



DAE

- ANIMATION FILM MAKING -

PRODUCT NOTE

(Effective from September '09)

* Available at select Arena Animation centers only

Animation

Animation means, literally, to breathe life into some thing. A transformation is involved, what were still, now moves.

“Animation is that stimulus to the mental, physical, and emotional life of people in a given area which moves them to undertake a wider range of experiences through which they find a higher degree of self-realization, self expression, and awareness of belonging to a community which they can influence”

The term “persistence of vision” describes the optical phenomenon that makes animation possible. The human eye retains an image for a split second after the source of the image disappears, so when 24 frames per second of an animated film zip through a projector, the flow of motion on the screen looks seamless.

WHY ANIMATION ?

The future for animators looks bright. The industry is evolving and expanding into exciting new areas. Technology is becoming more powerful and user-friendly which, when coupled with the steady growth of the entertainment industry, particularly within the feature film and gaming markets, indicates that the art form seems poised on the brink of a breakthrough. It appears there will continue to be high demand for skilled animators and increased earnings for industry professionals.

Animators seem to be highly satisfied by their jobs. They comprise one of the few categories of artists well compensated for their art. Being an animator is one of the most creatively fulfilling jobs one can have. As a whole, animators are extremely happy with the work they do.

As a career, animation involves teamwork, creativity and innovative problem solving. It is a career that offers unlimited professional and personal growth as the industry continues to take on new forms and technological advances enabling artists to continue pushing the creative envelope while telling their stories.

TRENDS IN GLOBAL ANIMATION MARKET

In addition, about the trend of outsourcing, currently, only pieces of animated features are outsourced while the bulk of the character animation work remains in-house with International studios. However, as animators in outsourced countries such as India develop their skills, they could potentially take over more of the work traditionally done in the USA or Europe. Many animators see a bright future for the industry with a growing need for more animators worldwide.

However, with improvement in technology through better and powerful bandwidth and faster computers, many animators would be able to freelance more easily and work remotely from their homes.

Many foresee a return to more 2D animation as audiences experience “viewer fatigue” caused by overuse of CG tricks and effects. Many respondents lament the movement towards special effects, explosions and fast action replacing good stories and strong characters that were once the heart of traditional animation. They were encouraged to see 2D making a comeback with films like Sony Pictures’ *Persepolis* and *Paprika*, as well as Walt Disney’s soon to be released *Princess and the Frog*.

Respondents also noted an increase in overall skill in the industry. This increase is due to advances in technology enabling more subtle animation. As more people master the technology, the quality of 3D animation is influenced. Many animators eagerly await more user-friendly rigs that can rival the flexibility of hand-drawn 2D animation. As animators continue to take more risks, the style and technique of animation will evolve. Animators worldwide are looking forward to new approaches of story-telling. All these trends bring pressure on animators to continue to evolve as artists and stay current with new technology. The skill level in the industry is improving and the competition is intensifying.

ANIMATION AS AN ART FORM

Animation is an art form. Although animation uses computer technology as well as drawing tools, it is not about programming or technical expertise. Animation is about bringing to life believable characters within a story that moves and inspires audiences. It is being recognized more and more as an art form, not just as children’s entertainment. Although 3D tools and technology will continue to evolve allowing animators to take more risks, many professionals see a return to traditional 2D animation as a future trend. Others see a convergence of the two art forms as 2D and 3D are used together, borrowing techniques and ideas from one another in order to push the art form even further.

Most see an opportunity for animators to use both 2D and 3D along with other tools to forge a new style of animation that we have yet to see. Although they agree that it will be more “original,” animators tend to disagree on what that style might be, with suggestions ranging from:

- ❖ More stylized
- ❖ More abstract
- ❖ More fantasy
- ❖ More use of mixed media
- ❖ More holographic display
- ❖ More photorealism

Another trend many animators are looking forward to is more independent productions, allowing artists to break free of major studios to create their own shorts, games, webisodes and other art forms. It will be increasingly easier for small entities to create animation as technology continues to improve and Internet bandwidth grows.

CAREER AS AN ANIMATOR

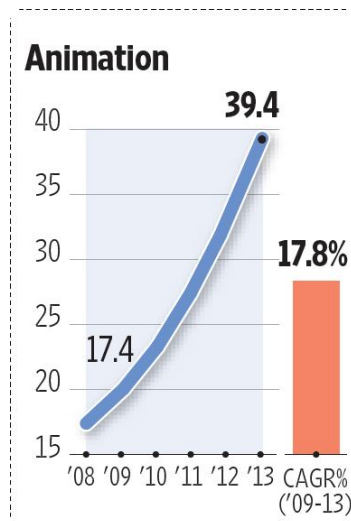
THE TOP FOUR SECTORS ANIMATORS WORK IN:

1. Computer and video games
2. Feature film character animation
3. Advertising/commercials
4. TV shows

A career as an Animator is the most rewarding because of the following reasons:

