



Deccan Education Society's

Fergusson College (Autonomous), Pune

Program Specific Outcomes(PSOs) and Course Outcomes (COs) 2019-20

Department of Animation

Programme: B.Sc. Animation

PSO No.	Program Specific Outcomes(PSOs) Upon completion of this programme the student will be able to
PSO1	Academic competence: (i) Create competence in the fields of Computer Graphics assets creation, Visual Effects, Gaming and Graphic designing. (ii) Understand the ongoing changing trends and keep them updated with the latest technology. (iii) Produce creative and technical skills in various domains of Animation, Gaming, VFX and multimedia. This will enable them to be employed globally.
PSO2	Personal and Professional Competence: (i) Use critical thinking skills and problem-solving strategies for overall development of the professional growth in the fields like Animation, VFX, gaming, and graphics. (ii) Carry out industry orientated new technologies and new trends in animation, VFX & graphics. (iii) Create ample opportunities to work effectively to emerge as an acceptable team leader by working on team projects & assignments.
PSO3	Research Competence: (i) Apply technical knowledge and methodologies from animation softwares in order to conduct research and demonstrate appropriate skill to seek solutions to problems that emerge in various fields of 3d animation & VFX simulations
PSO4	Entrepreneurial and Social competence: (i) Develop Entrepreneurial capabilities considering animation industry works mainly on freelancing and individual creativity. (ii) Build adequate knowledge, skill, dedication and work ethics required for accomplishment of the assigned task and strengthen social competency skills. (iii) Able to demonstrate their acquired knowledge for the growth of social and ethical values in outdoor activities, such as service learning, internships and field work. (iv) Maintain and develop ethics of Media, Animation & Gaming Industry as these industries plays vital role in today's generations.

F.Y. B.Sc. Semester I

Title of the Course and Course Code	Basics of Animation (ANI1101)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe the evolution of animation and its history.	1
CO2	Discuss the art of movement and analyze creative work of artist.	2
CO3	Examine various processes of animation techniques that are developed with various equipments.	3
CO4	Compare and contrast various traditional animation techniques.	4
CO5	Determine various animation techniques with basic principles of animation.	5
CO6	Build various optical toys and animations before films.	6
Title of the Course and Course Code	Language Skills (ANI1102)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	State importance of language in communication & journey of language.	1
CO2	Explain varied forms of applied formal writing.	2
CO3	Illustrate proofreading skills to eliminate linguistic barriers.	3
CO4	Compare written communication as an important form of communication.	4
CO5	Evaluate common errors in English language.	5
CO6	Prepare to interact with formal correspondence.	6
Title of the Course and Course Code	Photography (ANI1103)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall history of Photography	1

CO2	Explain camera functioning	2
CO3	Operate camera and its accessories	3
CO4	Compare lighting techniques and types of lenses	4
CO5	Review color theory	5
CO6	Generate photographs using the given techniques	6
Title of the Course and Course Code	Foundation Art (ANI1104)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall the basics of drawing and material handling.	1
CO2	Illustrate the importance of elements of designs	2
CO3	Demonstrate the usage of positive and negative space in a design composition.	3
CO4	Identify, analyze color theory and color harmony in drawing and sketching.	4
CO5	Review different type of art forms.	5
CO6	Create backgrounds and compositions with the help of color theory and color harmony.	6
Title of the Course and Course Code	Character Design (ANI1105)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall the basics of drawing and sketching	1
CO2	Illustrate the importance of character designing	2
CO3	Demonstrate the usage of expressions in character design	3
CO4	Identify, analyze types of characters and their styles	4
CO5	Review different type of concept arts in context of characters	5
CO6	Create Character Bible, Model Sheets for a newly designed character.	6

