Generative AI
for Beginners

From basics to mastering Gen AI

The Content

About TeqCertify

TeqCertify reimagines EdTech by blending innovation with hands-on, AI-powered learning in Data Domain. We equip professionals with future-proof skills through real-world case studies and industry projects.

Empowering Organizations with Ready-to-Deploy Data Domain Talent.

- Customized Training for Industry-Specific Needs
- Real-Time Performance Reports
- Flexible Training Solutions
- 100% Placement (Assistance & Guarantee)

Why Generative AI?

Generative AI is reshaping how we work, learn, and create. It goes beyond analyzing data—it's about building intelligent systems that generate content, automate tasks, and unlock entirely new ways of thinking and problem-solving.

Creative Automation

Learn how to design AI systems that write, visualize, and generate data-driven content at scale.

Intelligent Workflows

Build models that power chatbots, copilots, and other real-time AI tools used across industries.

Future-Proof Career

Generative AI is one of the fastest-growing tech domains equipping yourself now opens doors to tomorrow's most exciting roles.

CEO, databricks

Ali Ghodsi

In five or 10 years, to be the CEO in any of the industries, you'll need to have a Data-and-AI background.

At the heart of this program lies the belief that Generative AI isn't just a technological leap—it's a new way of building, thinking, and leading.

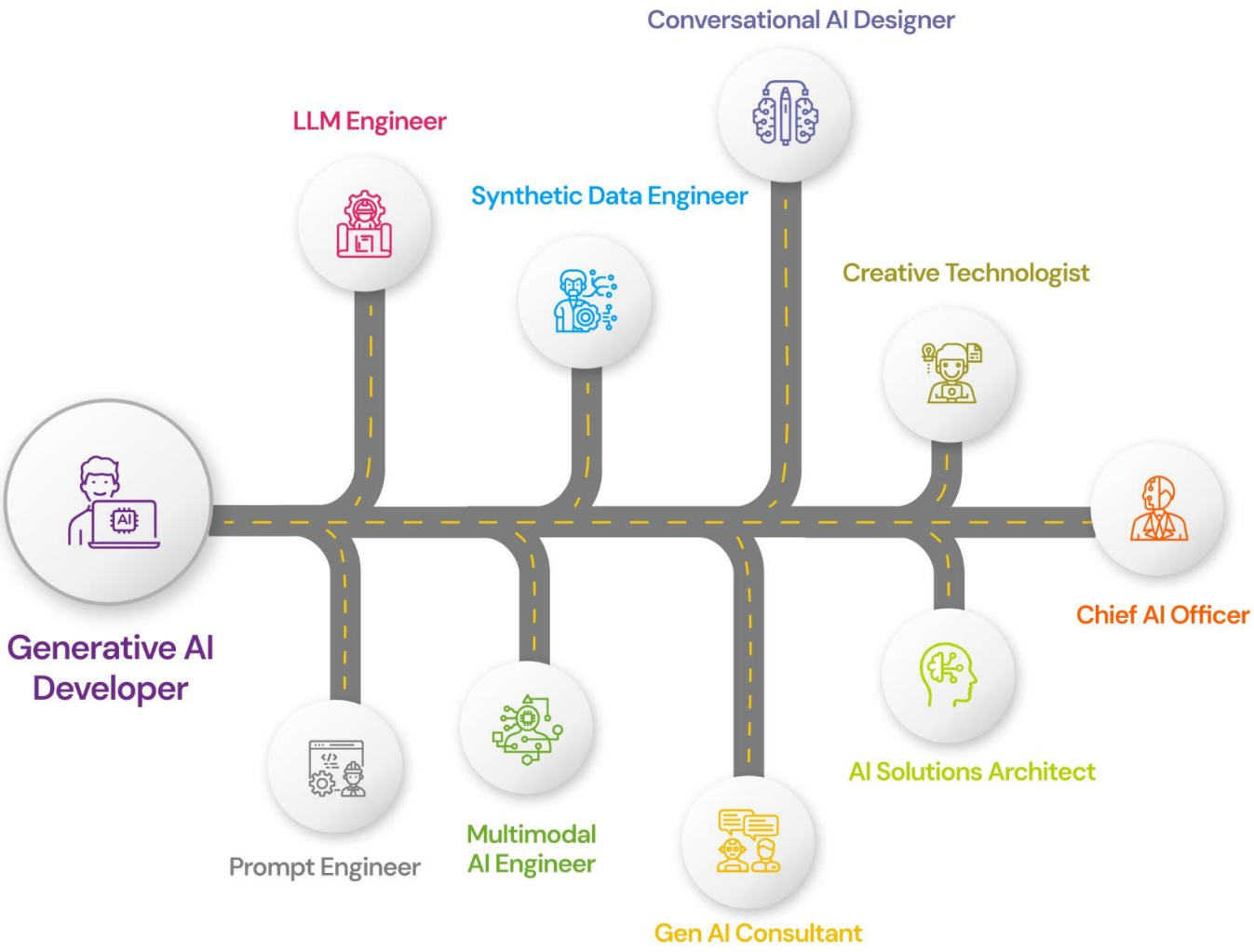
Inspired by this vision, our curriculum equips students to go beyond traditional data science—training them to design, build, and deploy AI systems that generate insights, content, and automation at scale. Learners will gain hands-on expertise with tools like Databricks, Lakehouse platforms, and foundational models, while preparing for the Databricks Generative AI Associate certification.

