

MCE Society's
Abeda Inamdar Senior College of Arts Science and Commerce

Animation Department



PG Diploma in Visual Effects



M. C. E. Society's

Abeda Inamdar Senior College

Of Arts, Science and Commerce, Camp, Pune-1

(Autonomous) Affiliated to Savitribai Phule Pune University

NAAC accredited 'A' Grade

PG Diploma in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	The Fundamental of Filmmaking
Course Code	21AUPGDVFX101
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	The prime objective of this unit is to introduce you to different aspects of camera work and also aim at developing or honing your skills related to your camera work.
2.	The unit will include knowledge that can benefit both a beginner and a professional in this field.
3.	The unit will explain all types of camera work irrespective of whether an individual aims at becoming an amateur movie maker or a hardcore professional in camera operations.
4.	This course will teach students the basic knowledge and concepts of editing and develop their editing sense in practical editing assignments.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Define the terms used in video production.
2.	Understand the planning of a video shoot.
3.	Know about the various camera functions.
4.	Techniques of framing.
5.	Analyze the ‘basic camera moves.
6.	Elucidate various shooting techniques.

Syllabus:

Unit No.	Title with Contents	No. of Lectures
Unit I.	Handling video camera	14
	1. Video Camera Terminology	1
	2. Shot	
	3. Framing & Composition	
	4. Transitions	
	5. Planning	
	6. Shoot Plan	1
	7. Planning to Edit.	
	8. Shot Plan	
	9. Camera Functions	2
	10. Zoom	
	11. Focus	
	12. Iris	
	13. White Balance	

	12. Video Camera Viewfinder 13. electronic viewfinder 14. Diopter adjustment 15. Zebra Stripes 16. Video Camera Shutter 17. Shutter term Speed 18. Shutter Speed	3 2
Unit III.	Video camera tripods	10
	1. Tripods 2. Tripod Parts 3. Choosing a Tripod 4. Head 5. Legs 6. Setting up a Camera Tripod 7. Tripod setup 8. Baseplate 9. How to Use a Tripod 10. Plan the Move 11. The Right Drag for the Job 12. Monopods 13. Single Legged 14. how to use a Monopod 15. Bipods	2 2
Unit IV.	Video chroma—green screen	12
	1. How to Make a Green Screen 2. Processing a green backdrop 3. Major Factors 4. Lighting 5. Camera 6. Planning the Studio Setting 7. Shoot in HD	1 1

	10. Setting up camera	
	11. Camera	
	12. Extra Camera	1
	13. Arrangements	
	14. Mobile Interviewing Techniques	
	15. Shoulder-Mounted Camera	
	16. Tripod-Mounted Camera	
	17. Walking and Talking	
	18. Field Kit Checklist	1
	19. Remote Interviews	
	20. Preparing the Guest	
	21. The Interview Sequence	
	22. Telephone and Audio-Only Interviews	
	23. New Technologies	1
	24. Recording Sound for Interviews	
	25. Microphones	
	26. Built-in Camera Mic	
	27. Audio Traps to Avoid	
	28. Lighting for Interviews	1
	29. Lights for Interviews	
	30. Shooting outside	
	31. Shooting inside	
	32. Without Lights Shoots	
	33. Camera-Mounted Lights	1
	34. Editing Interviews	
	35. Establishing Shot	
	36. Cutting Between Interviewer and Guest	
	37. Back-Cut Questions	1
	38. Noddies	
	39. General Tips for Shooting Interviews	
	40. Dealing with Newbie Guests	

	41. Pace Yourself	1
	42. Clothing	
	43. Be Prepared	1
	44. Shooting a Wedding Video	
	45. Planning a Wedding Video	
	46. Shooting the Wedding	1
	47. Editing a Wedding Video	
	48. Wedding Video Tips	1

References:

1. Cinematography & Directing, Dan Ablan, New Riders Publication
2. Make Your Digital Movies, Pete Shaner and Gernald Everett Jones, Course Technology PTR Publication.