Title of the Course and Course Code	Cell Animation (ANI1106)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe the Principles of Animation for creation of cell animations.	1
CO2	Explain various principles of animation with the help of traditional methods.	2
CO3	Apply action analysis and observations to animated drawings.	3
CO4	Analyze basic animation movements for characters or objects.	4
CO5	Determine critical thinking skills elemental to the problem solving of design and the visual arts.	5
CO6	Create drawings that represent actions and emotions.	6
Title of the Course and Course Code	Brainstorming & Crafting (ANI1107)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall the basics of drawing and material handling.	1
CO2	Illustrate the importance of brainstorming methods	2
CO3	Demonstrate the various methods of brainstorming	3
CO4	Identify, analyze different materials and tools used in art	4
CO5	Review different type of art forms along with the content	5
CO6	Create various innovative creative art sculptures	6
F.Y. B.Sc. Semester II		
Title of the Course and Course Code	Visual Communication (ANI1201)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe basics of Communication.	1
CO2	Explain theory of Visual Communication.	2

CO3	Apply rules of communication theory.	3
CO4	Analyze various camera angles and shots.	4
CO5	Determine the importance of visuals in media.	5
CO6	Create a design or storyboards for the films.	6
Title of the Course and Course Code	Stop Motion Animation (ANI1202)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe the working of stop motion industry.	1
CO2	Explain the process of handling materials for clay modelling and cut out animation.	2
CO3	Classify armature and miniature modelling.	3
CO4	Differentiate techniques between cut-out animation and clay-mation.	4
CO5	Review the techniques of tool handling.	5
CO6	Create an animated clip by using the cut out and clay animation techniques.	6
Title of the Course and Course Code	Digital Film Production (ANI1203)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall basics of Camera	1
CO2	Explain lighting & cinematography techniques	2
CO3	Execute video shoots with lighting setups	3
CO4	Compare different cameras with lenses	4
CO5	Review post production techniques & stages	5
CO6	Compose video footages to create final outputs	6
Title of the Course and Course Code	Advance Foundation Art (ANI1204)	Number of Credits : 04

On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall the basics of drawing and sketching	1
CO2	Illustrate the importance of color theory	2
CO3	Demonstrate the usage of 1-2 point perspective in drawing	3
CO4	Identify, analyze color theory and color harmony in drawing and sketching.	4
CO5	Review different type of art forms.	5
CO6	Create backgrounds, compositions and storyboards with the help of color theory and color harmony.	6
Title of the Course and Course Code	Advance Character Design (ANI1205)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall the basics of drawing and sketching	1
CO2	Illustrate the importance of character designing	2
CO3	Demonstrate the usage of expressions in character design	3
CO4	Identify, analyze types of characters and their styles	4
CO5	Review different type of concept arts in context of characters	5
CO6	Create Character Bible, Model Sheets for a newly designed character	6
Title of the Course and Course Code	Vector Design (Illustrator) (ANI1206)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall theoretical knowledge of print and digital media.	1
CO2	Explain various concepts of digital art.	2
CO3	Illustrate the usage of various tools for vector graphic software.	3

CO4	Identify various points of vector design styles & raster designing	4
CO5	Compare Concept Art and Fantasy Art while converting from paper to digital format.	5
CO6	Create art related to print media and vector based using digital platforms.	6
Title of the Course and Course Code	Digital Art (Photoshop) (ANI1207)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall theoretical knowledge of print and digital media.	1
CO2	Explain various concepts of digital art.	2
CO3	Illustrate the usage of various tools for graphic software.	3
CO4	Identify various points of switching from hand drawings to digital platforms.	4
CO5	Compare Concept Art and Fantasy Art while converting from paper to digital format.	5
CO6	Create background for 2d animation, texturing for 3d animation using digital platforms.	6
S.Y. B.Sc. Semester III		
Title of the Course and Course Code	Technical English I (ANI2301)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	State importance of language in communication & journey of language.	1
CO2	Explain varied forms of applied formal writing.	2
CO3	Illustrate proofreading skills to eliminate linguistic barriers.	3
CO4	Compare written communication as an important form of communication.	4
CO5	Evaluate common errors in English language.	5
CO6	Prepare to interact with formal correspondence.	6

