



TGC ANIMATION & MULTIMEDIA
www.tgcindia.com

Course Syllabus

Houdini

**FROM SCRATCH
TO ADVANCED**

VFX

Simulation



BECOME MASTER IN VFX Simulation

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& ONLINE
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WEEKENDS**

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DEMO SESSIONS
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LEARN FROM
**PROFESSIONAL
TRAINERS**

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STARTING SOON**

**ADMISSIONS
OPEN**

Why TGC?

Master procedural VFX and dynamic simulations using Houdini in one course. Learn from industry experts with real-world experience in film, games, and advt. Project-based training centered around destruction, fluids, fire, and particle FX etc. Includes showreel creation and professional guidance for VFX portfolio building.

DELHI/ NCR: SOUTH EXTENSION | PREET VIHAR | PITAMPURA
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CALL: 1800 1020 418

Course Syllabus



Modules	Module Description	Outcomes
Houdini Essentials & Procedural Workflow	Interface Overview & Project Setup Geometry Nodes & Attributes Groups, Parameters & Expressions Attributes: position, color, normals	Model a simple procedural city layout or terrain using nodes and parameters
Dynamics & Rigid Body Simulations (RBD)	Introduction to RBD Systems Fracturing Techniques Controlling RBD Simulations	Create a wall break or object shattering simulation with constraints
Particle FX and Pyro Simulations	POP (Particle) Simulation Pyro FX – Fire & Smoke Customizing Sim Behavior Controlling voxel resolution and dissipation	Simulate a small explosion or dynamic smoke trail with color and lighting
Fluids, Cloth, and Vellum Solver	FLIP Fluids Introduction Vellum for Cloth & Soft Bodies Combining FX Elements	Create a short scene involving water splashing or cloth reacting to motion
Final Project & Portfolio Preparation	Shot Planning & Asset Setup Simulation & Lookdev Final Render & Breakdown	Simulate and render a 5–8 second VFX shot combining at least 2 systems (e.g., debris smoke, explosion particles)