



3D FX Dynamics and Simulation

People Develop Countries... We Develop P.E.O.P.L.E.

Program Admission Arrangement

Who May Apply?

- Graduates of:
 - "All graduates from all colleges of higher education - starting from a grade of 'Pass' and above."

Prerequisites

"We highly recommend that candidates review the following courses prior to applying for admission to our program."

"The courses cover multiple points in the specialization areas of 3D Art tracks."

- [Pixar in a Box](#)
- [Getting Started | Learning Houdini Learning Path – SideFX:](#)
- [Houdini101 - 001 - Intro \(Houdini beginner course\)](#)
- [Autodesk Maya 101 Tutorials :](#)
- [Free Autodesk Maya Course | 3D Modeling Essentials:](#)
- ITI values: <https://iti.gov.eg/about-us>

Selection Process

- **Phase 1: IQ, English, and Technical MCQ Assessment**
- **Phase 2 : Technical Interview**
Those applicants would be discussing with the interviewing panel their pre-work -"Before You Apply"- in a one-to-one interview
- **Phase 3: Interpersonal Skills Interview**
Those who pass phase 3 will be promoted to this interview

Delivery Approach

- 50 % face to face Learning| 50 % Online
- Common Hardware
- Common Software

Students' Deliverables

- Each student must deliver at least ONE **freelancing** job and an international **certificate** based on his track



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1 Programs Offered

☑ Professional Training Program:

- FX(FX Dynamics And Simulation)

2 Industry/Academy Stakeholders

- Sidefx
- Mercury visual solutions
- Trend VFX
- Squids VFX
- The Crew
- Concave art production

3 Targeted Employability

- Mercury visual solutions
- Trend VFX
- Squids VFX
- The Crew
- Concave art production
- Aroma Graphics
- Umbrella studio
- Monkeys | Visual Effects and Animation
- Gemini studio
- Clear pictures
- Blue Monk

4 Certifications

- Rebelway
- Sidefx Certified Schools & Training

5 Graduates Job Profiles

• FX artist

An FX artist is essential in the VFX industry, creating dynamic visual effects such as explosions, smoke, fire, and water. They use specialized software to design and simulate these effects, ensuring they look realistic and integrate seamlessly into the final product. FX artists collaborate with other departments, troubleshoot technical issues, and optimize effects for performance. Their role involves both artistic creativity and technical expertise, contributing significantly to the visual storytelling in films, television, and video games.

• FX TD

A FX Technical Director (FX TD) is vital in the VFX industry, responsible for creating complex visual effects like explosions, smoke, and water using specialized software. They work with physics-based simulations to achieve realistic movements, develop tools to streamline the process, and collaborate with various departments to ensure seamless integration of effects. FX TDs troubleshoot technical issues, optimize effects for performance, and stay updated with industry advancements. Their role combines artistic and technical skills to enhance visual storytelling in film, television, and video games.

• Character FX artist

A character FX artist focuses on creating dynamic effects and simulations related to characters. They work on effects such as hair, fur, cloth, or dynamic simulations to enhance the realism and movement of characters. Character FX artists collaborate with other team members to ensure that the effects integrate seamlessly into the overall visual presentation.

• Procedural Environment TD

A 3D environment artist is responsible for creating digital environments and backgrounds for various media and film productions. They design and create immersive settings, including landscapes, buildings, and props, to provide a realistic and engaging backdrop for the story. Environment artists pay attention to lighting, composition, and detail to bring the environment to life.

• Pipeline TD

A Pipeline Technical Director (Pipeline TD) plays a crucial role in the VFX and animation industry, ensuring the smooth integration and workflow of various production processes. They develop and maintain the technical infrastructure that allows artists and other team members to collaborate efficiently. This includes writing and managing scripts and tools, automating repetitive tasks, and troubleshooting technical issues that arise during production. Pipeline TDs work closely with different departments to ensure compatibility and efficiency in the production pipeline. Their work ensures that data flows seamlessly between software applications and departments, enabling a more streamlined and productive workflow from initial concept to final output.



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1050 Hours

Program Content Structure

Film Making Fundamentals

- Art History
- Sound editing and mixing
- Film language and Directing
- Script Writing
- Cinematography: Composition Theory
- Cinematography: Color Theory and Light
- storyboard fundamentals
- Video Editing
- Introduction to Generative AI and Prompt Engineering (Workshop)

Life Skills Courses

- Communication Essentials for Professionals
- High Impact Presentations
- Job Seeking Skills
- Professional Demeanor (Workshop)
- "Progressive Teamwork and Leadership Skills(Workshop)"
- Introduction to Generative AI and Prompt Engineering (Workshop)

Character FX and TD

- Characters Grooming
- Cloth simulation
- Crowd Simulation
- Rigging Fundamentals

FX Dynamics and Simulation

- FX Destruction essentials
- Liquids and FLUIDS
- Particles essentials - FX
- Procedural Modeling - FX
- PYRO FX essentials - FX
- Rigged body -RBD simulations - FX
- FX application
- FX Portfolio-Making

TD for FX

- Introduction To Programing With Python - FX
- Python essentials - FX
- Math for FX Artists

FX Look Development Essentials

- Lighting and Rendering essentials for FX
- Texturing Essentials
- Shading Fundamentals For FX

3D Essentials

- CG Introduction
- Introduction to Maya
- Maya fundamentals for FX
- Introduction to houdini
- Match moving for FX

