



### **About Us**

At **GrepUp Academy**, we believe that quality education should be accessible, practical, and future-focused. Our mission is to empower students with the right skills and mindset needed to thrive in today's competitive tech world. Whether you're a college student, working professional, or someone switching careers, our courses are designed to take you from beginner to job-ready — with full support along the way.

At GrepUp Academy, our Data Science program helps students build strong skills in Python, statistics, machine learning, and deep learning through hands-on projects and real-world tools like Scikit-Learn and TensorFlow. With practical training, expert guidance, and career support, we prepare learners to confidently enter the Data Science field and grow in high-demand tech roles.





With over 9.5K+ students trained and many landing careers in top companies with salaries up to ₹45 LPA, GrepUp Academy is proud to be a launchpad for tech talent. From interview preparation and resume building to one-on-one mentorship and career guidance, we support students every step of the way. Our vision is clear — to build India's most career-focused tech learning platform where learning is not just theoretical, but transformational.



#### **Modules**

#### Module 1: Introduction To Artificial Intelligence

- Introduction to AI
- Al vs ML & DL
- Types of learning (Supervised, Unsupervised & Reinforcement) Core Difference between ML and DL
- Life Cycle of ML and DL Project

#### Module 2: Introduction To Generative Al

- Introduction to Generative AI
- Overview of generative AI technologies.
- Applications and case studies across industries.

#### Module 3: Getting Started with Large Language Models

- Into to large language Models
- History of NLP Intro to
- RNN,LSTM,GRU
- Intro to EncoderDecoder Model

#### Module 4: Prompt Engineering and Working With LLM

- Intro to Prompt Engineering
- LLM with Prompt Engineering
- Introduction to GPT models.
- Understanding how GPT-3 and GPT-4 work
- Training on popularLLMs like GPT (Generative Pre-trained Transformer).
- Practical applications of LLMs in generating text, code, and more

#### Module 5: Working with Open AI API

- Intro To Open Ai
- Utilizing OpenAI APIs
- Setting up and authenticating API usage.
- Practical exercises using GPT-3/GPT-4 for text generation.
- Understanding DALL-E and its capabilities in image generation.
- Hands-on project to generate images from textual descriptions.



#### **Modules**

#### Module 6: Working with Google GeminiGen API

- Getting Started with Gemini
- How to obtain an API key for Gemini.
- Overview of the Gemini API and accessing its features.
- Detailed exploration of different Gemini models.
- Selecting and initializing the right model for specific tasks.
- Step-by-step project to create an Al-powered chatbot Using Gemini.

#### Module 7: Working with Meta's LLaMA API

- Introduction of LLaMA.
- Comparison with other large language models like GPT-3 and GPT.
- · Key features and capabilities of LLaMA
- Understanding the Model Architecture of LLaMA.
- Discussion on model sizes and capabilities.
- Environment setup: Installing necessary libraries and tools.
- Intro to the architecture of LLaMA models
- Understanding the differences betweenLLaMA model variants(8B, 13B, 30B, and 70B parameters)
- Implementing text generation using LLaM

#### **Module 8: Working With Hugging Face Ecosystem**

- Introduction to the Hugging Face ecosystem and the Transformers library.
- Exploring HuggingFace Models and Tokenizers.
- Introduction to the TrainerAPI.
- Integrating Hugging Face models with web application

#### Module 9: BuildingGen AI Apps Using Lang Chain

- Introduction to the LangChain framework
- Understanding the purpose and core components of Lang Chain Framework
- LangChain Setupand necessary dependencies Basic configuration and setup for development
- Step-by-step guide

#### **Module 10: Intro To RAG**

- Intro To RAG
- Building applications using RAG
- LLMs in Depth
- Fine Tuning LLMs
- Training LLMs by Implementing Fine Tuning



#### **Modules**

#### Module 11: Stable Diffusionby Stability AI

- Intro to Stable Diffusion
- Fundamentals of Diffusion Models
- Application of StableDiffusion
- Modifying image attributes and styles using prompt engineering
- Parameters of image generation: seeds, prompts, and steps explained Tool For StableDiffusion
- Fine-tuning and training StableDiffusion on custom data sets
- Advanced prompt engineering and achieving specific artistic effects.
- Introduction to variations and derivatives of Stable Diffusion (e.g., Dream Booth for personalization).
- Using the Diffusion library for more control over the diffusion process.
- Integrating Stable Diffusion models into web applications
- Advance Stable DiffusionTechniques

