1st edition (<i>Module referred from external web source</i>)
3	FS23CB103	Texturing and Shading	1. Blender 3D Incredible Models: A comprehensive guide to hard-surface models, including polygon modeling, texturing, and rendering: A comprehensive ... modeling, procedural texturing, and rendering ; ArijanBelec; Packt Publishing Limited, (<i>Module referred from external web source</i>)
4	FS23CB104	Rigging and Lighting	1. Death to the Armatures: Constraint-Based Rigging in Blender; Christopher Kuhn; Kuhn Industries 2. Aesthetic 3D Lighting: History, Theory, and Application Paperback -8; Lee Lanier; Routledge; 1st edition, (<i>Module referred from external web source</i>)
5	FS23CB105	Communication and Personality Development	S68-Effective Communication & Personality Development
6	FS23CB106	Animation	1. Blender 2.5 Character Animation Cookbook Kindle Edition; VirgilioVasconcelos ; Packt Publishing, (<i>Module referred from external web source</i>)
7	FS23CB107	Visual Effects and Simulation	1. Learn Blender Simulations the Right Way: Create attractive and realistic animations with Mantaflow, rigid and soft bodies, and Dynamic Paint; Stephen Pearson ; Packt Publishing Limited, (<i>Module referred from external web source</i>)
8	FS23CB108	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9	FS23CB109	Practical - Project/ Internship: Show Reel Development Project	1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel; Daniel Johnson ; Kindle Edition February 1st 2021, (<i>Module referred from external web source</i>)

**CERTIFICATE IN VIDEO EDITING
AND MOTION
GRAPHICS(FS23CVEMG)**

Certificate in Video Editing and Motion Graphics(FS23CVEMG)

सर्टिफिकेट इन विडियो एडिटिंग(FS23CVEMG)

(A) Duration : 06 Months (D) Courses : 09

(अ) अवधि : 06 माह (द) कोर्सेस : 09

(B) Eligibility : 10th Pass (E) Credit : 20

(ब) पात्रता : 10वीं पास (इ) क्रेडिट : 20

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CVEMG101	Introduction to Adobe Premiere Pro Training	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Adobe Premiere Pro Interface • Nonlinear editing • Workflow • Setting up a project • Setting up a sequence • Importing footage and assets • Media Browser uses • Importing images • The Media Cache • The Project Panel • Working with Bins

										<ul style="list-style-type: none"> • Organizing Media with content Analysis • Monitoring Footage • Modifying clips
FS23CVEMG 102	Video Editing	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • The rules of video editing • The video editing essentials of Adobe Premiere Pro • Program Monitor Control • Controlling Resolution • Using Markers • Using sync Lock and track lock • Finding timeline gaps • Moving clips in a sequence • Edit Point and Handles • Adding Transitions into footage • Fine tuning Transitions • Adding Audio transitions

FS23CVEMG 103	Advanced Editing Techniques and Audio Editing Mixing (Digital Video Editor 2020/ME/NFDC03966)	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Four-point editing • Retiming clips • Replacing clips and footage • Nesting Sequence • Regular and Advanced Trimming • Motion Effect Adjustment • Clip position,size and rotation • Key frame Interpolation • Motion related effects • Multi camera Process • Multi camera Sequence • Multiple camera switch • Working with the Audio Interface • Audio Characteristics • Adjusting Audio volume and audio gain • Adjusting audio levels in a sequence • Using audio effects • Applying effects in the audio mixer • Key framing effect
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FS23CVEMG 104	Adobe After Effects Motion Graphics	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Create new compositions with appropriate settings. • Apply advanced text animation techniques using text animators. • Employ deinterlacing techniques for smoother playback. • Apply rotoscoping techniques specifically for character animation. • Understand keying fundamentals for background removal. • Apply color correction techniques to achieve desired color balance, exposure, and contrast. • Utilize advanced keying techniques using the Color Correction effect. • Master motion tracking techniques for accurate tracking and attaching of graphics. • Understand the 3D workspace in After Effects. • Implement wire removal techniques to eliminate unwanted objects from footage.
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										<ul style="list-style-type: none"> • Utilize Photoshop for sequence painting to enhance footage seamlessly. • Implement displacement effects using displacement maps effectively. • Design and implement particle effects using After Effects particles. • Design and create dynamic motion graphics sequences for various media applications. • Create professional pack shots and TV commercial animations with advanced animation and effects techniques.
FS23CVEMG 105	Communication & Personality Development	1	100	70	28	-	-	30	12	<ul style="list-style-type: none"> • Basic communication skills • Personality grooming
FS23CVEMG 106	Color Correction and Grading	3	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Color Balance • Exposure • Special color effects • Look development • Using alpha channels • Alpha channel transparencies and color keying • Mattes and opacity effect

