iMSD

Vector Graphics Course Outline

INSTITUTE MEDIA STRATEGY DESIGN

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Vector Graphics Course Outlines

Duration: 3 Days

Related Courses:
Principles of Design, Typography, Principles of Colour, Drawing for designers, Illustrator, After Effects, Sketch, Draw

Course Overview and Objectives

This course begins with the foundational principles of vector graphics, covering key concepts such as the distinction between vector and raster images. You'll gain hands-on experience with industry-leading software, including Adobe Illustrator, Inkscape, and CorelDRAW, We'll explore essential techniques like layering, grouping, and working with the pen tool, as well as advanced topics such as gradient meshes, custom brushes, and typography in vector formats.

Whether you're a beginner or looking to sharpen your design skills, this course equips you with the tools and knowledge to create professional-quality vector graphics that can be applied across various media, from print to web and beyond.

Pre-requisites:
A basic to intermediate knowledge of design and software

Introduction to Vector Graphics

- What are vector graphics?
- Difference between vector and raster graphics
- Common file formats: SVG, AI, EPS, PDF

Vector Graphics Software

- Overview of popular vector software: Adobe Illustrator, CorelDRAW, Inkscape, Affinity Designer
- Basic interface and tools overview

Creatiing Basic Shapes

- Drawing and editing shapes — rectangles, ellipses, polygons
- Understanding paths and anchor points
- Using shape tools

Working with Lines and Strokes

- Creating lines and paths
- Adjusting stroke weight and style
- Dashes, arrows, and stroke profiles

Fills and Colours

- Solid fills and gradients
- Locking, hiding, and grouping layers
- Layer stacking order

Transformations

- Scaling, rotating, and skewing objects
- Reflecting and mirroring
- Aligning and distributing objects

Text and Typography

- Adding and editing text
- Fonts and typefaces
- Converting text to outlines

Pen Tool Basics

- Drawing and editing paths with the Pen tool
- Understanding Bézier curves
- Adding and removing anchor points
- Converting Anchor Points
- Adjusting Path Segments
- Creating Complex Shapes
- Working with Paths in Layers
- Path Intersections and Boolean Operations

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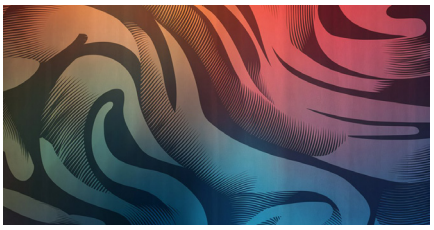
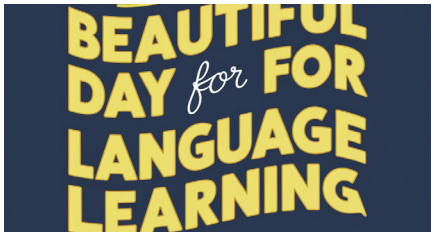
Shape manipulation is essential
It enables precise control over shapes and paths. Designers can adjust anchor points, curves, and edges to transform graphics.



Vector gradients and patterns
These add depth and visual interest to designs, enhancing their appeal and versatility. Gradients create smooth color transitions, while patterns introduce rhythm to graphics.



Text on a path in design
Aligns typography along curves or shapes, adding dynamic flow to compositions. It's ideal for circular logos and decorative elements, interest.

Intermediate Concepts

Advanced Shape Manipulation
- Using the Pathfinder tool for shape combinations
- Compound paths and clipping masks
- Creating custom shapes

Advanced Text Effects
- Text on a path
- Creating text outlines and effects
- Warp and distort text

Gradients and Patterns
- Linear and radial gradients
- Creating and editing patterns
- Gradient mesh for complex coloring

Symbols and Reusable Elements
- Creating and using symbols
- Editing and updating symbols
- Reusing design elements efficiency

Image Tracing
- Converting raster images to vector
- Using live trace tools
- Refining traced images

Effects and Filters
- Applying effects — drop shadows, glows, etc
- Using appearance panels
- Non-destructive editing techniques

Layer masks and Transperency
- Creating transparency effects
- Using layer masks for detailed editing
- Opacity masks and blending modes

Alignments and Guides
- Using rulers and guides
- Snapping objects to grids
- Aligning and distributing elements precisely

Exporting and File Formats
- Exporting vector graphics for web and print
- Understanding different vector file formats
- Preparing files for different outputs
- Optimizing vector graphics for scalability

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3D vector graphics add depth
By using mathematical equations to create precise, three-dimensional shapes. They maintain clarity at an size.

Advanced symbols in vectors
Eenable reusable, scalable elements that ensure consistency across projects. Updates to a symbol apply automatically to all instances, streamlining complex designs.

Vector animation
Enables smooth, scalable animations using precise vector shapes. It allows designers to create high-quality, dynamic visuals that maintain clarity.

Advanced Concepts

Complex Illustrations and Techniques
- Creating detailed vector illustrations
- Using multiple artboards
- Advanced Pen tool techniques

3D Vector Graphics
- Creating 3D effects and isometric designs
- Extrude, revolve, and 3D transformation
- Using perspective grids

Mesh and Gradient Mesh Tool
- Creating complex gradients with mesh tool
- Shading and realistic effects
- Manipulating mesh points

Advanced Path Operations
- Advanced pathfinder operations
- Cutting and dividing paths
- Using path offsets

Advanced Typography
- Custom typography and lettering
- Variable fonts and OpenType features
- Typography design in vectors

Scripting and Automation
- Introduction to scripting in vector software
- Automating repetitive tasks
- Using plugins and extensions

Advanced Symbol Usage
- Nested symbols and complex symbol structures
- Dynamic symbols
- Global editing of symbols

Vector Graphics for UI/UX
- Responsive design considerations
- Using vectors in mobile and web interfaces

Vector Animation
- Basic principles of vector animation
- Using Adobe After Effects and other tools
- Animating SVGs for web

We offer online support to clients on content covered on our courses.