Program Overview

In today's AI-first era, generative AI is transforming how we create, communicate, and solve problems across industries. This full-time residential program is designed to immerse you in a focused, hands-on learning environment where you'll master the tools, techniques, and mindset of applied generative AI.

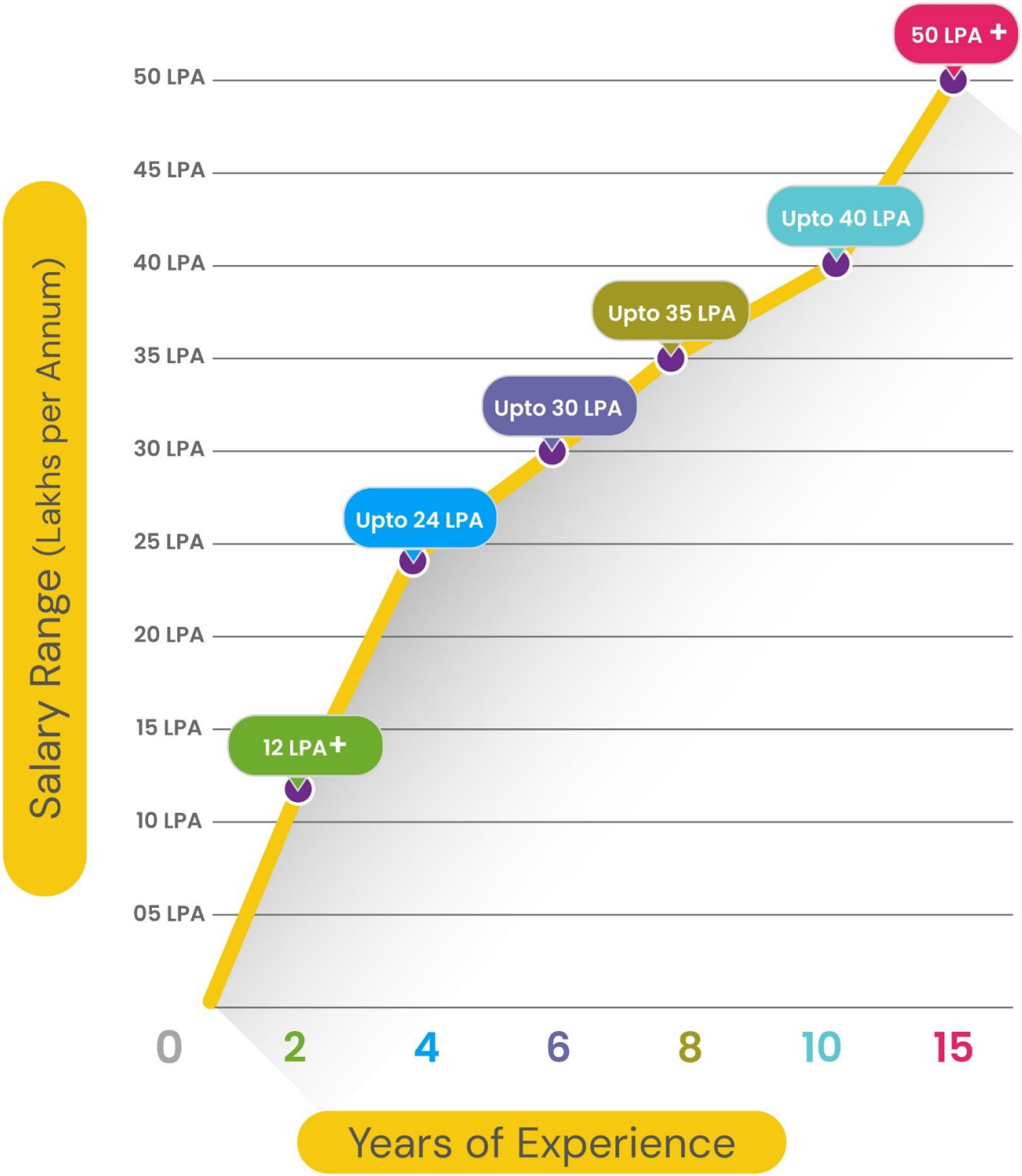
Generative AI for Beginners is a career-ready certification program that transforms students and freshers into industry-ready professionals. Through real-world projects, expert-led mentoring, and guided preparation for the Databricks Certified Generative AI Engineer Associate certification, you'll gain the confidence and skills to build cutting-edge AI solutions and lead innovation.

