SUBSTANCE 3D DESIGNER

ZETLAN TECHNOLOGIES

COURSE MODULES

Module 1: Introduction to Substance 3D Designer

- Overview of Substance 3D Designer
- Understanding procedural texturing vs. traditional texturing
- Interface and navigation basics
- Working with graphs and nodes

Module 2: Fundamentals of Node-Based Workflow

- Introduction to nodes (generators, filters, blend nodes, etc.)
- Understanding grayscale vs. color maps
- Exploring the material pipeline: Base Color, Normal
- Creating simple patterns with procedural techniques

Module 3: Height and Normal Map Generation

- Working with height maps for depth and details
- Converting height maps into normal maps
- Creating intricate surface details procedurally
- Using the Normal Map Baking process

Module 4: Creating Base Materials

- Designing a procedural wood, metal, and stone material
- Understanding procedural noise and warping
- Adjusting material properties with blend nodes
- Using curvature, ambient occlusion, and edge wear effects

Module 5: Advanced Material Creation

- Creating realistic fabric, dirt, and weathering effects
- Working with multi-layered materials
- Exposing parameters for customization
- Substance functions and automation

Module 6: Exporting and Integration

- Exporting textures for Unreal Engine, Unity, Blender, Maya, etc.,
- Optimizing texture resolution and tiling
- Using Substance materials in real-time engines
- Performance consideration