



**Arfa Karim**  
Technology Incubator

# Generative AI

Duration: 3 Months



Office # 09, 9th Floor, Arfa Software Technology  
Park, 346-B, Ferozpur Road, Lahore.



+92 321 1119651  
+92 321 1119652



[www.akti.com.pk](http://www.akti.com.pk)  
[info@akti.com.pk](mailto:info@akti.com.pk)

## Modules

- Introduction to Generative AI
- Fundamentals of Machine Learning
- Deep Learning Foundations
- Introduction to Generative Models
- Variational Autoencoders (VAEs)
- Generative Adversarial Networks (GANs)
- Recurrent Neural Networks (RNNs) & Sequence Generation
- Long Short-Term Memory Networks (LSTMs) & Text Generation
- Attention Mechanisms & Transformers
- Advanced Topics in Generative AI

## Outcomes

- Explain the principles of generative AI and its various applications.
- Implement and train (VAEs) & (GANs).
- Create generative models for image generation, text generation, and sequence generation.
- Understand & work with advanced deep learning techniques
- Discuss ethical considerations & biases in generative models.
- Stay updated with emerging trends & future directions

## Audience

- Software engineers
- Data scientists
- Students with python programming & ml background

## Eligibility Criteria

- Individuals with basic understanding of machine learning concepts & Python programming