MCE Society's

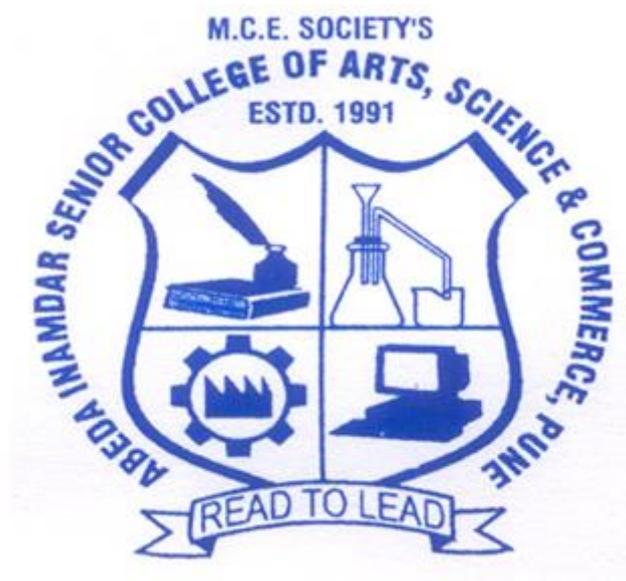**Abeda Inamdar Senior College of Arts Science and Commerce**

Animation Department

Certificate Course 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

Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	The Art of Video Editing
Course Code	**21AUCCVF101**
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	The history of editing is the story of filmmaking itself. As filmmaking evolved, so did the art of editing, with constant innovation and new discoveries.
2.	Video Editing is a fundamental component of filmmaking. It is an art of composing space (as totality or fragment, continuous or discontinuous) and time (linear or nonlinear) through the arrangement, assembly, and interaction of images (static or

	dynamic) and sounds (on screen or off screen).
3.	Editing includes storytelling, rhythm, tempo, and emotion. A good editing senses is necessary to creatively structure a cinematic work.
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.	Identify the various components of Video Editing.
2.	Identify the basic knowledge and concepts of editing.
3.	How to Make Smart Editing Decisions.

Syllabus

Unit No.	Title with Contents	No. of Lectures
Unit I.	**An introduction to the project and the development of the artifact**	**10**
	1. The Artifact	2
	2. Background for the project	2
	3. The production of the artifact	2
	4. Creative challenges in shooting and editing the interviews.	2
	5. The Exegesis	2
Unit II.	**The Art of Editing**	**16**

		1. Editing - the hidden art	2
		2. A Brief History of Editing	2
		3. Montage and mise-en-scene	3
		4. The rise of the auteur and the impact on filmmaking today	2
		5. Film editing today.	2
		6. How editors view their work in terms of art or craft.	3
		7. In summary: good film, good editing	2
Unit III.	**Looking at film editing through the prism of film theory**		**10**
		1. Where does editing sit as a 'concept' in terms of film theory.	2
		2. There is no one predominant film theory.	3
		3. Where does film theory sit in terms of filmic investigation and analysis in practice based.	1
		4. Studies	
		5. What insights did the early film theorist-practitioners bring to academic discourse as	2
		6. relevant to the practice of editing today.	
		7. Film Theory opens the scholarly discussion on filmic investigation and representation of	1
		8. space	
		9. In summary: investigating editing through the prism of film theory	1
Unit IV.	**Insights into teaching creative editing practice**		**12**
		1. Creativity, can it be taught.	2
		2. How editors learn their craft.	2
		3. Film schools are not a new concept.	3
		4. The new film schools.	
		5. In Summary: the challenge of teaching creative editing	3
			2
Unit V.	**The nexus of theory and practice in teaching**		**12**

creativity in editing		
	1. The nexus of theory and practice	4
	2. Studio-based learning and collaboration in creativity	4
		2
	3. Visual Aided Learning	2
	4. In Summary: teaching creativity in editing	

References:

1. Creative Practice and Pedagogy by Jillian Holt.
2. The Art of Editing Raymond Carver and David Foster Wallace

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Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Fundamental of Visual Effects
Course Code	**21AUCCVF102**
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	Digital compositing is a key component of today's visual effects, which create fantastic and exciting images for audiences everywhere.
2.	Visual effects have become a mainstay in modern filmmaking.
3.	The tools are new, but the principles have been the same since the dawn of cinema.

| 4. | In this course we will cover all the important principles and tools of modern visual effects and we will recapitulate the history and development of modern techniques. |
| 5. | This class will teach the fundamentals of Visual Effects. |

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	The students analyse complex visual effects in movies.
2.	The students will become familiar with the interface and the basic concepts of the software.
3.	Students will gain some insight in the compositing tools and how they apply to the creation of visual effects.