FS23CVEMG 107	Composting Techniques Managing Projects	2	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Using alpha channels • Alpha channel transparencies and color keying • Mattes and opacity effect • Exporting frames, clips and sequences • Working with Adobe Media Encoder
FS23CVEMG 108	Safety Practices in the Work Environment	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Familiarity with electrical safety, fire safety, first aid, food safety, primary health and basic hygiene
FS23CVEMG 109	Show- Reel Development	1	100	50	20	20	8	30	12	<ul style="list-style-type: none"> • Understanding the whole concept of Video editing and developing a sample show reel • Knowledge of whole video editing pipeline

Note: For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
900	360

Detailed Syllabus

FS23CVEMG101: Introduction to Adobe Premiere Pro Training

- ☐ Adobe Premiere Pro Interface
- ☐ Nonlinear editing
- ☐ Workflow
- ☐ Setting up a project
- ☐ Setting up a sequence
- ☐ Importing footage and assets
- ☐ Media Browser uses
- ☐ Importing images
- ☐ The Media Cache
- ☐ The Project Panel
- ☐ Working with Bins
- ☐ Organizing Media with content Analysis
- ☐ Monitoring Footage
- ☐ Modifying clips

FS23CVEMG 102: Video Editing

- ☐ The rules of video editing
- ☐ The video editing essentials of Adobe Premiere Pro
- ☐ Program Monitor Control
- ☐ Controlling Resolution
- ☐ Using Markers
- ☐ Using sync Lock and track lock
- ☐ Finding timeline gaps
- ☐ Moving clips in a sequence
- ☐ Edit Point and Handles
- ☐ Adding Transitions into footage
- ☐ Fine tuning Transitions
- ☐ Adding Audio transitions

FS23CVEMG 103: Advanced Editing Techniques and Audio Editing Mixing (Digital Video Editor 2020/ME/NFDC03966)

- ☐ Four-point editing
- ☐ Retiming clips
- ☐ Replacing clips and footage
- ☐ Nesting Sequence
- ☐ Regular and Advanced Trimming

- ☐ Motion Effect Adjustment
- ☐ Clip position, size and rotation
- ☐ Keyframe Interpolation
- ☐ Motion related effects
- ☐ Multicamera Process
- ☐ Multicamera Sequence
- ☐ Multiple camera switch

FS23CVEMG104: Motion graphics after effects

- ☐ Working with the Audio Interface
- ☐ New Composition, Animation and Blending in Layers
- ☐ Text Layer, Animating Text
- ☐ Deinterlacing a footage, Masking, Rotoscopy-shape based
- ☐ Rotoscopy - character
- ☐ Keying Basics
- ☐ Color Correction
- ☐ Advanced Keying with CC
- ☐ Tracking and Stabilizing
- ☐ 3D Interface and 3D Camera Tracking
- ☐ Wire Removal
- ☐ Sequence painting with Photoshop
- ☐ Displacement Map
- ☐ AFX particles
- ☐ Motion Graphics
- ☐ Motion Graphics
- ☐ Pack Shot-TVC

