

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

1	Name of Course	CERTIFICATE COURSE IN POST PRODUCTION – VISUAL EFFECTS (VFX) (2019-2020)																																																													
2	Course Code	413203																																																													
3	Max. No. of Students Per Batch	25 Student																																																													
4	Duration	1 Year																																																													
5	Type	Part Time																																																													
6	No Of Days / Week	6 Days																																																													
7	No Of Hours / Days	4 hrs.																																																													
8	Space Required	1) Lab = 200 sq feet 2) Class Room = 200 sq feet TOTAL = 400 sq feet																																																													
9	Minimum Entry Qualification	12 th Pass or Equivalent.																																																													
10	Age Limit	Minimum 18 Years																																																													
10	Objective Of Course	To develop ability and skills of latest visual effect software and techniques. Student learns Concept of Visual Effect and Video Editing. To develop ability of Various skills like Roto, Compositing, Paint, Colour Correction etc.																																																													
11	Employment Opportunities	Student can get various job roles with this course related post production process and video editing. Roto artist, Compositing artist, Colour correction artist, Motion graphics designer, Paint artist, Match move artist etc.																																																													
12	Teacher's Qualification	Graduate from any stream + Any diploma in Visual Effects. Min. 1 year industry Experience																																																													
13	Training System	<table><tr><th colspan="3">Training System Per Week</th></tr><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>12 hrs</td><td>30 hrs</td><td>42 hrs</td></tr></table>							Training System Per Week			Theory	Practical	Total	12 hrs	30 hrs	42 hrs																																														
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14	Exam. System	<table><tr><th>Sr. No.</th><th>Paper Code</th><th>Name of Subject</th><th>TH/ PR</th><th>Hours</th><th>Max. Marks</th><th>Min. Marks</th></tr><tr><td>1</td><td>41320311</td><td>Editing & Composition</td><td>TH - I</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>2</td><td>41320312</td><td>Adv. Editing & Composition</td><td>TH - II</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>3</td><td>41320313</td><td>Dynamics & Simulation</td><td>TH-3</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>4</td><td>41320321</td><td>Editing & Composition</td><td>PR - I</td><td>4 hrs.</td><td>100</td><td>50</td></tr><tr><td>5</td><td>41320322</td><td>Dynamics & Simulation</td><td>PR- II</td><td>4 hrs.</td><td>100</td><td>50</td></tr><tr><td>6</td><td>41320323</td><td>Final Showreel</td><td>PR- III Oral</td><td>4 hrs.</td><td>100</td><td>50</td></tr><tr><td></td><td></td><td>Total</td><td></td><td></td><td>600</td><td>255</td></tr></table>	Sr. No.	Paper Code	Name of Subject	TH/ PR	Hours	Max. Marks	Min. Marks	1	41320311	Editing & Composition	TH - I	3 hrs.	100	35	2	41320312	Adv. Editing & Composition	TH - II	3 hrs.	100	35	3	41320313	Dynamics & Simulation	TH-3	3 hrs.	100	35	4	41320321	Editing & Composition	PR - I	4 hrs.	100	50	5	41320322	Dynamics & Simulation	PR- II	4 hrs.	100	50	6	41320323	Final Showreel	PR- III Oral	4 hrs.	100	50			Total			600	255					
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2	41320312	Adv. Editing & Composition	TH - II	3 hrs.	100	35																																																									
3	41320313	Dynamics & Simulation	TH-3	3 hrs.	100	35																																																									
4	41320321	Editing & Composition	PR - I	4 hrs.	100	50																																																									
5	41320322	Dynamics & Simulation	PR- II	4 hrs.	100	50																																																									
6	41320323	Final Showreel	PR- III Oral	4 hrs.	100	50																																																									
		Total			600	255																																																									