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	The Art Direction for Film
Course Code	21AUPGDVFX102
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Art directing is somewhat like snowboarding or skydiving—the essence of the activity is in the doing. In that way, an art director is by nature an action figure.
2.	On one hand, creativity reigns with few boundaries; on the other hand, practicality takes primary focus. Balancing pairs of opposites, like art and commerce, make the job of art directing unique and challenging.
3.	The art director on a film project operates as a department manager in form but as an artist in substance. In other words, business decisions for the art department are made on a daily basis.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
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	19. Lenses 20. Composition 21. Where to Begin? 22. Working Toward Specificity in Visualization 23. Looking for Order 24. Dramatic Blocks and the Camera 25. Shot Lists and Storyboards 26. The Prose Storyboard	3 3
Unit II.	The Responsibilities, The Relationships, and the Setup	8
	1. Hierarchy of Responsibilities and Art Department Setup 2. First Responsibilities 3. Second Responsibilities 4. Third Responsibilities 5. Fourth Responsibilities 6. Art Department 7. Interdepartmental PR 8. Art Department Coordinator 9. Digital Artists 10. Set Designers 11. Set Decorator 12. Greensman 13. The Relationships 14. Art Department 15. Interdepartmental PR 16. The Setup	2 2 2

	17. Head Accountant and Staff 18. Locations Manager and Staff 19. UPM, Production Supervisor, and Production Office Staff 20. First Assistant Director and Staff 21. Previsualization Supervisor and Staff	2
Unit III.	The Design Process	10
	1. Locations Department and Scouting 2. First Scouts 3. Second Scouts 4. Third Scouts 5. Fourth Scouts 6. Fifth Scouts 7. Beginning the Design Process 8. Research 9. Storyboarding 10. Animatics 11. Concept Illustrating 12. Computer Modeling 13. White Models 73 14. Hand Drafting 15. Designing for the Lens 16. Lenses 101 17. Aspect Ratio 18. Perspective 101 19. Lens Test	3 2 2 3

Unit IV.	A Legacy of Historical Techniques	8
	1. Painted Glass 2. Gate Matting 3. The Process Camera 4. Traveling Mattes 5. Miniatures 6. Hanging Foreground Miniature 7. Foreground Miniature 8. Cutouts: A Variation on Miniatures 9. Forced Perspective 10. Mobile Miniatures 11. Front Projection 12. Rear Projection and Mirrors 13. Camera Projection 14. Perspective 15. Conversations on the Visionary Frontier 16. Alex McDowell 17. Colin Green 18. Doug Chiang 19. The Cutting Edge	2 2 2 2
Unit V.	Paperwork and Production Tasks	12
	1. The Onset of Principal Photography 2. Production Meetings 3. Camera Techniques 4. Rule of Third 5. The Schedule and Lists	 2

	<ul style="list-style-type: none"> 6. Script Breakdown 7. One-Liner Schedule 8. Shooting Schedule 9. Day Out of Days 10. Call Sheet 197 11. Cell Phone and Pager List 	2
	<ul style="list-style-type: none"> 12. Art Department Production Tasks 13. Clearances and Product Placement 14. Keeping Ahead of the Camera 200 15. On-Set Presence 16. Cover Sets 17. Communication with the Trinity 18. Telling the Truth 	3
	<ul style="list-style-type: none"> 19. Art Department Tactical Strategy 20. Handling Changes 21. Vendors 22. Minding the Budget 23. Keeping a Chronicle 24. Protecting the Crew 	2
	<ul style="list-style-type: none"> 25. Post-Production 26. Finishing Up 27. Archiving 28. Wrapping the Art Department 29. Wrapping Hero Sets 30. Re-shoots 31. Sequels 32. Landing the Next Job or Taking a Vacation 	3

	33. Editing 34. Music and Sound 35. Locking Picture, or How Do You Know When It is Over? 36. An Audience and a Big Screen	
Unit VI.	Art Director's Plans	10
	1. Networking and Self-Promotion 2. Interviewing 3. Planning 4. Social Media 5. The Networking Process 6. Gae Buckley 7. Phil Dagort 8. Steve Saklad 9. Christa Munro 10. Linda Berger 11. Paying Dues 12. Production Value = Budget + Scheduling 13. Budget 14. Schedule 15. Designing Films 16. The Art Directors Guild 17. Classes of Membership 18. Initiation Fee and Dues 19. The Roster 20. Taft–Hartley 21. Training	2 3 2 3

	22. Basic Collective Bargaining Agreement Selected Provisions	
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References:

1. Film Directing Fundamentals, Nicholas T. Proffers, Routledge Publication
2. The Art Direction Handbook for Film, Michael Rizzo, Routledge; 2nd edition Publication.