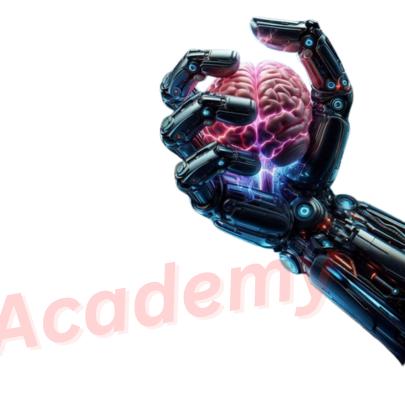




## Introduction To Artificial Intelligence

#### What is Artificial Intelligence?

Artificial Intelligence (AI) refers to the ability of machines to mimic human intelligence — enabling systems to learn from data, make decisions, recognize patterns, and even understand natural language. From virtual assistants like Siri to recommendation engines on Netflix and self-driving cars, AI is already reshaping how we live and work. At GrepUp Academy, we introduce students to the core principles of AI, including search algorithms, knowledge representation, decision-making systems, and the basic logic that powers smart machines.







#### Why Learn AI and Where It's Used

Learning AI opens doors to some of the most exciting and high-paying career opportunities in tech. Whether it's in healthcare, finance, ecommerce, or robotics, AI is helping businesses automate processes, improve accuracy, and deliver smarter services. At GrepUp Academy, students not only learn the theory behind AI but also get hands-on with real-world applications using Python, machine learning libraries, and beginner-friendly frameworks like TensorFlow and Scikit-learn. Our goal is to help learners build a strong AI foundation that prepares them for the future of intelligent systems.



### Introduction To Generative

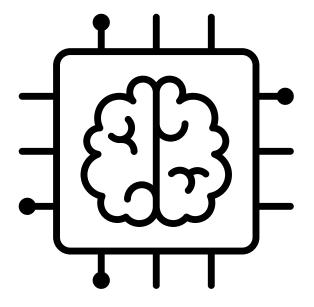
#### What is Generative AI?

Generative AI is a branch of artificial intelligence that focuses on creating new content — such as text, images, music, code, or even videos — by learning patterns from existing data. Unlike traditional AI, which analyzes data to make predictions or decisions, Generative AI produces entirely new outputs that resemble human creativity. Popular tools like ChatGPT, DALL·E, and Midjourney are examples of generative models in action. At GrepUp Academy, we introduce students to the core concepts behind these models, including neural networks, transformers, and how they learn to "generate" realistic content from massive datasets.



### Grepup

#### Why It Matters and Where It's Used



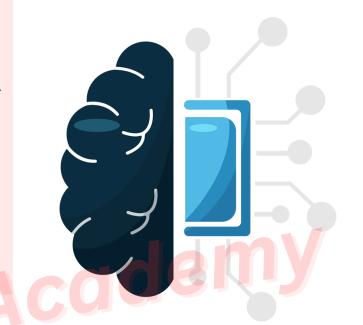
Generative AI is rapidly transforming industries — from marketing and design to software development and education. It's being used to automate customer service, generate content at scale, create lifelike simulations, and even assist in scientific research. At GrepUp Academy, we ensure learners don't just understand how generative AI works, but also gain hands-on experience with tools like ChatGPT APIs, DALL·E, Google's Gemini, and more. By building real projects and experimenting with AI generation tools, students are prepared to leverage this technology in the workplace and become part of the AI-driven future.



## Getting Started with Large Language Models

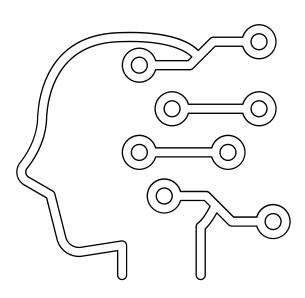
#### What Are Large Language Models (LLMs)?

Large Language Models are advanced AI systems trained on vast amounts of text data to understand, generate, and interact with human language. They power tools like ChatGPT, Gemini, and Meta's LLaMA — enabling applications such as chatbots, autowriting, translation, and intelligent search. These models work using deep learning techniques, especially transformer architectures, which allow them to grasp context, tone, and meaning across long pieces of text. At GrepUp Academy, we break down the complex world of LLMs into easy-to-understand concepts, starting with how they're built, trained, and fine-tuned for specific tasks.



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#### How to Start Working with LLMs Practically?