FS23CVEMG105: Communication and Personality Development

Communication Skills

- ☐ English Language - Listening, Speech, Pronunciation, Reading, Spelling, Writing *Right*
- ☐ Nouns: Countable and Uncountable, Pronouns: Personal, Relative and Others, Articles
- ☐ The Parts of Speech, The Prepositions, Clauses: Coordinate, Subordinate, Relative Adverbs, Adjectives and Adjective Phrases, Verb
- ☐ The Modal Auxiliaries, Adverb, Adverb Phrases Comparisons and Intensification, Linking Devices, Subject Verb Agreement, Tenses, Common Errors, Word Building, Vocabulary
- ☐ Developing Ability of Question and Answer, Body Language and Its Use in Speaking, Group Discussions, Interview Skills
- ☐ Composition - Making a Technical Report, E-Mails and Text Messages Composing, Letter Writing, Paragraph Writing, E-mail Writing, Writing Resume, Writing a Cover Letter

Personality Development

- ☐ Soft Skills Development, Body Language, Behavioral and Symptomatic Soft Skills, Etiquette and Manners, Positive Thinking, Motivation, Goal setting, Team building, Self Confidence, Leadership Skills, Time Management
- ☐ Introduction to Personality a) Basic of Personality b) Human growth and Behavior c) Theories in Personality d) Motivation
- ☐ Communication skills and Personality Development a) Intra personal communication and Body Language b) Inter personal Communication and Relationships c) Leadership Skills d) Team Building and public speaking
- ☐ Techniques in Personality development I a) Self confidence b) Mnemonics c) Goal setting d) Time Management and effective planning
- ☐ Techniques in Personality Development II a) Stress Management b) Meditation and concentration techniques c) Self hypnotism d) Self acceptance and self growth

FS23CVEMG106: Color Correction and Grading

- ☐ Color Balance
- ☐ Exposure
- ☐ Special color effects
- ☐ Look development
- ☐ Using alpha channels
- ☐ Alpha channel transparencies and color keying
- ☐ Mattes and opacity effect

FS23CVEMG107: Composting Techniques & Managing Projects

- ☐ Using alpha channels
- ☐ Alpha channel transparencies and color keying
- ☐ Mattes and opacity effect
- ☐ Exporting frames, clips and sequences
- ☐ Working with Adobe Media Encoder

FS23CVEMG108: Safety Practices in the Work Environment

Safety Signs & Colour at Work: Safety Signs - Cause for accidents, Safe attitudes; Safety Signs & Colour- Sign categories, Sign types.

First Aid & Artificial Respiration: First Aid - Introduction, first aid and Its aim, Recovery position, Cardiopulmonary resuscitation (CPR), Wound, Shock, Convulsion, Extensive burns, Minor burns and scalds, Chemical burns, Electric shock, Fracture, first-aid box; Artificial Respiration - Respiration, Artificial respiration, Mouth to nose method of artificial respiration, Artificial respiration in case of cardiac arrest, Important points to note after giving artificial respiration to victims.

Safe Lifting and Carrying Techniques: Causes of injury, Types of injury and methods to prevent them, Points that make an objects/load difficult to carry, Preparation before lifting or shifting heavy loads, Correct body posture before beginning the lift in kinetic method of lifting, Manual lifting techniques using kinetic method, shifting of working tables, Shifting of electronic equipments/instruments, Basic steps of safe lifting and handling.

Fire and Fire Extinguishers: Fire, Fuel, Heat, Oxygen, Controlled and uncontrolled fire, Controlling and extinguishing fire, Fire extinguishers, Types of fire extinguisher - water-filled extinguishers, foam, extinguishers, dry powder extinguishers, carbon dioxide type extinguishers, halon extinguishers, General procedure to be adopted in the event of a fire.

Safe Working Measure: Electric shock, action and treatments; Hazard identification, risk assessment and risk control; Workstation layout and ergonomic guidelines.

Managing Health and Safety at Work: Introduction, General office safety, Types of office accidents, Office hazard control, Office environment, Hazards from electrical equipments, Office safety procedures, Emergency action plan.

Personal Hygiene: Introduction, how to maintain good hygiene, how to ensure food safety, Grooming, what are the consequences of not maintaining good hygiene?