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PG Diploma in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Visual Communication
Course Code	21AUPGDVFX103
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Visual communication is the communication done with the help of visual aid. It can be described as the conveyance of information and ideas in a manner, which can be read or looked upon. Such communication totally relies on vision and, thus, is basically expressed or presented with two-dimensional images.
2.	Signs, drawings, typography, graphic design, illustration, electronic resources and color are the basic components of visual communication. The idea that a visual message, which accompanies the text always has a greater power to educate, inform or persuade an audience or person, is also empowered by visual communication.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Understand the basic concept of visual communication.
2.	Learn the characteristics of dots in visuals.
3.	Explain how to create a line in a visual
4.	Describe the functions of shape and space.
5.	Identify the functions of shape and space.
6.	Learn how to utilize different types of textures in pictures.
7.	learn about the use and significance of the main components of color.
8.	Understand the basics of scale.
9.	Identify how dimension and motion can add value to a visual picture

Syllabus

Unit No.	Title with Contents	No. of Lectures
Unit I.	Basic visual elements	10
	1. Basics of Visual Communication 2. How You See: Visual Relationships 3. Telling a Story: Visual Hierarchy 4. Syntactic Theory of Visual Communication 5. Basic Visual Elements: An Introduction 6. Dot 7. Line 8. Shapes and Space 9. Direction 10. Understanding Texture 11. Color: Hue, Value and Saturation	1 1

	39. Unity	
Unit II.	Oral and visual culture: a dominant form of communication	14
	1. Oral Communication 2. Oral Communication Definition 3. Oral Communication Models 4. Noise in Oral Communication 5. How to Make Oral Communication Effective? 6. Advantages of Oral Communication 7. Power of Orality 8. Additive 9. Redundant 10. Theory of the Characteristics of Oral Culture 11. Difference between Orality and Oratory 12. Unfamiliar with Syllogisms 13. Modes of Oral Communication 14. Telephone/Cellular phone 15. Messages 16. Intercom 17. Face-to-face discussion 18. Meetings/Conferences 19. Presentation 20. Dictaphone/Dictation 21. Conversation 22. Visual Rhetoric 23. What is visual rhetoric? 24. Visual literacy	2 2 2 2

	5. Subject 6. Simplicity 7. Leading Lines 8. Frame 9. Point of View 10. Camera Angles 11. Balance 12. Composition Rules 13. Two-Dimensional Composition 14. Three-Dimensional Composition 15. Rules of thirds 16. Three-Dimensional Composition 17. Layers of textures/lighting 18. Silhouettes 19. Depth of field	3 3 3
Unit V.	Types of photography	12
	1. Introduction to Types of Photography 2. Styles of Photography 3. Types of photography 4. Types of camera 5. Single lens reflex 6. Aerial Photography 7. Skills and Techniques Required for Aerial Photography 8. Commercial aerial photography 9. Astrophotography 10. What is Astrophotography? 11. Types of Night Sky Photography	2 3 3



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Video Editing in Premiere Pro
Course Code	21AUPGDVFX104
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	This course will take you through the basics of learning video editing with one of the most elite and professional video editing softwares available.
2.	Premiere Pro is easy to use and there is so much room to grow into the professional video editor you always wanted to be.
3.	Adobe Premiere Pro is the best video editing program you can use & it's so compatible with the Adobe family which a great plus for the program and makes your workflow easy and productive.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Creating a project.

2.	Organizing files and importing the footage
3.	Getting to know the interface.
4.	Creating sequences
5.	Basic editing tools and shortcuts
6.	Adding effects to your footage and familiarizing keyframes.
7.	Basic audio effects and controls
8.	Exporting video and presets for different platforms

Guidelines:

Sr. No.	Objectives
1.	<p>Lab Book:</p> <p>The lab book is to be used as a hands-on resource, reference and record of assignment submission and completion by the student. The lab book contains the set of assignments which the student must complete as a part of this course.</p>
2.	<p>Submission:</p> <p>Length. Your video should be 4–7 minutes in length, plus time for a “credit roll” to show your references. Style. There are no restrictions on the style of the video (i.e., you may use a narrated slideshow, a recorded lecture, a digital whiteboard, a stop motion animation (Claymation), a sock puppet show, animated graphics, a scripted scene, filmed artist drawings on paper, “man on the street” interviews, a combination of the above, etc.) Title slide. Your video should begin with a descriptive title, your name(s), the name of the school, and the year in which it was created. Original content. Aim to create your own resources. That means using your own drawings, pictures, music, animations, filmed scenes, and interviews. Where this is not possible, be sure that you only use material which falls under Creative Commons license (that you can use and modify without breaking copyright laws). Credits. Acknowledge the people who contributed to the video, including yourself, your interviewees, narrators and actors, people who supported the production, and your instructor, and specify that the video was made within the context of this course (course number, institution, date).</p>
3.	<p>File format.</p> <p>Your video must be submitted in one of the following file formats:</p>

