

# Professional Certificate in Visual Effects (Houdini FX)

## FOUNDATION IN CG & VFX:

- Introduction to Animation and Motion Graphics.
- Understanding Production Pipelines.
- Introduction to CG fundamentals.
- CG modelling and modular worldbuilding
- Basic concepts of Compositing and Matte Painting
- Creating an animated VFX scene or Motion Poster

## INTRODUCTION TO HOUDINI

- The Houdini interface
- Working with nodes
- Geometry in Houdini
- Modeling tools
- Polygonal modelling techniques
- Materials and Textures
- Texture mapping in Houdini

## ADVANCED HOUDINI

- Introduction to Lighting
- Advanced Lighting Techniques
- Global Illumination
- Caustics
- Rendering in Houdini
- RBD and Destruction
- Pyro Simulation
- Flip Fluids simulation
- Vellum Simulation

## PROFESSIONAL PORTFOLIO PROJECT:

- Concept research and selection.
- Create a Project Pitch using storyboards
- Working in a mentored studio-like environment.
- Students guided throughout this process
- Meeting tight deadlines for project submissions.
- Ensuring a professional industry-ready product.