Theory I
Editing & Composition

Sr. No.	Content	Training on	Learning Outcomes
1	Introduction to Adobe Photoshop	Adobe PhotoShop	Student understand use of Photoshop, tools, layout, workspace, layers, Masking, Vector Graphics, Raster Graphics, Using brushes, Gradient, Hue & saturation, Layers, Masking etc. Students develop their ability to design Logo, do some typography work and much more.
2	Digital Photo Editing	Adobe PhotoShop	Students understand how to use various tools, Retouching photo, Convert BW photo to Colour Photo, Photo Editing, Digital Make up, Image Colour Balance.
3	Matte Painting & Photo Composition	Adobe PhotoShop	Students Understand how to make collage, different views with different images, Use of Masking and Photo Composition.
4	Digital Painting	Adobe PhotoShop	Students Understand how to create imaginary digital painting, Character Painting, Back ground scene etc .
5	Introduction to After Effect	Adobe After Effect	Student understand Adobe AE interface, importing footage, text animation, path animation, create mask and shape effect.
6	Chroma Removal in live footage	Adobe After Effect	Student understand 3D camera projection, Converting footage into frames, how to use effect control, chroma reduction process.
7	Wire Remove	Adobe After Effect	Student understands how to remove wire or paint in AE.
8	Tracking	Adobe After Effect	Student Understand how to track object.
9	Using effects in AE	Adobe After Effect	Student learn and understand using various effects in AE
10	Demoreel	Adobe Photoshop & After Effect	Student Learn & understand to create demo reel.

Theory II
Advance Editing & Composition

Sr. No.	Content	Training on	Learning Outcomes
1	Introduction to Silhoutte	Silhoutte	Student Understand interface of Silhoutte, Tools, Menu Bar, workspace, Properties, Reports etc.
2	Techniques of ROTO in Silhoutte	Silhoutte	Students understand techniques of ROTO. They also understand Matte Roto.
3	Tracking in Silhoutte	Silhoutte	Student Understand One Point, 2 Point, 4 Point Tracking in Production.
4	Wire Removal (Paint)	Silhoutte	Student Understand how to do pixel painting for wire removal.
5	Rendering	Silhoutte	Student understand how to export file for rendering. Student also understand different file format.
6	Introduction to Nuke	Nuke	Student Understand Interface, Tool, Node inside Nuke, Importing file format inside nuke.
7	Techniques of ROTO in Nuke	Nuke	Student Understand Mask, Matte rotoscopy, different techniques of Roto.
8	Keying Concept in Nuke	Nuke	Student Understand green & blue BG, Matte Layer, some plug in for keying.
9	Paint Tool in Nuke	Nuke	Student Understand how to remove wire or unwanted object, dust busting, Rig removal etc.
10	Tracking and stabilization features	Nuke	Student Understand 1 point, 2 point and 4 Point tracking in Nuke.
11	2D/3D Camera Projection	Nuke	Student Understand camera and scene node parameters.
12	Texturing and Lighting nodes	Nuke	Student Understand diffuse, ambient specular and all light deformation node.
13	Stabilization Node	Nuke	Students Understand Stabilization Node.
14	Demoreel	Nuke	Student learn & Understand how to create Demo reel