	<p>.mov, .mv4, mp4, .wmv.</p> <p>Note that these are rendered movies, that is, files that will play on someone else's computer. Be sure to test your finished product ahead of the deadline.</p>
4.	<p>Assessment:</p> <p>Continuous assessment of Computer lab work is to be done based on overall performance and lab assignments performance of students. Each lab assignment assessment will be assigned grade/marks based on parameters with appropriate weightage. Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance, creativity.</p>
5.	<p>Operating Environment:</p> <p>For Editing and Making Final Video</p> <p>Operating system: Windows 10</p> <p>Software: Premiere Pro</p>

Syllabus:

Unit No.	Title with Contents	No. of Lectures
	Suggested List of Assignments:	90
	1. Check the Interface of Premiere, Tools, Panels and Effects	6
	2. Create a Sequence and a Basic Video Line up	6
	3. Adding video transitions & Basic CC	6
	4. Adding Audio & Audio Transition	6
	5. Adding professional and modern titles	6
	6. Stop Motion - Image Sequence- Trimming Images - Time Duration	6
	7. Keying Green Chroma - Using Ultra Keyer	6
	8. Cloning (Create Duplicating Person)	6
	9. Color correction (Effect)	6

	10. Slide Presentation	6
	11. Lens & Text Effects	6
	12. Intro Title Sequence	6
	13. Time Remapping	6
	14. Track Matt Effect	6
	15. Lower Third	6

References:

Books - Laboratory handbook



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Rotoscoping in After Effects
Course Code	21AUPGDVFX105
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	In this course, you will learn everything from Mask types to manual roto to fully automated workflows, showcasing After Effects, the industry-standard software for rotoscoping, and its comprehensive roto module.
2.	The course begins with an in-depth roto foundations class, then transitions to an extensive tour of the After Effects interface and shot approach tips.
3.	The fundamentals of all the Mask types, rotoscoping methodologies including shape creation and keyframing, multiple tracking methods, how to successfully roto a shot from beginning to end.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Know what, when and how to do proper rotoscoping.
2.	The rotoscoping technique in Adobe After Effects
3.	Know how to use After Effects and Mocha AE for rotoscoping live action shots
4.	Basic and advanced techniques in rotoscoping

Guidelines:

Sr. No.	Objectives
1.	Lab Book: The lab book is to be used as a hands-on resource, reference and record of assignment submission and completion by the student. The lab book contains the set of assignments which the student must complete as a part of this course.
2.	Submission: Your video should be 4–7 Sec in length, plus time for a “credit roll” to show your references. Render should be in Alpha, Color, and with Shapes for final video.
3.	Rotoscoping: File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4, .wmv. Note that these are rendered movies, that is, files that will play on someone else’s computer. Be sure to test your finished product ahead of the deadline.
4.	Assessment: Continuous assessment of Computer lab work is to be done based on overall performance and lab assignments performance of students. Each lab assignment assessment will be assigned grade/marks based on parameters with appropriate weightage.

	Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance, creativity.
5.	Operating Environment: For VFX Rotoscoping and Tracking Operating system: Windows 10 Software: After Effects

Syllabus:

Unit No.	Title with Contents	No. of Lectures
	Suggested List of Assignments:	90
	1. Check the Interface of After Effects, create a single Mask using Pen Tools.	15
	2. Create a ball animation using shapes.	15
	3. Create a multi mask using a solid layer.	15
	4. Basics of using tracking and rotoscoping together.	15
	5. Using multiple trackers to capture rotation and scaling.	15
	6. Using multi-Masking creates human rotoscoping, Create a Stereo Roto on human characters.	15

References:

1. Books - Laboratory handbook



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	VFX Compositing with After Effects
Course Code	21AUPGDVFX106
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	After Effects is a Compositing, VFX, and Motion graphics application developed and owned by Adobe Systems.
2.	It is generally used in the post-production stage of the film making and TV production pipeline. Besides the features mentioned above, After Effects can effectively perform a handful of jobs as keying, tracking, compositing, and animation.
3.	With this software application, you can even work on some non-linear editing in Video and Audio platforms.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
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1.	Apply basic and high-level techniques in compositing.
2.	Know what, when and how to do simple to advanced compositing in Adobe After Effects
3.	This course gives an in-depth knowledge of Compositing & Motion Graphics using Adobe After Effects CC.
4.	Know how to use Adobe After Effects for simple to advanced compositing of live-action shots

Guidelines:

