Deccan Education Society's
Fergusson College (Autonomous), Pune
Program Specific Outcomes(PSOs) and Course Outcomes (COs) 2019-20
Department of Animation
Programme: B. Voc. Digital Art and Animation

PSO No.	Program Specific Outcomes(PSOs) Upon completion of this programme the student will be able to
PSO1	**Academic competence**: (i) Build understanding for correct blend of Art & Technology instead of only technical tools (ii) Create competence in the fields of Computer Graphics assets creation, Visual Effects, Gaming and Graphic designing. (iii) Understand the ongoing changing trends and keep them updated with the latest technology. (iv) 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. (ii) Review relevant literature and can develop a hypothesis and conduct methodical research on any topic related to Animation.
PSO4	**Entrepreneurial and Social competence:** (i) Break down course with 3 exit points gives this course more entrepreneurial options compared with regular graduation degrees. (ii) Develop Entrepreneurial capabilities considering animation industry works mainly on freelancing and individual creativity. (iii) Build adequate knowledge, skill, dedication and work ethics required for accomplishment of the assigned task and strengthen social competency skills. (iv) 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. (v) Maintain and develop ethics of Media, Animation & Gaming Industry as these industries plays vital role in today's generations

F.Y. B. Voc. Semester I		
Title of the Course and Course Code	**Basics of Animation (BVA1101)**	**Number of Credits : 04**
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 BVA1102**	**Number of Credits : 04**
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 BVA1103**	**Number of Credits : 03**
Course Outcomes(Cos) 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 (BVA1104)	Number of Credits : 06
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 (BVA1105)	Number of Credits : 06
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 (BVA1106)	Number of Credits : 06
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	Analyze basic animation movements for characters or objects.	3
CO4	Apply action analysis and observations to animated drawings.	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
F.Y. B. Voc. Semester II		
Title of the Course and Course Code	**Visual Communication (BVA1201)**	**Number of Credits : 04**
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 (BVA1202)**	**Number of Credits : 04**
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	Illustrate, create and handle 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 (BVA1203)**	**Number of Credits : 04**
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 (BVA1204)**	**Number of Credits : 06**
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	**VECTOR DESIGN (ILLUSTRATOR) (BVA1205)**	**Number of Credits : 06**
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 desiging	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) (BVA1206)**	**Number of Credits : 06**
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. Voc. Semester III		
Title of the Course and Course Code	**Script Writing (BVA2301)**	**Number of Credits : 04**
On completion of the course, the students will be able to:		**Bloom's Cognitive level**
CO1	Define importance of script in the process of pre-production.	1
CO2	Differentiate Character and Plot driven scripts.	2
CO3	Apply visual treatment to a script.	3
CO4	Analyze various script formats and their style.	4
CO5	Evaluate different script format and their style.	5
CO6	Write different genre of scripts.	6

Title of the Course and Course Code	**Digital 2D Animation (BVA2302)**	**Number of Credits : 04**
On completion of the course, the students will be able to:		**Bloom's Cognitive level**
CO1	Recall principles of animation.	1
CO2	Differentiate tools used for 2d animation.	2
CO3	Carry out projects based on 2d Animations.	3
CO4	Compare various tools used in Animate software.	4
CO5	Consider 12 principals of animation while making the 2d animations.	5
CO6	Create 2D characters and environments.	6
Title of the Course and Course Code	**3D Modeling, Texturing and Rendering (BVA2303)**	**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	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	**Practical in Digital 2D Animation (BVA2304)**	**Number of Credits : 04**
On completion of the course, the students will be able to:		**Bloom's Cognitive level**
CO1	Recall principles of animation.	1
CO2	Differentiate tools used for 2d animation.	2
CO3	Carry out projects based on 2d Animations.	3
CO4	Compare various tools used in Animate software.	4
CO5	Consider 12 principals of animation while making the 2d animations.	5
CO6	Create 2D characters and environments.	6

Title of the Course and Course Code	**Practical in Production Process II (BVA2305)**	**Number of Credits : 06**
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	**Practical in 3D Modeling and Texturing (BVA2306)**	**Number of Credits : 06**
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. Voc. Semester IV		
Title of the Course and Course Code	**Web Design (BVA2401)**	**Number of Credits : 04**
On completion of the course, the students will be able to:		**Bloom's Cognitive level**
CO1	Define concepts of web technology.	1
CO2	Explain web technologies and the issues involved in web designing.	2
CO3	Execute scripts of HTML, Java script, CSS, Dreamweaver, SST.	3
CO4	Compare various options to design a web page.	4
CO5	Rewrite technical programs.	5
CO6	Reconstruct and design a new web page.	6
Title of the Course and Course Code	**3D Rigging and Animation (BVA2402)**	**Number of Credits : 04**
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	Illustrate different Rig setups & types of simulations and compare them.	3
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	**Motion Graphics and Composting (BVA2403)**	**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
Title of the Course and Course Code	**Practical in Sculpting (BVA2404)**	**Number of Credits : 04**
On completion of the course, the students will be able to:		**Bloom's Cognitive level**
CO1	Define use of sculpting in Animation Industry.	1
CO2	Explain interface of Mudbox.	2
CO3	Demonstrate sculpting techniques in the software.	3
CO4	Compare various tools used in mudbox for sculpting the 3d models.	4
CO5	Review other production-level texture painting programs.	5
CO6	Build high definition, detailed 3d models in Mudbox.	6
Title of the Course and Course Code	**Practical in 3D Rigging and Animation and Lighting. (BVA2405)**	**Number of Credits : 06**
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	Outline and compare different Rig setups & types of simulations.	3
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	**Practical in 3D Rigging and Animation and Lighting. (BVA2405)**	**Number of Credits : 06**
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	Outline and compare different Rig setups & types of simulations.	3
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	**Practical in Motion Graphics and Compositing (BVA2406)**	**Number of Credits : 06**
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. Voc. Semester V		
Title of the Course and Course Code	**Game Design (BVA3501)**	**Number of Credits : 04**
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	**Blender (BVA3502)**	**Number of Credits : 04**
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	**Introduction to Python (BVA3503)**	**Number of Credits : 04**
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 programs	6
Title of the Course and Course Code	**GAME PRODUCTION (BVA3511)**	**Number of Credits : 04**
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 BLENDER (BVA3512)**	**Number of Credits : 06**
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	**PHOTOGRAPHY - 01 (BVA3513)**	**Number of Credits : 06**
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 colour theory	5
CO6	Generate photographs using the given techniques	6
Title of the Course and Course Code	**VFX - I (BVA3601)**	**Number of Credits : 04**
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 Securities (BVA3602)**	**Number of Credits : 04**
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	**DIGITAL EDITING - (BVA3603)**	**Number of Credits : 04**
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	**VFX II - (BVA3611)**	**Number of Credits : 06**
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	**PHOTOGRAPHY II - (BVA3612)**	**Number of Credits : 06**
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	PROJECT - (BVA3613)	Number of Credits : 06
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