- ❖ You get to do what you love doing and get paid for it
- ❖ Creativity – the ability to bring characters to life
- ❖ Working in a creative environment with creative people
- ❖ Entertaining others with their work – touching them emotionally
- ❖ Joy of seeing their work onscreen and their name in the credits
- ❖ Teamwork
- ❖ Audience appreciation
- ❖ The excitement and challenge of solving creative problems, learning new things and growing in their career

INDIAN ANIMATION MARKET



While the value of the global animation industry is estimated to reach the staggering worth of INR 1530 billion by 2010, the Indian animation industry size still stands at modest 17.4 billion. But the sector has shown a consistent growth of estimated CAGR of 20.1% in the last two years (2007-08) and it is estimated to reach INR 39 billion by 2013. The animation production services segment, which currently comprises of 60% revenue worth of the industry, would be the amongst the major drivers, with an estimated growth CAGR of 21.9% by 2013.

Demand for Animation Professionals

There is a growing demand for Character animators in studios across India especially animation students who have undergone both 2D Classical as well as 3D Animation with a specialization in Character Animation. Top studios across India such as Dreamworks and Paprikaas in Bangalore, Rhythm & Hues in Mumbai & Hyderabad, Dataquest Entertainment in Hyderabad besides others are constantly on the lookout for good character animators for their international productions.

In India alone, about 300 Animation & Gaming companies employ more than 16000 professionals (including freelancers) and this is expected to cross 27000 by 2010.

The Product

The importance of traditional cel-animation and its knowledge in creating 3D Animation can never be exaggerated. Well-known Character animators have undergone 2D Classical Animation training and their experience in 2D has given them the edge to perform better in 3D.

Although there is a huge demand for 3D Character Animators but especially those who have undergone 2D Classical training. This has been a pre-requisite in major animation studios. The same pencil-and-paper cartoon workflow method is still the core production method in use today for 2D productions but with increasing use of Wacom, animation is starting to evolve and Digital animation using Wacom would become the core 2D production methodology.

Though 3D animation has become popular and a successful medium for filmmaking, we cannot underestimate the importance of 2D animation and animation principles. In fact, Many Top animation schools and International Animation Studios emphasize on hand-drawn animation first before moving to 3D. At times without the knowledge of 2D, 3D animation creation can appear lifeless or rigid. Till date, the world enjoys watching 2D animation such as Tom & Jerry, Mickey & Donald.

It is a known fact that Arena is a Leader in Multimedia and Animation Education and with its understanding of the industry requirement for well-trained animation professionals; it entered into animation industry in 1996.

Since then the Arena Animation's focus has been to make its programs relevant to the industry demands. In synchronization with the evolving industry requirements of professional animators and also the absence of a professional course aimed at training individuals to become complete animation professionals, Arena has introduced a comprehensive program in 2D and 3D animation training, **DAE - Animation Film Making**

DAE – Animation Film Making offers a dynamic career in the explosively expanding industry of computer animation - used extensively in ads/television/film, computer games and digital simulations. This program offers a unique blend of digital and analog art skills, as well as an understanding of the creative and technical processes involved. In this course students acquire solid art foundations with

drawing, storytelling and design for animation. They'll learn to draw, visualize, and effectively apply colour & composition principles. With the mastery of character drawing, principles of animation, texture mapping, motion capture and animation, students translate traditional art skills into the modeling of characters, objects, scenes, and virtual worlds. Skills in audio and video production and cinematography are also covered so that story continuity and believability become the hallmarks of student productions.

The program greatly emphasizes on teaching the students to integrate both the processes of **2D** as well as **3D**, with an exhaustive overview and skill development, right from ideation to execution.

Rationale behind DAE Animation Film Making Program

DAE – ANIMATION FILM MAKING program was designed with the objective of making a comprehensive industry relevant program for the most desired profile in Animation, Character Animation. The skills of a Character Animator along with knowledge of Animation Film making makes a professional a right candidate to pursue a career as a Animation Director. As per the constant requirement of Top Animation studios for Character Animators, DAE Animation Film Making gives a student the relevant skills as a character Animator in both 2D Classical and 3D animation. Through this course the students will develop their creative, artistic and technical skills required in the animation film making and at the end learn to apply these skills to the creation of their own demo reel in 3D Character Animation.

What does it take to be a Good or a Complete Animator?

"An animator is an actor with a pencil" goes the oldest and truest animation cliché. A skillful animator blends together creativity, dexterity and sheer hard work. The animator's task is to carefully understand the script and the storyboard, and try to "enact" the character as per the situation. In other words he/she needs to know, feel and understand the character, their nature & personality and the mood of the moment and create believable animation.