Syllabus

Unit No.	Title with Contents	No. of Lectures
Unit I.	**Overview and roto foundations**	**4**
	1. About Rotoscoping	1
	2. Splines	
	3. Articulated Rotos	1
	4. Interpolation	
	5. Keyframes	1
	6. Motion Blur	
	7. Semi-transparency	1
Unit II.	**Introducing Roto Paint's Interface**	**8**
	1. Painting strokes	1
	2. Editing strokes	1
	3. Painting in vectors	
	4. Erasing and deleting strokes.	1
	5. Drawing and editing shapes.	1

		6. Animating a shape.	
		7. The Curve Editor	1
		8. Painting in Practice	1
		9. Split-Screening Twins with Roto	1
		10. Combining Paint, Roto, and Animation	1
Unit III.	**Compositing Visual Effects**		**8**
		1. Green/Blue Screen Compositing	1
		2. Motion Tracking	1
		3. Warping and Morphing	1
		4. Crowd Duplication	1
		5. Atmospherics	1
		6. Scene Salvage	1
		7. Digital Compositing with CGI	1
		8. Set Extension	
		9. Match Move	1
Unit VI.	**Digital Images**		**7**
		1. Structure of Digital Images	2
		2. Attributes of Digital Images	1
		3. Image Resolution	1
		4. Image File Formats	2
		5. DPI	1
Unit V.	**Compositing CGI**		**12**
		1. The CGI Composite	2
		2. Multipass Compositing	2
		3. Depth Compositing	2
		4. Multiplane Compositing	2
		5. Working with Re-multiplied CGI.	2
		6. 3D Compositing	2
Unit VI.	**Blue Screen Compositing**		**9**
		1. The Blue Screen Composite	2
		2. About Keyers	2
		3. Helping the Keyer	2

		4. Compositing Outside the Keyer	1
		5. Shooting Bluescreens (and Green Screens)	2
Unit VII.	**Creating Masks**		**8**
		1. Key, Matte, Alpha, and Mask	2
		2. Creating a Luma-key	2
		3. Creating a Chroma-key	2
		4. Creating a Mask	1
		5. Drawing Shapes	1
Unit 8.	**The Art of Compositing**		**6**
		1. Colour Correcting.	1
		2. Matching Layer Attributes	2
		3. Sweetening the Composite.	1
		4. A Checklist	1
		5. Colour Correction	1

References:

1. Compositing Visual Effects by Steve Wright Publisher(s): Routledge
2. Professional Compositing and Visual Effects by Ron Ganbar

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Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Introduction to Entrepreneurship and soft skill
Course Code	**21AUCCVF103**
Semester	1
No. of Credits	4

Aims & Objectives of the Course

Sr. No.	Objectives
1.	To introduce the fundamentals of entrepreneurship.
2.	To develop the ability to Understand the characteristics of the various forms of business organization
3.	To understand a structured approach towards being a successful entrepreneur.
4.	To develop a plan of launching a start-up.

| 5. | To develop business -solution model around the current problems |
| 6. | To understand digital marketing as a tool for entrepreneurs. |

Expected Course Specific Learning Outcomes

Sr. No.	Learning Outcome
1.	Explore various ideas and business models around the business idea.
2.	Plan the core components and elements required to start a successful start-up.

Syllabus

Unit No.	Title with Contents	No. of Lectures
Unit I.	**Fundamentals of Entrepreneurship**	3
	1. What is the mindset of an entrepreneur?	
	2. Identifying a problem	1
	3. Need Analysis	
	4. Sensing solution among the problems	1
	5. Developing the seed "The Idea"	
	6. Searching market moves & trend.	1
	7. Understanding Creativity and Innovation	

		8. Opportunity finding and taking the right approach.	
Unit II.	**Develop the Plan for Start-up**		**7**
		1. Taking first steps to develop a business model.	3
		2. Selecting the right type for registering the business.	1
		3. Business Plan: concept, format. Components: Organizational plan; Operational plan; Production plan; Financial plan; Marketing plan; Human Resource planning	3
Unit III.	**Branding & Marketing of Start-up**		**10**
		1. Developing a brand around the idea.	1
		2. Branding, Logo, Tagline	1
		3. Copyright, trademark, and Patent for start-up	1
		4. Planning a strategy for promoting the start-up.	1
		5. The Art of negotiation and methods	1
		6. Customer Relationship Management	1
		7. Vendor Management	1
		8. Developing the minimum viable product.	1
		9. Sales and marketing plan	2
Unit IV.	**Growing the Start-ups**		**10**
		1. Lean start-up growth	2
		2. Making a growth plan for the start-up.	2
		3. Concept of Franchising the start-up	2
		4. Mergers and Acquisition: Concept, reasons, types.	2
		5. Reasons for failure of Mergers and Acquisitions.	2
Unit V.	**Cost, Expenses, Inventory and ROI**		**10**
		1. Unit of Sale, Unit Cost for multiple products or services	2
		2. Break even Analysis for multiple products or	2

		services.	2
	3.	Computation of Working Capital	
	4.	Inventory Control and EOQ	2
	5.	Return on Investment (ROI) and Return on Equity (ROE)	2
Unit VI.	**Resource Mobilization**		**5**
	1.	Capital Market- Primary and Secondary	1
	2.	Stock Exchange- Concept, features, functions, and importance	1
	3.	Securities and Exchange Board of India- History, establishment, powers	1
	4.	Angel Investor: Features	
	5.	Venture Capital: Features, funding	1
			1
Unit VII.	**Digital Marketing as Marketing Tool**		**15**
	1.	What is Digital Marketing	3
	2.	Growth of digital marketing	3
	3.	Benefits of digital marketing	3
	4.	Different digital marketing channels	3
	5.	Setting up digital marketing budgets	3