Title of the Course and Course Code	Production Process (ANI2302)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Outline pre-production process for animated films	1
CO2	Discuss the storyboarding techniques and animatics.	2
CO3	Demonstrate details of character designing.	3
CO4	Compare various characters aspects in detail.	4
CO5	Review Story-Boards for animation.	5
CO6	Create concept art for animated film and a Character design.	6
Title of the Course and Course Code	3d Modeling, Texturing And Rendering (ANI2303)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall 3d Animation techniques and concepts.	1
CO2	Illustrate tools used for 3d modelling & texturing.	2
CO3	Demonstrate different types of modelling.	3
CO4	Compare modelling topologies.	4
CO5	Review different types of shaders and materials.	5
CO6	Design various textured 3d models & get final renders.	6
Title of the Course and Course Code	Animation Practical I (ANI2304)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Outline pre-production process for animated films.	1
CO2	Discuss the storyboarding techniques and animatics.	2
CO3	Demonstrate details of character designing.	3

CO4	Compare various characters aspects in detail.	4
CO5	Review Story-Boards for animation.	5
CO6	Create concept art for animated film and a Character design from real life.	6
Title of the Course and Course Code	Animation Practical II (ANI2305)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall theoretical knowledge of print and digital media.	1
CO2	Explain various concepts of print media.	2
CO3	Illustrate the usage of various tools for graphic software.	3
CO4	Identify various points of switching from digital platforms to print media.	4
CO5	Compare Concept Art and Fantasy Art while converting from paper to digital format to print art.	5
CO6	Create content required for print media.	6
Title of the Course and Course Code	Animation Practical III (ANI2306)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall 3d Animation techniques and concepts.	1
CO2	Discuss tools used for 3d basics.	2
CO3	Demonstrate different types of modelling.	3
CO4	Compare modelling topologies.	4
CO5	Consider types of shaders and materials.	5
CO6	Design various textured 3d models to get final renders.	6
S.Y. B.Sc. Semester IV		
Title of the Course and Course Code	Technical English II (ANI2401)	Number of Credits : 03

On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	State importance of language in communication & journey of language.	1
CO2	Explain varied forms of applied formal writing.	2
CO3	Illustrate proofreading skills to eliminate linguistic barriers.	3
CO4	Compare written communication as an important form of communication.	4
CO5	Evaluate common errors in English language.	5
CO6	Prepare to interact with formal correspondence.	6
Title of the Course and Course Code	3D Rigging And Animation (ANI2402)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall 3d Animation techniques.	1
CO2	Discuss advanced 3d animation terms.	2
CO3	Compare different Rig setups & types of simulations.	5
CO4	Analyze terms of physics which are incorporated in 3d simulations.	4
CO5	Determine suitable results for the simulations and rig models.	5
CO6	Assemble rigs for 3d models to create character animations.	6
Title of the Course and Course Code	Compositing and Motion Graphics (ANI2403)	Number of Credits : 03
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall history & utility of motion graphics.	1
CO2	Compare various tools of motion graphics	2
CO3	Execute various compositing techniques.	3
CO4	Identify appropriate tools required for motion graphics specific projects.	4

CO5	Determine motion graphics examples based on target audience	5
CO6	Create motion graphic videos.	6
Title of the Course and Course Code	Animation Practical IV (ANI2404)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall character Animation principles.	1
CO2	Compare advanced tools used for character animation.	2
CO3	Examine 3d animation techniques.	3
CO4	Detect errors in key animations.	4
CO5	Test various character animation movements.	5
CO6	Compose different character animations.	6
Title of the Course and Course Code	Animation Practical V (ANI2405)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall rigging & simulation techniques.	1
CO2	Discuss advanced 3d animation terms.	2
CO3	Compare different Rig setups & types of simulations.	4
CO4	Analyze terms of physics which are incorporated in 3d simulations.	4
CO5	Determine suitable results for the simulations and rig models.	5
CO6	Assemble rigs for 3d models to create character animations.	6
Title of the Course and Course Code	Animation Practical VI (ANI2406)	Number of Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall history & utility of motion graphics.	1

CO2	Compare various tools of motion graphics.	2
CO3	Execute various compositing techniques.	3
CO4	Identify appropriate tools required for motion graphics specific projects.	4
CO5	Determine motion graphics examples based on target audience.	5
CO6	Create motion graphic videos.	6
T.Y. B.Sc. Semester V		
Title of the Course and Course Code	Web Design I (ANI3501)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe various web technology and application development issues and trends.	1
CO2	Distinguish between server-side and client-side web technologies	2
CO3	Apply CSS with its types and use them with HTML to provide the styles to the web pages at various levels	3
CO4	Explain different components and technologies of World Wide Web as a platform	4
CO5	Validate different web form fields using JavaScript.	5
CO6	Design and develop websites using fundamental web languages, technologies, and tools.	6
Web Design II (ANI3502)		
Title of the Course and Course Code	Web Design II (ANI3502)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe various web technology and application development issues and trends.	1
CO2	Distinguish between server-side and client-side web technologies	2
CO3	Apply CSS with its types and use them with HTML to provide the styles to the web pages at various levels	3
CO4	Explain different components and technologies of World Wide	4