Career Paths



Note:
Step into the future of AI with creativity and purpose. Learn to build with large language models, create prompts, and apply GenAI across industries. No coding background? No problem. Start here to become tomorrow's AI builder.

Salary Growth



Databricks Certification

The **Databricks Generative AI Engineer Associate** certification proves your proficiency in building and deploying generative AI models using Databricks. It validates your ability to work with AI techniques like natural language processing and deep learning to create innovative AI solutions.

Earning your certification isn't just proof of your skills
It's a testament to your mastery of Generative AI.
Companies recognize it. Recruiters remember it.

Top Mentors

Srinath Raja

Chief Data Officer

Co-founder and Chief Data Officer of GWC Data.ai, with extensive expertise in analytics and insights across banking, retail, and healthcare Industries. A dynamic leader from Tamil Nadu driving global innovation in cloud and business intelligence solutions and also a trusted partner for DOMO.

Kalpana Kudumula

Senior Data Engineer

Senior Boomi Developer | Data Engineer With her expertise spanning business consulting to data engineering, Kalpana transforms data challenges into innovative solutions. From Business Consultant at Multiplier IT Solutions to Business Analyst at Accenture, she now excels as a Senior Data Analyst and Boomi Developer, driving growth and mentoring in the data domain.

Denzina Eric

L&D Analyst

As a Learning & Development Analyst at TeqCertify, Denzina Eric brings 11+ years of experience, having empowered 1200+ aspiring leaders at Hope Foundation in a short span. With a solid background as a Business Analyst at Merstan Impex, she now leads talent creation, shaping the next generation of visionary leaders through transformative, forward-thinking programs.

Curriculum Overview

Our comprehensive 6-month, full-time Generative AI Program is designed to equip students and freshers with in-demand skills in large language models, prompt engineering, and real-world AI applications.

Aligned with the Databricks Certified Generative AI Engineer Associate certification, the program blends hands-on learning with future-ready tools to launch careers in generative technologies.

Introduction to AI & Machine Learning

Build foundational knowledge in AI concepts, machine learning algorithms, and basic coding skills needed to understand and work with generative models.