Public and Home Safety: Introduction, Safety at home, Activities that have a potential for accidents, Things that are normally used at home and have a potential for accidents, Public safety, Prevention.

Common Food Borne Diseases and Infections: Introduction, The Farm – beginning of the food chain, Food processing-preventing food-borne illness and improving quality, Transport and storage-safeguarding food, Food safety and retailing, Food safety in the home, Food borne diseases.

FS23CVEMG109: Show - Reel Development

- ☐ Understanding the whole concept of video editing and developing a sample show reel
- ☐ Knowledge of whole video editing

Counseling and Study Structure

Sl. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CVEM G 101	Introduction to Adobe Premiere Pro Training	3	60	08	22	12	18
2	FS23CVEM G 102	Video Editing	3	60	08	22	12	18
3	FS23CVEM G 103	Advanced Editing Techniques and Audio Editing Mixing (Digital Video Editor 2020/ME/NFDC03966)	3	60	08	22	12	18
4	FS23CVEM G 104	Adobe after effects motion graphics	3	60	08	22	12	18
5	FS23CVEM G 105	Communication & Personality Development	1	30	04	17	-	09
6	FS23CVEM G 106	Color Correction and Grading	2	60	08	22	12	18
7	FS23CVEM G 107	Composting Techniques & Managing Projects	3	90	12	33	18	2
8	FS23CVEM G108	Safety Practices in the Work Environment	1	30	04	11	06	09
9	FS23CVEM G 109	Show- Reel Development	1	30	-	-	30	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CVEMG101	Introduction to Adobe Premiere Pro Training	1. Editing Digital Video (Digital Video and Audio Series) ; Robert Goodman, Patrick McGrath ; †McGraw-Hill Education TAB; Pap/Cdr edition, (<i>Module referred from external web source</i>)
2	FS23CVEMG102	Video Editing	1. Editing Digital Video (Digital Video and Audio Series) ; Robert Goodman, Patrick McGrath ; McGraw-Hill Education TAB; Pap/Cdr edition (<i>Module referred from external web source</i>)
3	FS23CVEMG103	Advanced Editing Techniques and Audio Editing Mixing (Digital Video Editor 2020/ME/NFDC03966)	1. Editing Digital Video (Digital Video and Audio Series) Robert Goodman, Patrick McGrath ; †McGraw-Hill Education TAB; Pap/Cdr edition (<i>Module referred from external web source</i>)
4	FS23CVEMG104	Adobe after effects motion graphics	1. Adobe After Effects Classroom in a Book (2023 release) Paperback – Import, 2 March 2023 , Lisa Fridsma, Adobe Press; 1st edition (2 March 2023) (<i>Module referred from external web source</i>)
5	FS23CVEMG105	Communication and Personality Development	S68-Effective Communication & Personality Development
6	FS23CVEMG106	Color Correction and Grading	1. Editing Digital Video (Digital Video and Audio Series) ; Robert Goodman , Patrick McGrath ; †McGraw-Hill Education TAB; Pap/Cdr edition, (<i>Module referred from external web source</i>)
7	FS23CVEMG107	Compositing Techniques & Managing Projects	1. Editing Digital Video (Digital Video and Audio Series) ; Robert Goodman, Patrick McGrath ; †McGraw-Hill Education TAB; Pap/Cdr edition), (<i>Module referred from external web source</i>)
8	FS23CVEMG108	Safety Practices in the Work Environment	S 69 : Safety Practices, Primary Health & Personal Hygiene
9	FS23CVEMG109	Practical - Project/ Internship: Show Reel Development Project	1. How to Build a Great Acting Showreel: Showreels from Scratch, Casting Types and Editing Your Demo Reel ; DanielJohnson; †Kindle Edition (<i>Module referred from external web source</i>)

**CERTIFICATE IN DRAWING AND
DIGITAL ART (CDDA)**

Certificate in drawing and digital art (CDDA)

सर्टिफिकेट इन ड्रवाइंग एण्ड डिजिटल आर्ट (CDDA)