Sr. No.	Objectives
1.	<p>Lab Book:</p> <p>The lab book is to be used as a hands-on resource, reference and record of assignment submission and completion by the student. The lab book contains the set of assignments which the student must complete as a part of this course.</p>
2.	<p>Submission:</p> <p>Your video should be 4–7 Sec in length, plus time for a “credit roll” to show your references. Render should be in Alpha, Color, and with Shapes for final video.</p> <p>File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4, .wmv.</p> <p>Note that these are rendered movies, that is, files that will play on someone else’s computer. Be sure to test your finished product ahead of the deadline.</p>
3.	<p>Compositing:</p> <p>Assignments should be done individually by the student. The submission should include all render passes & final render in JPG, PNG or video format.</p>
4.	<p>Assessment:</p>

	Continuous assessment of laboratory work is to be done based on overall performance and lab assignments performance of students. Each lab assignment assessment will be assigned grade/marks based on parameters with appropriate weightage. Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance and creativity.
5.	Operating Environment: For VFX Compositing Operating system: Windows 10 Software: After Effects

Syllabus:

Unit No.	Title with Contents	No. of Lectures
	Suggested List of Assignments:	90
	1. Change to Color Effects	15
	2. Chroma Removal of character	15
	3. Using Multi Elements Compositing shot	15
	4. Tracking 1 Point and 2 Point with chroma	15
	5. 3D tracking using camera tracker.	15
	6. Compositing Cg Passes, Camera Projection	15

References:

1. Books - Laboratory handbook



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	VFX & CG Compositing in Nuke
Course Code	21AUPGDVFX107
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Nuke is a Compositing, VFX, application developed and owned by The Foundry.
2.	It is generally used in the post-production stage of the film making and TV production pipeline. Besides the features mentioned above, Nuke can effectively perform a handful of jobs such as keying, tracking, compositing, Camera Projection, and animation.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome

1.	Apply basic and high-level techniques in compositing.
2.	Know what, when and how to do simple to advanced compositing in Nuke
3.	This course gives an in-depth knowledge of VFX Compositing & CG Compositing using Nuke.
4.	Know how to use Nuke for simple to advanced compositing of live-action shots

Guidelines:

Sr. No.	Objectives
1.	<p>Lab Book:</p> <p>The lab book is to be used as a hands-on resource, reference and record of assignment submission and completion by the student. The lab book contains the set of assignments which the student must complete as a part of this course.</p>
2.	<p>Submission:</p> <p>Your video should be 4–7 Sec in length, plus time for a “credit roll” to show your references. Render should be in Alpha, Color, and with Shapes for final video.</p> <p>File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4, .wmv.</p> <p>Note that these are rendered movies, that is, files that will play on someone else’s computer. Be sure to test your finished product ahead of the deadline.</p>
3.	<p>Compositing:</p> <p>Assignments should be done individually by the student. The submission should include all render passes & final render in JPG, PNG or video format.</p>
4.	<p>Assessment:</p> <p>Continuous assessment of Computer lab work is to be done based on overall performance and lab assignments performance of students. Each lab assignment assessment will be assigned grade/marks based on parameters with appropriate weightage. Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance,</p>

	creativity.
5.	Operating Environment: For VFX Compositing and CG Compositing Operating system: Windows 10 Software: Nuke

Syllabus:

Unit No.	Title with Contents	No. of Lectures
	Suggested List of Assignments:	90
	1. VFX Rotoscoping	15
	2. Multi-Part greenscreen keying	15
	3. 2d Tracker	15
	4. 3d Camera Tracker	15
	5. Camera Projection	15
	6. Multi-channel Compositing, VFX Compositing	15

References:

1. Books - Laboratory handbook



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2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	The Fundamental of Video Editing
Course Code	21AUPGDVFX109
Semester	2
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	There's enormous demand for high-quality video content, and today's video producers and editors work in an ever-changing landscape of old and new technologies.
2.	Despite all this rapid change, however, the goal of video editing is the same: You want to take your footage and shape it, guided by your original vision, so that you can effectively communicate with your audience.
3.	The latest technology and cameras with powerful tools that are easy to use. These tools integrate perfectly with almost every type of media, as well as a wide range of third-party plug-ins and other post production tools.
4.	You will begin by reviewing the essential post-production workflow that most editors follow, and then you'll learn about the main components of the Premiere Pro interface and how to create custom workspaces

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Performing nonlinear editing
2.	Exploring the standard digital video workflow
3.	Enhancing the workflow with high-level features
4.	Checking out the workspace
5.	Customizing your workspace
6.	Setting keyboard shortcuts