Introduction to AI and Generative AI

- Basics of AI: What is AI, machine learning, and deep learning
- Overview of Generative AI and its applications
- Types of generative models: GANs, VAEs, Transformers
- Project: Build a basic AI model using simple data
- Deliverable: Working code of a basic machine learning model

Python Programming & Data Science Essentials

- Python basics: Data types, functions, loops, conditionals
- Introduction to NumPy and Pandas for data manipulation
- Data visualization basics with Matplotlib and Seaborn
- Project: Write Python code to analyze and visualize a dataset
- Deliverable: Data exploration report with visualizations

Introduction to Machine Learning Algorithms

- Supervised vs unsupervised learning
- Linear regression, logistic regression, and clustering techniques
- Model evaluation and cross-validation
- Project: Train a simple linear regression model
- Deliverable: Model accuracy report with visual evaluation

Data Preprocessing for Generative AI

- Handling missing values, outliers, and scaling data
- Feature engineering and selection
- Data augmentation for training AI models
- Project: Clean and preprocess a dataset for training
- Deliverable: Preprocessed dataset ready for use in models

Deep Dive into Generative Models

Explore the core concepts behind generative models, including their architectures and how to train them for generating new data.

Introduction to Neural Networks

- Basics of neural networks: Layers, neurons, and activation functions
- Understanding backpropagation and optimization techniques
- Deep learning frameworks: TensorFlow, Keras
- Project: Build a simple feedforward neural network
- Deliverable: A neural network that can classify a basic dataset

Generative Adversarial Networks (GANs)

- GAN architecture: Generator and Discriminator networks
- How GANs generate realistic data
- Training GANs with a focus on stability and performance
- Project: Train a basic GAN to generate synthetic data (e.g., images)
- Deliverable: A trained GAN model that generates realistic images

Variational Autoencoders (VAEs)

- VAE architecture and how it differs from traditional autoencoders
- Latent space representation and reconstruction loss
- Applications of VAEs in generating new data
- Project: Implement a basic VAE for image generation
- Deliverable: A working VAE model with output images

Data Augmentation & Ethical Considerations in AI

- Advanced techniques in data augmentation for training generative models
- Ethical considerations in using Generative AI (bias, fairness, misuse)
- Project: Apply data augmentation techniques to improve a model's performance
- Deliverable: Enhanced model with ethical AI considerations

Advanced Techniques and Applications in Gen AI

Develop advanced skills in working with more complex generative models, and apply them in real-world scenarios like text generation and style transfer.

Introduction to Transformers & Natural Language Processing

- Overview of transformers and their significance in NLP
- Working with BERT, GPT, and other language models
- Text generation, sentiment analysis, and text summarization
- Project: Fine-tune a pre-trained GPT model for text generation
- Deliverable: A text generation model for creating creative content

Style Transfer and Generating Art

- Introduction to neural style transfer
- How generative models create art and mimic artistic styles
- Applications in digital art and creative industries
- Project: Implement neural style transfer to create artistic images
- Deliverable: Style-transferred image that mimics famous artwork

Music Generation with AI

- Using AI for music composition
- Recurrent Neural Networks (RNNs) for sequence generation
- Training AI to generate music patterns
- Project: Train an RNN model to generate a simple melody
- Deliverable: A basic music track generated by AI

Advanced Generative Models - Combining Models

- Hybrid models: Combining GANs, VAEs, and transformers
- Using generative models for multimodal data (e.g., text-to-image generation)
- Project: Combine GANs and transformers for multimodal generative tasks
- Deliverable: A multimodal generative model (e.g., text-to-image)

Project-Based Learning & Real-World Applications

Focus on applying learned skills to real-world projects while building a professional portfolio for the job market.

Project Planning and Dataset Collection

- Identifying the scope of a generative AI project
- Collecting and cleaning data for generative modeling
- Project: Choose a real-world problem and collect relevant datasets for the project
- Deliverable: Project brief and dataset

Model Building and Refinement

- Building and training a generative model on collected data
- Hyperparameter tuning and model optimization
- Project: Build and refine a generative model for a specific task (e.g., text generation, image synthesis)
- Deliverable: Trained model ready for deployment

Final Project Development & Portfolio Building

- Putting together a portfolio of AI projects
- Best practices in presenting machine learning models and results
- Project: Develop a comprehensive final project using generative models
- Deliverable: Fully functional generative AI model and a polished project portfolio

Final Presentation and Job Market Preparation

- Job preparation: Resume building, portfolio presentation, and interview skills
- Presenting your final project to potential employers or mentors
- Project: Present your final generative AI project to a panel for evaluation
- Deliverable: Final presentation showcasing your generative AI skills, model results, and insights

Sample Projects

Apply your knowledge to business-critical challenges inspired by real companies:

Text Generation

Developed a generative language model to create news articles based on specific keywords, improving content creation efficiency by 30% and driving higher user engagement.