(A) Duration	:	03 Months	(D) Courses	:	03
(अ) अवधि	:	03 माह	(द) कोर्सेस	:	03
(B) Eligibility	:	10th Pass	(E) Credit	:	Non- credit
(ब) पात्रता	:	10वीं पास	(इ) क्रेडिट	:	नॉन-क्रेडिट

(C) Contents and Scheme of Examination

(स) पाठ्यक्रमविषय सूची एवंपरीक्षा योजना

Course Code	Title of the Course	Credit	Total Marks	Theory		Practical Marks		Assignments		Key Learning Outcomes
				Max	Min	Max	Min	Max	Min	
FS23CDDA101	Principles of Design & Fundamentals of Drawing	Non-credit	100	20	8	50	20	30	12	<ul style="list-style-type: none"> Understanding the meaning of Visual design. Learning to draw frames. Drawing cartoons with basic forms. Cartoon drawing. Learning human body proportions. Weight and balance of the figure. Drawing Stick figures & Drawing Stick figures in poses. Gesture drawings. Human Skeleton & Human skeleton in orthographic views. 1pt perspective concept, Definition; drawing objects in 1pt persp. Composing the objects for Drawing. Understand the light behaviors

										<ul style="list-style-type: none"> with different materials. Pencil rendering, hatching and cross hatching. Creating light and shade. Monochromatic still life. Understanding Primary, Secondary and Tertiary colors. Creating color wheel of Primary, Secondary and Tertiary colors. Understanding the color tones and tints. Creating Color scale. Drawing human figure in Box form & in cylinder form Human muscle of Head, neck upper body and lower body Story and storyboard design Camera angles for framing
FS23CDDA10 2	Live Portrait & Caricature	Non-credit	100	20	8	50	20	30	12	<ul style="list-style-type: none"> Technique for Drawing Caricatures Facial Features and How to Draw Them Face Elements in a Caricature Draw 3/4 Caricatures Modern Techniques to Draw Babies and Elderly People Live Samples after Photos to Learn More Use Bodies for a Proper Sense of Humor
FS23CDDA10 3	Introduction Computer Graphics	Non-credit	100	20	8	50	20	30	12	<ul style="list-style-type: none"> Introduction to Digital art and platform.

	(Photoshop)									<ul style="list-style-type: none"> • User Interface of Adobe Photoshop. • Basics (setting, color, resizing, canvas, brush) • Selection tools (different selection techniques, quick mask, color range, background eraser) • Layer management. • Photo enhancement and corrections. • Retouching photos and images • Text effect in Photoshop. • Filters and effects. • Understanding the concept of Matte paint • Matte painting • Digital Painting • Coloring the character. • Coloring BG in Photoshop. • Coloring BG in Photoshop. (without any BG drawing)
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Note : For a PASS - A Student would require to secure 40% for both Theory and Practical.

Grand Total	Pass
300	120

Detailed Syllabus

FS23CDDA101: Principles of Design & Fundamentals of Drawing

- ☐ Understanding the meaning of Visual design. Learning to draw frames.
- ☐ Drawing cartoons with basic forms.
- ☐ Cartoon drawing.
- ☐ Learning human body proportions.
- ☐ Weight and balance of the figure.
- ☐ Drawing Stick figures & Drawing Stick figures in poses.
- ☐ Gesture drawings.
- ☐ Human Skeleton & Human skeleton in orthographic views.
- ☐ 1pt perspective concept, Definition; drawing objects in 1pt persp.
- ☐ Composing the objects for Drawing.
- ☐ Understand the light behaviors with different materials.
- ☐ Pencil rendering, hatching and cross hatching.
- ☐ Creating light and shade.
- ☐ Monochromatic still life.
- ☐ Understanding Primary, Secondary and Tertiary colors.
- ☐ Creating color wheel of Primary, Secondary and Tertiary colors.
- ☐ Understanding the color tones and tints.
- ☐ Creating Color scale.
- ☐ Drawing human figure in Box form & in cylinder form
- ☐ Human muscle of Head, neck upper body and lower body
- ☐ Story and storyboard design
- ☐ Camera angles for framing