Syllabus:

Unit No.	Title with Contents	No. of Lectures
Unit I.	Introduction to Premiere Pro	12
	<ul style="list-style-type: none">1. Performing nonlinear editing in premiere pro2. digital video workflow3. enhancing the workflow4. expanding the workflow5. Components into the editing workflow	3
	<ul style="list-style-type: none">6. Workspace of Premiere Pro7. Launch Premiere Pro8. Click Open Project9. Timeline panel10. Tracks11. Monitor Panel	3

	12. Project panel 13. Media Browser 14. Libraries 15. Effects panel 16. Audio Clip Mixer 17. Effect Controls panel 18. Introducing preferences 19. Choose Edit. 20. Interactive Controls and Focus Indicators 21. Auto Save preferences 22. keyboard shortcuts 23. Mouse operations. 24. celluloid film-editing 25. Specialized keyboards.	3 3
Unit II.	Setting Up a Project	12
	1. Creating a new project. 2. Recent file 3. CC Files 4. New Project 5. New Project dialog box 6. Exploring video rendering and playback settings. 7. Real-time playback 8. dropping frames 9. Sequence 10. Mercury Playback Engine GPU 11. Mercury Playback Engine Software Only 12. Playback performance	1 2

Unit III.	Importing Media	12
	<ol style="list-style-type: none"> 1. Importing Assets 2. Standard importing 3. Media Browser 4. Import command 5. working with ingest option and proxy media 6. Importing from Adobe Prelude 7. Project Settings 8. Copy 9. Transcode 10. Create Proxies 11. Copy and Create Proxies 12. Working With the media browser 13. A file-based camera workflow 14. Understanding supported video file types 15. Finding assets with the Media Browser 16. Importing Images 17. Importing flattened Adobe Photoshop files 18. Importing layered Adobe Photoshop files 19. Merge All Layers 20. Merged Layers 21. Individual Layers 22. Sequence 23. Document Size 24. Importing Adobe Illustrator files 25. Import a vector graphic. 26. Importing subfolders 27. Import Folder button 	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>

	28. Using Adobe Stock 29. Libraries panel 30. License and Save	2
Unit IV.	Organizing Media	12
	1. Using the Project Panel 2. Customizing the Project panel 3. Finding assets in the Project panel 4. Filtering bin content 5. Filtering bin content 6. Using advanced Find 7. Column 8. Operator 9. Match 10. Case Sensitive 11. Creating bins 12. Managing media in bins 13. Changing bin views 14. List view 15. Icon view 16. Switch to List view 17. Assigning labels 18. Changing names 19. Customizing bins 20. Having multiple bins open at once 21. Customizing the monitors 22. Settings menu	2 2 2 2

	23. Source Monitor and Program Monitor 24. Button Editor 25. Modifying Clips 26. Adjusting audio channels 27. Merging clips 28. Interpreting video footage 29. Working with raw files	2 2
Unit V.	Mastering the Essentials of Video Editing	12
	1. Using the source monitor 2. Loading a clip 3. Loading multiple clips 4. Source Monitor 5. Using Source Monitor controls 6. Add Marker 7. Mark In 8. Mark Out 9. Insert 10. Overwrite 11. Export Frame 12. Selecting a range in a clip 13. Creating subclips 14. Packet moved 15. make subclip 16. Navigating the Timeline 17. what is sequence 18. Opening a sequence in the Timeline panel	1 2 1 1