Theory III
Dynamics & Simulation

Sr. No.	Content	Training on	Learning Outcomes
1	Introduction to 3Ds Max	3Ds Max	Student Understand interface, workspace, tools, menu etc. in 3Ds Max.
2	Creating object in 3Ds Max	3Ds Max	Student Understand 3D para-metrics – standard, extended, AEC, Windows door object, Compound object. Student also understands Nurbs, Editable poly, compound object etc.
3	Texturing	3Ds Max	Student understand the process of Texturing, UV Map, Unwrapping Map(Bump, Noise, Gradient etc.), Material etc.
4	Lightning	3Ds Max	Student understands CG lighting, different type of light, V-ray and Arnold lighting.
5	Cloth Modifier	3Ds Max	Student Understand cloth modifier: bed sheet, curtains, pillow, tearable cloths etc.
6	Dynamics – Particle	3Ds Max	Student understand Simple Particles: Spray, Snow, Blizzard, Super Spray, Parray, P cloud, Blob Mesh and Masher Explain event, linking event together in Particle Flow, Explain force, Material Static, Position Object, Collision, Age Test, Spawn, Find Target and many more
7	Dynamics - Physics	3Ds Max	Students Understand Reactor, Physics, RB, Collection, SB Collection, Def Mesh, Rope, Cloth, Fracture, Water, Ragdoll, Spring, Hinge, Toy car.
8	Crowd Simulation	3Ds Max	Student Understand introduction to crowd simulation, Tips and Tricks Conclusion.
9	Hair & Fur	3Ds Max	Students Understand tips and tricks for hair and fur.
10	Introduction to Autodesk Maya	Maya	Students understand interface, workspace, tools, and modifiers in the MAYA. Students Understand Nurbs Modelling, Texturing etc.
11	MAYA Dynamics	Maya	Student Understand definition-laws regarding dynamics, effect panel and fields, 2D & 3D container and parameters, destruction object, sea ponds, N-particles, rain, fire etc.
12	N cloth	Maya	Student Understand Cloth,N cloth, Tearble Cloth Tranform etc.
13	Hair & Fur	Maya	Students Understand tips and tricks for hair and fur.
14	Rendering	Maya	Student Understand types of Rendering and process of rendering.
15	Demo Reel	3Ds Max + Maya	Student learn & Understand how to create Demo reel

Practical I
Editing & Composition

Sr. No.	Practical	Practical on	Other details if have
1	Collage	Photoshop	Student Create Collage in Photoshop using different image.
2	Retouched old photograph	Photoshop	Student retouch old photo.
3	Digital Painting	Photoshop	Student Create BG with help of Digital Painting.
4	Photo colour Correction	Photoshop	Student transform Black white photo in colour photo.
5	Logo Design	Photoshop	Student creates Logo for given information.
6	Adding effect to text	Photoshop	Student Add effect to text.
7	Create Gif animation	Photoshop	Students create Gif Animation.
8	Create simple animation of different type of footage	After Effect	Student creates simple animation of different type of footage.
9	Create mask & shape effect (using all make a motion graphics)	After Effect	Student creates motion graphics.
10	Create 3d camera projection	After Effect	Student create 3D environment for video.
11	Chroma remove on live footage	After Effect	Student removes chroma from live footage.
12	Roto of 100 frames	After Effect	Student does rotoscoping for 100 frames.
13	Track computer monitor or ipod	After Effect	Student track a video with monitor or ipod.
14	Convert day to night scene, use track for light	After Effect	Student convert day scene to night scene.
15	Create any particle effect by using particle illusion	After Effect	Student creates a particle effects.
16	Assignment using different passes	After Effect	Student creates video using different effect and passes in After Effect.
17	100 frames Roto in Silhouette	Silhouette	Student does rotoscoping for minimum 100 frames.
18	50 frames Roto using Matte	Silhouette	Student does rotoscoping for minimum 50 frames.
19	One point tracking	Silhouette	Student does faculty guided assignment (100 Frames)
20	Two point tracking	Silhouette	Student does faculty guided assignment (100 Frames)
21	Four point tracking	Silhouette	Student does faculty guided assignment (100 Frames)
22	make one 100 frames scene using all paint techniques	Silhouette	Student makes one 100 frames scene using all paint techniques.
23	Roto work in Nuke on footage	Nuke	Student does Roto on minimum 200 frame by frame.
24	Frame by using track	Nuke	Student creates minimum 100 frames using track.
25	100 frames of Chroma Key	Nuke	Student does work on Chroma key
26	Clean up of footage	Nuke	Students remove objects in given video.
27	Tracking	Nuke	Students create 1/2/4 Point tracking assignment as per teachers guideline.
28	Stabilization of any 2 footage	Nuke	Students does Stabilization of 2 footage work on given footage.