	Web as a platform	
CO5	Validate different web form fields using JavaScript	5
CO6	Design and develop websites using fundamental web languages, technologies, and tools.	6
Title of the Course and Course Code	Blender I (ANI3503)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall 3d concepts	1
CO2	Discuss & Differentiate various tools used for 3d modeling in Blender	2
CO3	Execute modeling and texturing techniques for blender	3
CO4	Compare blender techniques for gaming	4
CO5	Review blender as open source software	5
CO6	Create 3d models and textures	6
Title of the Course and Course Code	Blender II (ANI3504)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall 3d concepts	1
CO2	Discuss & Differentiate various tools used for 3d animation & dynamics in Blender	2
CO3	Execute animation, and lighting techniques for blender	3
CO4	Compare blender techniques for dynamics	4
CO5	Review blender as open source software	5
CO6	Create 3d setups with lighting and animations	6
Title of the Course and Course Code	VFX I (ANI3505)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define Concept & terminology of Visual Effects.	1

CO2	Explain various tools of VFX industry.	2
CO3	Demonstrate concepts of Compositing.	3
CO4	Differentiate node based and layer based compositing softwares.	4
CO5	Compare the techniques of layer based software with the node based.	5
CO6	Compile methods of VFX for live action & Animation Films.	6
Title of the Course and Course Code	VFX II (ANI3506)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define Concept & terminology of Visual Effects.	1
CO2	Explain various tools of VFX industry	2
CO3	Demonstrate concepts of Compositing	3
CO4	Differentiate node based and layer based compositing softwares.	4
CO5	Compare the techniques of layer based software with the node based	5
CO6	Compile methods of VFX for live action & Animation Films	6
Title of the Course and Course Code	Practical In Web Design (ANI3507)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe various web technology and application development issues and trends.	1
CO2	Distinguish between server-side and client-side web technologies	2
CO3	Apply CSS with its types and use them with HTML to provide the styles to the web pages at various levels	3
CO4	Explain different components and technologies of World Wide Web as a platform	4
CO5	Validate different web form fields using JavaScript	5
CO6	Design and develop websites using fundamental web languages, technologies, and tools.	6

Title of the Course and Course Code	Practical In Blender (ANI3508)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe various web technology and application development issues and trends.	1
CO2	Distinguish between server-side and client-side web technologies	2
CO3	Apply CSS with its types and use them with HTML to provide the styles to the web pages at various levels	3
CO4	Explain different components and technologies of World Wide Web as a platform	4
CO5	Validate different web form fields using JavaScript	5
CO6	Design and develop websites using fundamental web languages, technologies, and tools.	6
Title of the Course and Course Code	Practical In VFX (ANI3509)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define Concept & terminology of Visual Effects.	1
CO2	Explain various tools of VFX industry.	2
CO3	Demonstrate concepts of Compositing.	3
CO4	Differentiate node based and layer based compositing softwares.	4
CO5	Compare the techniques of layer based software with the node based.	5
CO6	Compile methods of VFX for live action & Animation Films.	6
Title of the Course and Course Code	IPR & Cyber Security (ANI3511)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define Intellectual Property Rights.	1

CO2	Discuss process of registration of Intellectual Property	2
CO3	Demonstrate terms related to computer networks.	3
CO4	Explain information security and its principles.	4
CO5	Appraise security threats.	5
CO6	Specify security management.	6
Title of the Course and Course Code	Introduction To Python (ANI3512)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define the syntax for python programming.	1
CO2	Discuss data types and operators	2
CO3	Demonstrate control structure	3
CO4	Explain types of functions	4
CO5	Determine different operation on array	5
CO6	Compose various program	6
T.Y. B.Sc. SEMESTER VI		
Title of the Course and Course Code	Game Design (ANI3601)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe gaming industry and its pipeline	1
CO2	Explain tools of Unity game engine	2
CO3	Carry out Production & post production of the game project.	3
CO4	Compare different game engines	4
CO5	Review Production & post production of games	5
CO6	Build a complete 3d and 2d game	6
Title of the Course and Course Code	Animation In Media Industry (ANI3602)	Number of Credits : 03