References:

1 - Udyamita (in Hindi) by Dr. MMP. Akhouri and S.P Mishra, pub. By National Institute for Entrepreneurship and Small Business Development (NIESBUD), NSIC-PATC Campus,Okhla

2-Entrepreneurship development & management (English, Paperback, V. K. Joshi) Publisher: Jagdamba Publishing Company ISBN: 9789380280462, 9380280462

3-Entrepreneurship Paperback – 1 July 2020 by Rajeev Roy Publisher : OUP India; 3rd edition (1 July 2020) Language : English Paperback : 600 pages ISBN-10 : 0190125306

4- Safalta ki 22 Chabiyaan (In Hindi) by Dr. Rishi Aacharya pub. by Notion Press Chennai
ISBN-10 : 1947027514

Magazines

- Udyamita Samachar Patra (Monthly, Hindi), Pub. By Centre for Entrepreneurship
Development, M.P. (CEDMAP), 60 Jail Road, Jhangerbad, Bhopal-462008.

- Science Tec. Entrepreneur (A Bi Monthly Publication), Centre for
Entrepreneurship Development, M.P (CEDMAP), 60 Jail Road, Jhangerbad, Bhopal -
462008

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Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Video Editing in Premiere Pro
Course Code	**21AUCCVF104**
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 software's 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 familiarize keyframes
7.	Basic audio effects and controls
8.	Exporting video and presets for different platforms

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:** 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).
	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
3.	**Assessment:**
	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, creativity	
4.	**Operating Environment:** For Editing and Making Final Video Operating system: Windows 10 Software: Premiere Pro	

Syllabus

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

9. Assignment 9. Color correction (Effect)	6
10. Assignment 10. Slide Presentation	6
11. Assignment 11. Lens & Text Effects	6
12. Assignment 12. Intro Title Sequence	6
13. Assignment 13. Time Remapping	6
14. Assignment 14. Track Matt Effect	6
15. Assignment 15. Lower Third	6

References:

Books: Lab handbook

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Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	Rotoscoping in After Effects
Course Code	**21AUCCVF105**
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, Colour, and with Shapes for final video. File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4. 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. | |
|---|---|---|
| **3.** | **Assessment:**

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,

creativity | |
| **4.** | **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. **Assignment 1.**

Check the Interface of After Effects, create a single Mask using Pen Tools. | 15 |
| | 2. **Assignment 2.**

Create a ball animation using shapes. | 15 |
| | 3. **Assignment 3.**

Create multi mask using solid layer. | 15 |
| | 4. **Assignment 4.**

Basics of using tracking and rotoscoping together. | 15 |
| | 5. **Assignment 5.**

Using multiple trackers to capture rotation and scaling. | 15 |
| | 6. **Assignment 6.** | 15 |

| | Using multi-Masking create human rotoscoping. | |
| | Create a Stereo Roto on human character | |

References:

Books: Lab handbook

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Certificate Course in Visual Effects

2021-22 (CBCS – Autonomy 21 Pattern)

Course/ Paper Title	VFX Compositing with After Effects
Course Code	**21AUCCVF106**
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 put to use in the post-production stage of the filmmaking 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
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.	**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:** Video should be 2-3min in length, plus time for a "credit roll" to

	show your references. Render should be in full HD frame size of the video should be 1920*1080. File format. Your video must be submitted in one of the following file formats: .mov, .mv4, mp4. 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	
3.	**Assessment:** 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, creativity	
4.	**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. **Assignment 1.** Check all the After Effects Interface Panel	8
	2. **Assignment 2.** Use all the Tools & Effects and Create a Basic Comp	7
	3. **Assignment 3.** Work with Shape Layer and create Ball Animation with Masking	8
	4. **Assignment 4.**	7

	Create a Keying Composition using key light & Garbage Mask.	
	5. Assignment 5. Replace a Sky Using 1 Point Tracking and create a Sky Replacement Comp	8
	6. Assignment 6. Create a Composition using 1 Point Tracking & Key light Chroma Removal.	7
	7. Assignment 7. Using Motion Tracking Stabilize Video Footage and Track a Shape using Null Object.	8
	8. Assignment 8. Track the element using 2-point tracking.	7
	9. Assignment 9. Track a banner using 4-point Tracking.	8
	10. Assignment 10. Create 3d Tracking Using Camera Track also do a Time Remapping.	7
	11. Assignment 11. Infographics: Animate a static image also add fake light with CC Light Rays	8
	12. Assignment 12. Create Basic Motion Graphics Introduction of Yourself Create Motion Graphics using After Effects Tools	7

References:

Books: Lab handbook