Practical II
Dynamics & Simulation

Sr. No.	Practical	Practical on	Other details if have
1	Create Geometrical shapes with standard & extended primitives.	3Ds Max	Students create various 3D object.
2	Create Geometrical shapes with compound + spline object	3Ds Max	Student creates various 3D Model.
3	Mapping and unwrapping or Defuse colour on geometrical shapes. (reflaction or refraction)	3Ds Max	Students use various texturing tools.
4	Standard lighting to illuminate the scene	3Ds Max	Students create lighting effect.
5	Make the scene renderable with standard camera	3Ds Max	Student create scene with renderable standard camera.
6	Create simulations with the particles.	3Ds Max	Student create fire, snow, smoke, water effects
7	Create softbody, Hardbody simulation	3Ds Max	Student creates Cloth simulation, destruction effects.
8	Hair & Fur	3Ds Max	Students create hair and fur for given object.
9	Morphing	3Ds Max	Students create particle morphing effects.
10	Create Geometrical shapes with standard & extended primitives.	MAYA	Students create various 3D object.
11	Create Geometrical shapes with compound + spline object	MAYA	Student creates various 3D Model.
12	Mapping and unwrapping or Defuse colour on geometrical shapes. (reflaction or refraction)	MAYA	Students use various texturing tools.
13	Standard lighting to illuminate the scene	MAYA	Students create lighting effect.
14	Make the scene renderable with standard camera	MAYA	Student create scene with renderable standard camera.
15	Create simulations with the particles.	MAYA	Student create fire, snow, smoke, water effects
16	Create softbody, Hardbody simulation	MAYA	Student creates Cloth simulation, destruction effects.
17	Hair & Fur	MAYA	Students create hair and fur for given object.
18	Morphing	MAYA	Students create particle morphing effects.
19	Making simulation with passive objects	3DS Max + Real flow	Student creates active and passive objects simulations.
20	D Spline simulation	Real Flow	Students create guided effect.
21	Planner tracking	Mochapro	Student track as per spline.

Examination

Sr. No.	Subject	Written/Practical Examination	Class Assessment	Total	Credit Score
		Total Mark/Min. Marks	Total Mark/Min. Marks	Total Mark/Min. Marks	Credit Score
1	Editing & Composition (TH)	80/32	20/12	100/40	4 Credits
2	Adv. Editing & Composition (TH)	80/32	20/12	100/40	4 Credits
3	Dynamix & Simulation (TH)	80/32	20/12	100/40	4 Credits
4	Editing & Composition (PR)	100/50		100/50	4 Credits
5	Dynamix & Simulation (PR)	100/50		100/50	4 Credits
6	Final Showreel (PR)	100/50		100/50	4 Credits
				600/270	24 Credits

List of Tools, Equipment and Machinery etc.

Sr. No.	Name of Item	Nos./Quantity
1	Intel i3 processor, 4 GB RAM, 2GB Graphic Card, 17" Monitor, Keyboard, Mouse, compatible Motherboard (Configured Computers)	15+1
2	Server	1
3	Lan Switch	1
4	LCD Projector/42 inches TV	1
5	Inkjet Printer	1
6	Digital Camera/Handy Cam	2
7	Scanner	1
8	Photoshop Subscription	1
9	Aftereffect Subscription	1
10	Nuke License	1
11	3Ds Max Subscription	1
12	MAYA subscription	1
13	Video Footage as per syllabus	15
14	E books related with syllabus	15
15	Chroma curtain and stand (green/blue)	1 (6ft width X 9ft Height)
16	Speaker (2.1)	1
17	Headphone	1
18	Adequate Furniture	As per requirement
19	Lights (Shooting)	Any type of light
20	Internet broadband Connection.	

Estimated investment for the above tools and Material

Sr. No.	Name of Item	Amount in Rs.
1	Intel i3 processor, 4 GB RAM, 2GB Graphic Card, 17'' Monitor, Keyboard, Mouse, compatible Motherboard (Configured Computers)	512000.00
2	Server	80000.00
3	Lan Switch	2200.00
4	LCD Projector/42 inches TV	35000.00
5	Inkjet Printer	12000.00
6	Digital Camera/Handy Cam	50000.00
7	Scanner	3500.00
8	Chroma curtain and stand (green/blue)	4800.00
9	Speaker (2.1)	1800.00
10	Headphone	3000.00
11	Adequate Furniture	30000.00
12	Lights (Shooting)	8000.00
13	Internet broadband Connection.	1500.00
TOTAL		743800.00