M. C. E. Society's

Abeda Inamdar Senior College

Of Arts, Science and Commerce, Camp, Pune-1

(Autonomous) Affiliated to Savitribai Phule Pune University

NAAC accredited 'A' Grade

PG Diploma in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	The Art of Motion Graphics Design
Course Code	21AUPGDVFX110
Semester	2
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	This book is here to bridge the gap between what you can figure out with learning by doing and what you need to know to become a professional motion graphics artist.
2.	While its core mission is to give you a solid foundation in animation and design, the book also touches on other topics that are important to running a successful motion graphics business - like using storyboards to be more efficient and clearly communicate with your client, for example.
3.	We also, somewhat surprisingly, talk a lot about how our brains work - because ultimately when you understand how humans react to motion, you can create better motion graphics. And always keep in mind: a big part of success is not just to create good animations, but also to convince your clients.
4.	So it's tremendously helpful if you can deliver not just a great animation, but also an explanation of how and why your animation produces the intended effects.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	How to use all of After Effects CC - in a dynamic, hands on approach.
2.	Work with the latest Responsive Design Techniques
3.	Create Motion Graphics to enhance your videos using a step by step, easy-to-use method.
4.	Boost your creativity by completing 50+ Practice Activities and projects from simple to complex.
5.	Practice compositing techniques to achieve stunning video effects.
6.	Master Visual Time Effects on Videos and Motion Graphics.
7.	How to use specialized visual effects such as Motion Tracking, Camera Tracking, Chromakeying, Rotoscoping, Stabilizing and many more...
8.	Work in 3D space with Cameras, Lights and Shadows and practice your new skills with 3D Motion Graphics Projects.
9.	How to Import and animate Illustrator Vector Graphics
10.	Create advanced Type Animation in 2D & 3D – cool stuff only in After Effects.
11.	And much more for you to become an expert in Motion Graphics, Visual Effects and Compositing

Syllabus:

Unit No.	Title with Contents	No. of Lectures
Unit I.	A Brief History of Motion Graphics	12
	1. Precursors of Animation 2. persistence of vision 3. Early optical invention 4. Cinematic inventions 5. Experimental animation 6. Pioneers of pure cinema 7. Computer animation pioneers 8. Motion Graphics in Film Titles 9. Terry Gilliam's contribution to animation 10. Groundbreaking title sequence 11. Designing the opening title 12. Motion graphics in television 13. Early cinematic techniques 14. Network identities 15. Optical devices	3 3 3 3
Unit II.	Motion Graphics in Film and Television	12
	1. Film titles 2. Film opening titles 3. The titles for your eyes only 4. Today, motion graphics	3

	<ul style="list-style-type: none"> 5. Lines of typography 6. Network Branding 7. Station IDs 8. Show openers 9. Show package 10. Interstitials 11. Bumpers 12. Lower thirds 13. Mortises 14. Promotional campaign 15. Commercials 16. Public service announcements 17. Increasing role in television 18. Music Videos 19. Cinematic tradition 20. Expresses the dark 	<p>3</p> <p>3</p> <p>3</p>
Unit III.	The Interactive Environment	12
	<ul style="list-style-type: none"> 1. Motion over the web 2. Conceived of the idea 3. The unique web 4. Frames from made in space 5. Resn's use of animation 6. Design for RoTo Architects 7. Animation Formats 8. Voice over the web 9. Animation navigation system 	<p>2</p>

	6. Spatial transformations	
	7. Dynamic typography	
	8. Direction	2
	9. Frame Mobility	
	10. Time	
	11. Velocity	
	12. Temporal considerations	2
	13. The linear velocity	
	14. The dots along this motion	
	15. Coordinating Movement	2
	16. Basic animation principles	
	17. Squash and Stretch.	1
	18. Pause	
	19. Timing	
	20. Acceleration and declaration	
	21. Secondary action	1

References:

1. Motion Graphics Design Applied history and Aesthetics, Jon Krasner, Focal Press



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PG Diploma in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Compositing Visual Effects
Course Code	21AUPGDVFX111
Semester	2
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Digital compositing for visual effects students new to the industry
2.	Someone considering digital compositing as a career and would like to see what it is all about
3.	Entertainment industry professionals that would like to understand digital compositing, such as producers, directors, editors, colorists, and post-production supervisors.
4.	The curious, the interested, the explorer.
5.	The newcomer, it is also packed full of information and techniques specifically designed to be useful to those new to compositing and visual effects.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Nuke's User Interface
2.	Concepts and techniques for digital compositing
3.	Additive color theory
4.	Image formats / resolutions / colors
5.	2d Tracking
6.	Roto paint and Rotoscoping
7.	Keyframe animation
8.	Color correction / color grading techniques
9.	Introduction to Chroma Keying / Green Screen removal
10.	Camera traits (Lens distortion, grain, sensor noise)
11.	Clean plating and removing objects from a scene.
12.	Rendering

Syllabus:

Unit No.	Title with Contents	No. of Lectures
Unit I.	Visual Effects Today	12
	1. Digital Compositing with CGI 2. CGI Compositing 3. Set Extension 4. Match Move	3
	5. Compositing Visual Effects 6. Blue Screen Compositing 7. Motion Tracking 8. Warping and Morphing	3

