Course Name : AI IMAGE GENERATION & ENHANCEMENT WITH COMFYUI
Duration : 3 Days (Physical Classroom / Virtual Live Instructor)
Skill Level : Beginner

COURSE DESCRIPTION:
This 3-day intensive course provides a structured and practical approach to AI image generation using ComfyUI. Participants will gain a solid understanding of how AI thinks, how to write effective prompts, and how to control AI outputs using tools such as LoRAs, ControlNet, and high-resolution upscaling. The course follows a hands-on, guided approach, ensuring that participants can immediately apply their knowledge to real-world creative workflows.

Whether you're looking to create stunning visuals, enhance digital artwork, or streamline your creative workflow, this course equips you with the tools and knowledge to harness AI effectively. Through interactive lectures, live demonstrations, and practical exercises, participants will gain a deep understanding of how AI interprets prompts, refines outputs with LoRAs and ControlNet and enhances images with advanced upscaling techniques. By the end of the course, you'll be able to generate high-quality AI visuals tailored to professional use in digital art, content creation, marketing, and pre-production design. Join us and take your creative skills to the next level with AI!

WHAT WILL YOU LEARN?
- The fundamentals of AI-generated content and how AI "thinks"
- How to write structured AI prompts for better control
- Generating images using Text-to-Image (T2I) & Image-to-Image (I2I) techniques
- Fixing AI mistakes with Inpainting & Outpainting
- Using LoRAs & ControlNet for precise AI image manipulation
- Enhancing AI-generated images through high-resolution upscaling

PREREQUISITE:
- No prior AI or programming knowledge required.
- Basic familiarity with digital art, photography, or design tools is helpful but not necessary.

METHODOLOGY:
This program will be conducted with interactive lectures, PowerPoint presentations, discussions, and practical exercises. This course can be conducted as instructor-led (ILT) or virtual instructor-led training (VILT).

JOB SCOPE:
Upon completion of this course, candidates may pursue the following career paths:

- Digital Art & Concept Design
- Marketing & Advertising
- Film & Game Pre-Production
- Social Media & Content Creation

DAY 1

MODULE 1: INTRODUCTION TO AI-GENERATED CONTENT
- Welcome
- Understanding AI in content creation
- Overview of Stable Diffusion & ComfyUI
- Key concepts: Checkpoints, Models, VAE, Conditioning

MODULE 2: TEXT-TO-IMAGE (T2I) – HOW AI READS PROMPTS
- How AI interprets words and concepts
- Understanding positive & negative prompts
- Hands-on: Simple vs. complex prompt testing

MODULE 3: WRITING EFFECTIVE AI PROMPTS
- Prompt Weighting & Strength – Making AI follow instructions better
- CFG Scale & Samplers – Their role in AI output
- Hands-on: Generating stunning AI images using text prompts

MODULE 4: HANDS-ON AI CONTENT CREATION
- Generating portraits, landscapes, and cinematic shots
- Troubleshooting common AI mistakes in T2I
- Group activity: Creating AI images in different styles
- Q&A & Recap

DAY 2

MODULE 5: IMAGE-TO-IMAGE (I2I) – TRANSFORMING AI IMAGES
- What is I2I & how it works
- Adjusting Denoising Strength for better control
- Hands-on: Turning sketches into AI-generated artworks

MODULE 6: OUTPAINTING – EXPANDING AI IMAGES
- How Outpainting works for extending images
- Hands-on: Expanding small images into cinematic compositions

MODULE 7: INPAINTING – FIXING AI MISTAKES
- Why AI fails (distorted hands, faces, artifacts)
- Using Inpainting to fix and restore images
- Hands-on: Fixing AI-generated mistakes with Inpainting

MODULE 8: ENHANCING AI CONTENT FOR PROFESSIONAL USE
- Refining images with Photoshop & AI upscaling
- Hands-on: Finalizing an AI-generated composition
- Q&A & Recap

DAY 3

MODULE 9: CONTROLLING AI WITH LoRAs & STYLE TRAINING
- What are LoRAs & how they refine AI generations
- Applying pre-trained LoRAs for consistent styles
- Hands-on: Enhancing AI images using LoRAs

MODULE 10: CONTROLNET – ACHIEVING AI PRECISION
- Understanding ControlNet for structure and control
- Using Pose Guidance & Depth Maps for accuracy
- Hands-on: Generating controlled images using ControlNet

MODULE 11: AI UPSCALING & HIGH-RESOLUTION ENHANCEMENT
- Why upscaling is essential for professional AI outputs
- Using ESRGAN & latent upscaling for 4K+ images
- Hands-on: Upscaling AI images while maintaining quality

MODULE 12: FINAL PROJECT – APPLYING ALL AI TECHNIQUES

CONCLUSION
- QA
- Useful References and Books
- Feedback