Image Synthesis

Trained a Generative Adversarial Network (GAN) to generate realistic images from text descriptions, enhancing creative workflows for digital artists.

Chatbot Development

Built a conversational AI chatbot that responded to customer inquiries in real time, reducing customer support response time by 40% and improving customer satisfaction.

Music Composition

Created an AI model to generate background music for video content, saving production time and increasing content creation by 25%.

Content Personalization

Developed a recommendation system using generative models to personalize playlists, improving user engagement and satisfaction by 18%.

Toolstack

Use modern GenAI tools to build intelligent, creative systems from day one.

OpenAI APIs
(ChatGPT, Whisper, DALL·E)

- Text generation, summarization
- Voice-to-text, image generation

› Learn prompt engineering & API integration

LangChain
Build GenAI pipelines

- Connect LLMs to tools, memory, and data
- Build custom assistants

› Modular GenAI workflows

Python
Build small GenAI applications

- Requests, Streamlit, Gradio for app interfaces

› Deploy simple projects and UIs

Prompt Engineering Tools
(Flowise, PromptLayer)

- Visualize and manage prompts

› Low-code GenAI experimentation

Vector DBs
(ChromaDB, FAISS – Intro only)

- Store and retrieve embeddings

› Ground LLMs with real data

Audio/Video AI tools
eg: Descript, ElevenLabs

- Text-to-speech, editing with AI

› Use GenAI in content creation

Careers

Step confidently into the Gen AI ecosystem with guided project-based learning.

Resume + Portfolio

Show hands-on GenAI apps with APIs, LangChain & Prompt Engineering.

LinkedIn Optimization

Position yourself as a GenAI-aware candidate with strong foundations.

Mock Interviews

Role-based evaluations for prompt design, use-case thinking & logic.

Project Reviews

Refinements from mentors on creative AI tools & workflows.

Placement Support

Get matched with startups, AI labs & creative-tech teams.

Our Alumni have landed analyst roles in:

AI Startups

ContentTech

Support Automation

EdTech

Freelance AI Devs

Use Cases

Hands-on GenAI projects designed to build practical creative and functional applications using foundational tools and models.

Marketing:
Ad Copy Generation

Use LLMs to create compelling product descriptions and personalized ad variations at scale.

Education:
AI Tutoring Assistant

Develop a chatbot that answers student questions and adapts content using retrieval-augmented generation.

Support Automation:
Email Summarization

Build tools to auto-summarize support tickets and improve response time and prioritization.

HR:
Resume Screening Bot

Design AI workflows that extract relevant candidate information from resumes for faster hiring.

Content Creation:
Blog Writer & Idea Generator

Prompt engineer a tool that produces blog drafts, outlines, and idea pitches using generative models.

Certification & Job Readiness

Designed for AI-first roles with hands-on Gen AI implementation.

You'll Graduate With:

Real-World Exposure

Live demos of ChatGPT, Claude, and open-source LLMs

Microsoft CERTIFIED EXPERT

Guest talks by AI startup founders & Experts

Prompting and fine-tuning practice labs

Hackathons on GenAI use cases

AI product design sprints

Translates AI curiosity into applied creativity

Dream Companies Await

TATA ELECTRONICS
Henkel
amazon
TOYOTA
J.P.Morgan
accenture
AVEVA
Sangeetha mobiles.com
ALTIMETRIK
BANGALORE BIOINNOVATION CENTRE
Sculpting the Future of Bioinnovation
Pfizer
COLAN INFOTECH
GSK
Kmart
lululemon
virtusa
Accelerating Business Outcomes
Initiative
Tech Mahindra
TATA CONSULTANCY SERVICES
T2
Parents At Work
STYLE UNION
NEVER BLEND IN
LEVELAI
GWC DATA.AI
SOLUTION MATTERS

TeqCertify

Elevate Your Data Journey

EdTech

Our offline locations

Hosur, Salem, Dharmapuri

Tirupattur, Bengaluru

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