	11. Display Aspect Ratio 12. Bit Depth 13. Floating Point 14. Multiplying Images 15. Image File Formats 16. Photographic Images vs. Graphics 17. Indexed Color Images (CLUT) 18. Compression 19. EXR 20. File Formats	4
Unit III.	Compositing CGI	12
	1. The CGI Composite 2. Scaling the Background 3. Semi-transparent Pixels 4. Summing the Layers 5. Multipass Compositing 6. Diffuse and Specular Passes 7. Occlusion and Shadow Passes 8. Reflection Pass 9. Creative Control 10. Depth Compositing 11. Multiplane Compositing 12. Sims 13. Particle Systems 14. Working with Premultiplied CGI 15. Color Correcting 16. Transformations and Filters	1 2 3 3

	17. The Common Mistake 18. 3D Compositing 19. The 3D Compositing Environment 20. Placing 3D in Live Action 21. Placing Live Action in 3D 22. Set Extensions 23. Camera Tracking 24. Small 3D Tasks 25. Conclusion	3
Unit IV.	Blue Screen Compositing	12
	1. The Blue Screen Composite 2. Pulling the Matte. 3. The Basic Composite 4. About Keyers 5. How Keyers Work 6. Despill 7. Color Correction 8. Scaling the Foreground and Background 9. Sum the Layers 10. The Final Composite 11. Helping the Keyer 12. Garbage Mattes 13. Procedural Garbage Mattes 14. Holdout Mattes 15. Degrain 16. Compositing Outside the Keyer 17. Merging Multiple Mattes	1 2 3 3

	18. Performing the Despill 19. Color Correcting 20. The Composite 21. Shooting Bluescreens (and Green Screens) 22. Lighting the Backing 23. Lighting the Talent 24. The Backing Material 25. Bluescreen vs. Greenscreen 26. Blue Screen Floors 27. Film Issues 28. Video Issues 29. Photography Tips	3
Unit V.	Creating Masks	12
	1. Key, Matte, Alpha, and Mask 2. Keylight 3. Ultra Keyer 4. Primmate 5. Color Matte 6. Creating a Luma-key 7. Luma matte 8. Luma Keyer 9. Color Keyer 10. Creating a Chroma-key 11. Green Screen 12. Blue Screen 13. Creating a Mask 14. The Difference Mask 15. The Color Difference Mask	3 3 3

	16. Geometric Primitives 17. Drawing Shapes 18. Painting a Mask 19. Combo Masks	3
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References:

1. Compositing Visual Effects Essentials for the Aspiring Artist, Steve Wright, Routledge



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PG Diploma in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	VFX Roto and Compositing
Course Code	21AUCC3DA112
Semester	2
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Silhouette FX and Nuke is a Roto and Compositing, VFX, application developed and owned by The Foundry.
2.	It is generally used in the post-production stage of the film making and TV production pipeline. Besides the features mentioned above, Nuke can effectively perform a handful of jobs such as keying, tracking, compositing, Camera Projection, and animation.

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Apply basic and high-level techniques in compositing.
2.	Know what, when and how to do simple to advanced compositing in Nuke.
3.	This course gives an in-depth knowledge of VFX Compositing & CG Compositing using Nuke.
4.	Know how to use Nuke for simple to advanced compositing of live action shots

Guidelines:

Sr. No.	Objectives
1.	Lab Book: The lab book is to be used as a hands-on resource, reference and record of assignment submission and completion by the student. The lab book contains the set of assignments which the student must complete as a part of this course.
2.	Submission: Your video should be 4–7 Sec in length, plus time for a “credit roll” to show your references. Render should be in Alpha, Color, and with Shapes for final video.
3.	Roto & Compositing File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4, .wmv. Note that these are rendered movies, that is, files that will play on someone else’s computer. Be sure to test your finished product ahead of the deadline.
4.	Assessment: Continuous assessment of Computer lab work is to be done based on overall performance and lab assignments performance of students. Each lab assignment assessment will be assigned grade/marks based on parameters with appropriate weightage. Suggested parameters for overall assessment as well as each lab assignment assessment include- timely completion, performance, creativity.
5.	Operating Environment: For VFX ROTO and Compositing Operating system: Windows 10 Software: Nuke and Silhouette FX

Syllabus:

Unit No.	Title with Contents	No. of Lectures
	Suggested List of Assignments:	90
	1. VFX Rotoscoping	9
	2. Stereo Rot	9
	3. 1 point & 2 Point Tracker for Roto	9

	4. Planner Tracker	9
	5. Mocha Tracker	9
	6. 3d Camera Tracker	9
	7. Multi Green Chroma Removal	9
	8. Camera Projection	9
	9. Multi-channel Compositing	9
	10. VFX Compositing, Color Correction	9

References:

1. Books- Laboratory handbook