FS23CDDA102: Live Portrait & Caricature

- ☐ Technique for Drawing Caricatures
- ☐ Facial Features and How to Draw Them
- ☐ Face Elements in a Caricature
- ☐ Draw 3/4 Caricatures
- ☐ Modern Techniques to Draw Babies and Elderly People
- ☐ Live Samples after Photos to Learn More
- ☐ Use Bodies for a Proper Sense of Humor

FS23CDDA103: Introduction Computer Graphics (Photoshop)

- ☐ Introduction to Digital art and platform.
- ☐ User Interface of Adobe Photoshop.
- ☐ Basics (setting, color, resizing, canvas, brush)

- ☐ Selection tools (different selection techniques, quick mask, color range, background eraser)
- ☐ Layer management.
- ☐ Photo enhancement and corrections.
- ☐ Retouching photos and images
- ☐ Text effect in Photoshop.
- ☐ Filters and effects.
- ☐ Understanding the concept of Matte paint
- ☐ Matte painting
- ☐ Digital Painting
- ☐ Coloring the character.
- ☐ Coloring BG in Photoshop.
- ☐ Coloring BG in Photoshop. (without any BG drawing)

Counseling and Study Structure

Sl. No.	Course Code	Title of the Course	Credit	Total Hours of Study	Counseling and Study Structure (hours)			
					Face to Face Counseling	Self study	Practical	Assignments
1	FS23CDD A101	Principles of Design & Fundamentals of Drawing	Non-credit	60	08	34	18	-
2	FS23CDD A102	Live Portrait & Caricature	Non-credit	60	08	34	18	-
3	FS23CDD A103	Introduction Computer Graphics (Photoshop)	Non-credit	60	08	34	18	-

Study Modules & Books Information

Sr. No	Course Code	Subject Name	Modules/Books to be used
1	FS23CDDA101	Principles of Design & Fundamentals of Drawing	1. General Principles of Design, Drawing, Importance of Safety: Ese 2021: Prelims Gseaby Made Easy; MADE EASY Editorial Board;¶Made Easy Publications; Fifth edition 2. The Fundamentals of Drawing Still Life; Barrington Barber;¶Arcturus Publishing Ltd (<i>Module referred from external web source</i>)
2	FS23CDDA102	Live Portrait & Caricature	1. Caricatures (Collins Learn to Draw) (Collins Learn to Draw S.), Alex Hughes;¶Collins, (<i>Module referred from external web source</i>)
3	FS23CDDA103	Introduction Computer Graphics (Photoshop)	1. Adobe Photoshop 6: Introduction to Digital Images (Against the Clock Series) Spiral-bound – Import, EllennBehovian Against The Clock;¶Pearson; Pap/Cdr edition), (<i>Module referred from external web source</i>)

SHORT TERM CERTIFICATE PROGRAMS

S.No.	Program List	Duration	Eligibility
1	Certificate in Photo Editing with Adobe Photoshop (FS23CPEAP)	10 days	10th Pass
2	Certificate in Graphics Design with Adobe Illustrator (FS23CGDAI)	10 days	10th Pass
3	Certificate in Video Editing with Adobe Premiere Pro (FS23CVEAPP)	10 days	10th Pass
4	Certificate in Motion Graphics and Compositing with Adobe After Effect (FS23CMGCAAE)	10 days	10th Pass
5	Certificate in Photography (FS23CIP)	10 days	10th Pass
6	Certificate in Videography (FS23CIV)	10 days	10th Pass

Short terms programs are listed separately along with Academy Programs. The respective Academy can conduct relevant Short Term programs choosing from a list of short term courses. The exam scheme of each program is:

- (1) Theory Paper : 70 Marks
- (2) Assignment : Not Applicable for short term certificate programmes
- (3) Practical/Project : 30 Marks

Thus, every short term program evaluation shall be done on the basis of 100 marks

Note : For Short Term Certificate Programs, only Certificates are provided by the University after conducting examination.