Course Code		
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Outline animation in media industry	1
CO2	Compare different types of media	2
CO3	Examine different media categories for animation uses	3
CO4	Explain Internet and social media	4
CO5	Review various media platforms	5
CO6	Create a report on use of animation in media	6
Title of the Course and Course Code	UI Design (ANI3603)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define principles of UI Design in order to design with intention	1
CO2	Explain the MVC (model-view-controller) design pattern and its importance to sound user interface software design and implementation	2
CO3	Apply a user centered design process (design strategy development that provides solutions to meet business and user goals) in the creation of basic to complex software applications	3
CO4	Explain about unsatisfactory user interface design and how the observed problems could have been avoided by following sound user interface design principles	4
CO5	Compare between usability and user experience	5
CO6	Design and develop user interfaces optimized for a range of devices and platforms	6
Title of the Course and Course Code	Digital Editing (ANI3604)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define terminology and concepts of Digital editing.	1
CO2	Classify principles of video production.	2

CO3	Apply compression schemes for various output.	3
CO4	Analyze Film sequences from editing point of view.	4
CO5	Compare various cuts used for video editing.	5
CO6	Produce Digital editing examples within the limits of premiere-pro.	6
Title of the Course and Course Code	Creative Writing (ANI3605)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define creative writing skills for Animated films.	1
CO2	Explain Basic literary concepts.	2
CO3	Apply writing theory for animation writing.	3
CO4	Analyse Reader response, Theory Editing & Proofreading.	4
CO5	Review Sources of Creativity from given books.	5
CO6	Write a creative script for creating animated films.	6
Title of the Course and Course Code	Project Pre-Production (ANI3606)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall pre-production concepts	1
CO2	Articulate for the individual project	2
CO3	Carry out research for the projects	3
CO4	Break down process for the respective pipelines	4
CO5	Review individual pre-production process	5
CO6	Build pre-production document	6
Title of the Course and Course Code	Game Production (ANI3607)	Number of Credits : 02
On completion of the course, the students will be able to:		Bloom's

		Cognitive level
CO1	Outline UNITY software for game.	1
CO2	Explain tools of Unity game engine.	2
CO3	Carry out Production & post production of the game project.	3
CO4	Compare different game engines.	4
CO5	Review Production & post production of games.	5
CO6	Build a complete 3d and 2d game.	6

Title of the Course and Course Code	Practical In Digital Editing (ANI3608)	Number of Credits : 02
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On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Define terminology and concepts of Digital editing.	1
CO2	Classify principles of video production.	2
CO3	Apply compression schemes for various output.	3
CO4	Analyze Film sequences from editing point of view.	4
CO5	Compare various cuts used for video editing.	5
CO6	Produce Digital editing examples within the limits of premiere- pro.	6

Title of the Course and Course Code	Project (Production) - (ANI3609)	Number of Credits : 02
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On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Recall pre production concepts	1
CO2	Articulate for the individual project	2
CO3	Carry out research for the projects	3
CO4	Break down process for the respective pipelines	4
CO5	Review individual pre production process	5
CO6	Build pre production document	6

Title of the	Industrial Training - (ANI3611 & ANI 3612)	Number of
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Course and Course Code		Credits : 04
On completion of the course, the students will be able to:		Bloom's Cognitive level
CO1	Describe the different skills, attitude and knowledge to understand the professionalism in the Animation industry.	1
CO2	Discuss the working culture of the Industry in view to maintain quality standards.	2
CO3	Implement the confidence, presentation skills and logical thinking while working on animation projects	3
CO4	Differentiate between the academics and professional work culture in timely delivery of projects.	4
CO5	Compare and contrast the professional development of the programs and project.	5
CO6	Combine the techniques to enhance oneself as a thorough animation professional	6