Animators need to know about:

- The history of art and design
- Animation Drawing techniques /Human Anatomy/ Animal Anatomy
- Animation Production process
- Design for Animation
- Animation Principles
- Different styles of animation such as Stop motion, 2-D and 3-D animation
- How to create different moods and feelings in characters
- Animation software applications
- Technical knowledge of formats for Film and television

Animators need to be:

- Artistic, creative and innovative
- A good Actor and communicator
- Inclination towards good music
- Able to ideate and conceptualize
- Understand and Apply Animation Principles in his/her animations
- Strong Posing knowledge
- Focus on expressions & gestures in animation
- Able to use their knowledge of the human and animal anatomy and movement to create animations
- Versatile and adaptable and able to accept criticism
- Able to work to a deadline
- Observant, with an eye for detail
- Able to work well in a team
- Able to understand the nature and personality of animation characters

Course Contents

Semester 1 – Animation Drawing & Design Fundamentals

Overview

This semester focuses on developing creativity and drawing skills for Animation through study of design, anatomy, light & shade, perspectives along with the study of Basic Animation principles and timing for animation.

Objective

At the end of this semester, the student will be able to, discuss the concepts of design and animation fundamentals.

Learning Outcome

The students will learn to appreciate art for animation, animation process, understand basics of animation, and convey their ideas through drawing.

Modules

- Basic Shapes & Sketching Techniques
- Anatomy Drawing
- Body Language & Expressions
- Light, Colour & Perspectives
- Digital Sketching
- Animation Concepts
- Process of Animation
- Principles of Animation
- Timing for Animation
- Magic with Photoshop
- Photographic Techniques (***Knowledge Enhancement***)
- Stop Motion Animation

Semester 2 – Animation Design & Pre-Production

Overview

This semester concentrates on various concepts, techniques and design for animation. The focus is on development of ideas into concepts, scriptwriting for animation, character designing, concept art, acting and voice characterization, visual scripting using film grammar, drawing storyboards to creating animatics. At the end of the semester, the students have to prepare an e-project which includes Pre-Production of an original concept of 30-60 second duration.

Objective

At the end of this semester, the student will be able to, define and discuss the design for animation and the pre-production process. The student will also be able to convert their original ideas into concepts and prepare pre-production work of the concept.

Learning Outcome

The student will have the skills of a Pre-Production artist with the complete technical know how of the animation pre-production process.

Modules

- Concept Design, Development & Storytelling Techniques
- Scriptwriting for Animation
- Character Design & Development
- Concept Art & Inspirational sketches
- Acting and Voice Characterization
- Visual Scripting with Film Language
- Storyboarding for Animation
- Storyboard to Animatics
- Basics of Video Editing
- E-Project

Semester 3 – 2D Classical Animation Production

Overview

In this semester, students will apply their knowledge of drawing and concentrate on 2D Classical Animation Production - Drawing Keyframes, in-betweening, clean ups, line testing, digital ink and paint to 2D Digital Post Production by adding dialogues, sound effects and background music and final editing.

Objective

At the end of this semester, the student will be able to discuss, the process of 2D Classical Animation production.

Learning Outcome

The students have the knowledge of 2D Classical animation production. The Students will be gain proficiency in creating 2D animation for various avenues such a Film, TV, Ads, Web and e-learning.

Modules

- Concepts of 2D, Cel & limited animation
- Keyframing, Inbetweening & Cleanups
- Digital Ink & Paint
- Animation Scene Planning
- 2D Animation Post Production
- Showreel Development

Semester 4 – 3D Animation Production Process

Objective

This semester concentrates on the process of 3D animation production. The focus is on various aspects of 3D Animation Production from 3D Modeling, Texturing, Rigging, Character Animation, Lighting and Final Rendering. The focus of this module is to understand the various processes of 3D Animation production and concentrating on Rigging & 3D Character Animation.

Learning Outcome

The student would understand the 3D production process and various aspects of the 3D production pipeline. The students would develop skills to create a 3D Character model, texture the character, Character Rigging, Lighting and Rendering the scenes.

Modules

- Clay Modeling
- Modeling with Maya
- Advanced Modeling
- Texturing with Maya
- Rigging with Maya
- Character Animation with Maya
- Lighting & Rendering with Maya

Semester 5 – Post Production & Animation Specialization

This semester concentrates on the Post Production process in Animation and allows the student to effectively use the knowledge gained in the earlier semesters to develop a professional Show-reel with specialization in 3D Character Animation.

Objective

At the end of this semester, the student will be able to, apply their skills to understand the Animation Post Production process with modules on 3D Dynamics, Motion capture, Visual effects and Video Editing. A student finally would have to create a 3D Portfolio of his or her specialization in 3D Character Animation.

Learning Outcome

The student would be able to discuss various aspects of Animation Production such as 3D Dynamics ad Effects, Motion capture and Visual Effects to further use in their 3D Animation Film production. The student will have the desired skills required for a 3D Character animator with the complete technical know-how of the 3D Animation Film Making process.

Job Opportunities

The student can take up a career as 3D Character Animator in any Film, TV, Game or Ad production, the most desired profile in the animation industry and has the relevant animation film making skills to develop into an Animation Director. Character Animators are highly satisfied with their jobs and are considered as one of the few categories of artists well compensated for their art.

Modules

- 3D Dynamics – Hair, Fur & Cloth
- Concepts of Visual Effects
- Introduction to Motion Capture for Animation
- Post Production for Animation
- Show-reel Development – 3D Character Animation