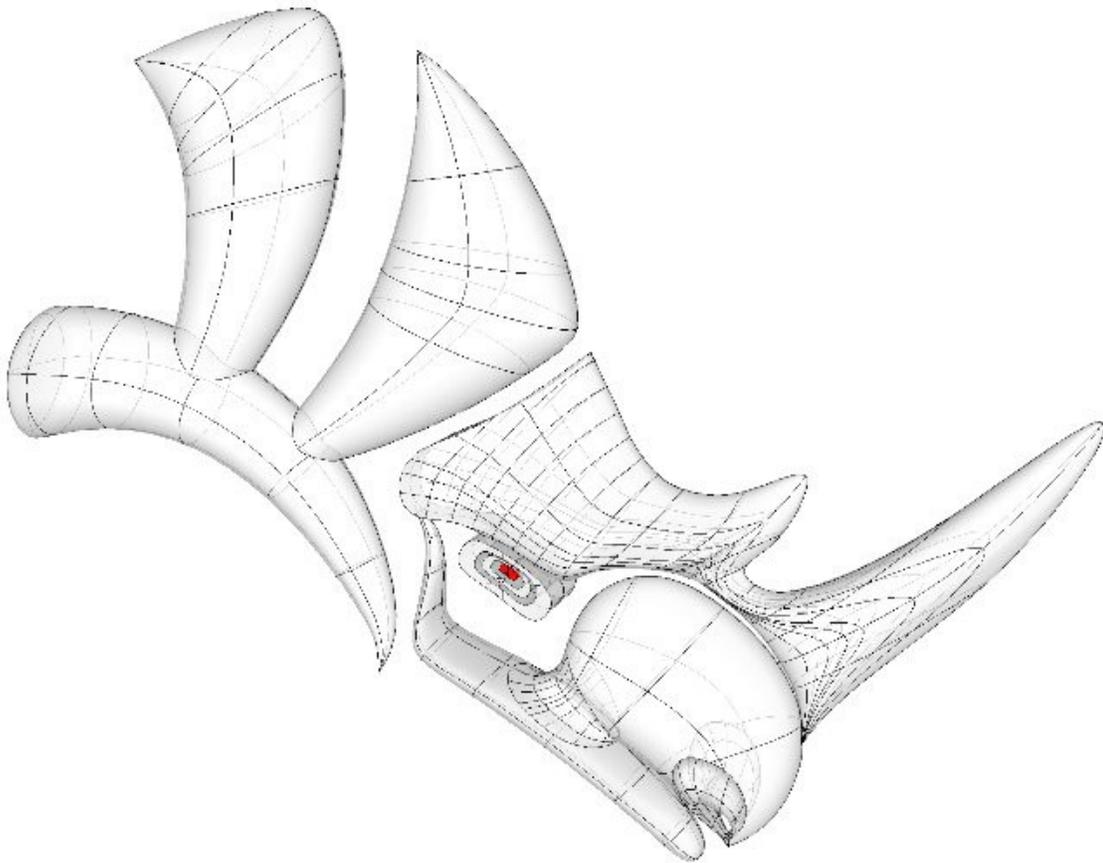# Rhinoceros®

NURBS modeling for Windows

3DTechnics

Rhino Architecture Intensive Course Curriculum

Architecture Modeling with Rhino

Course Outline

- In this comprehensive 1-day class you'll learn to create and edit accurate free-form Architecture models with four of the powerful packages available for the Rhino engine.
  - Visual Arq (1.5 hrs)
  - Paneling Tools (1.5 hrs)
  - Grasshopper (1.5 hrs)
  - Tsplines (1.5 hrs)
  - RhinoTerrain (1.5 hrs)

Visual Arq

- **VisualARQ** is a fully-integrated Rhino plug-in that adds architectural features to Rhino 3D. Using the accessible and intuitive Rhino interface, **VisualARQ** provides tools for architects, planners, and interior designers that facilitate the architectural design process and its documentation, the creation of virtual architecture models using Rhino render options, and the connection with other architecture software. **VisualARQ** adds parametric 3D architectural objects like walls, columns, doors, windows, and stairs that are suitable for both 3D modeling and 2D documentation.

Paneling Tools

- PanelingTools plugin helps generate 2D and 3D cellular patterns and populate them over rectangular grids. The plug-in supports intuitive design of paneling concepts as well as rationalize complex geometry into a format that is suitable for analysis and fabrication. The plug-in is closely integrated with Rhino 4.0 and is widely used for architectural and other building designers.

Grasshopper

- For designers who are exploring new shapes using generative algorithms, **Grasshopper** is a graphical algorithm editor tightly integrated with Rhino's 3-D modeling tools. Unlike RhinoScript, **Grasshopper** requires no knowledge of programming or scripting, but still allows designers to build form generators from the simple to the awe-inspiring.

TSplines

- T-Splines are a powerful computer-aided design (CAD) surface with special properties, which improves upon traditional CAD technology while retaining compatibility. **T-Splines** allows architecture designers to:

    - Add detail only where necessary
    - Create non-rectangular topology
    - Easily edit complex freeform models
    - Maintain NURBS compatibility

- Since **T-Splines** is compatible with existing modeling technologies, it integrates easily with most production pipelines.

Rhino Terrain

- RhinoTerrain is a GeoModeling package that can associate NURBS, point-clouds and meshes to create, edit, and analyze digital terrain.

    - Point cloud import and filtering
    - Geographic transformations
    - GoogleEarth, Geotiff, DEM,... imports
    - Profiles and cross section creation
    - Powerful terrain analysis

Target Audience

- This course is for the architectural design professional who wants to efficiently learn the concepts and features of the Rhinoceros modeling software as it pertains to Architecture at an accelerated pace in an instructor-lead environment.

Prerequisites

- Rhino Level 1 Training equivalency is required. Rhino Level 2 Training is recommended.