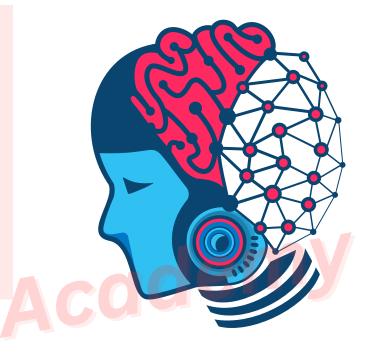
Getting started with LLMs doesn't require building one from scratch — thanks to APIs and pre-trained models from platforms like OpenAI, Hugging Face, and Google. At GrepUp Academy, students learn how to interact with LLMs through Python, use tools like LangChain, and integrate models into real projects such as smart assistants, content generators, and data summarizers. Through hands-on experience, they gain the skills to customize prompts, connect LLMs to external data sources, and deploy intelligent applications — preparing them for the rapidly growing field of generative AI.



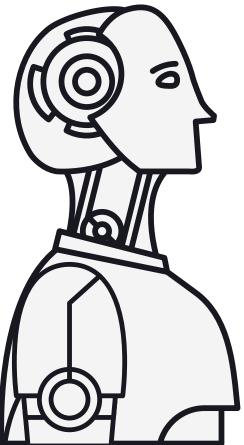
## Prompt Engineering and Working With LLM ———

#### What is Prompt Engineering?

Prompt Engineering is the art and science of crafting effective input prompts to get accurate, meaningful, and context-aware responses from Large Language Models (LLMs) like ChatGPT, LLaMA, and Gemini. Unlike traditional programming where we write logic line by line, prompt engineering uses natural language to guide models in generating desired outputs. At GrepUp Academy, we teach students how to design prompts for various tasks — from writing and summarizing to coding, translation, and Q&A — helping them master the skill of "talking to AI" in a way that delivers real results.



### Working with LLMs in Real-World Projects



Using LLMs effectively involves more than just asking questions — it's about integrating them into tools, apps, and workflows. At GrepUp Academy, students get hands-on with LLMs through platforms like OpenAI's GPT API, Meta's LLaMA, and Hugging Face Transformers. They learn how to build intelligent chatbots, automate content creation, and even chain prompts using frameworks like LangChain. By combining prompt engineering with real-world deployment, our learners gain a future-ready edge — turning LLMs into powerful tools for productivity, automation, and innovation across industries.



### Working with Open AI API

#### Understanding the Power of OpenAl's API

OpenAI's API gives developers access to advanced language models like GPT-4, DALL·E, and Whisper, making it easy to integrate powerful AI features into any application. Whether it's generating content, answering questions, writing code, or analyzing text, the OpenAI API allows users to interact with language models through simple prompts and responses. At GrepUp Academy, we teach students how the API works, how to structure requests using Python, and how to set up secure authentication and environment variables — all with real-time coding examples and projects.

# eat-time coding examples and projects. Grepup Academy

#### **Hands-On Integration and Real-World Applications**



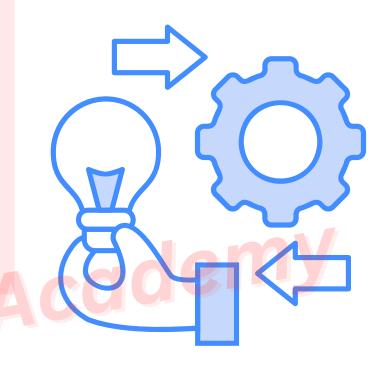
At GrepUp Academy, learners gain practical experience by building real-world applications using the OpenAI API — like chatbots, AI-powered content tools, and smart assistants. We guide them through making API calls, handling responses, setting temperature and token limits, and chaining prompts for more advanced workflows. Students also explore use cases such as summarization, sentiment analysis, text classification, and automated report generation. This hands-on approach not only strengthens their technical skills but also prepares them to confidently implement AI in real-world business solutions.



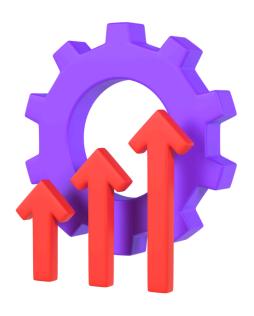
### Working with Google Gemini Gen API

#### Getting Started with Google Gemini (GeminiGen) API

The Google Gemini API is Google's powerful gateway to its family of advanced large language models — designed for tasks like text generation, summarization, code completion, and multimodal interaction (text + image). It enables developers to bring conversational AI and smart automation into their applications with simple API calls. At GrepUp Academy, we introduce learners to the fundamentals of Gemini's architecture, show them how to set up API keys via Google Cloud Console, and teach them how to interact with Gemini using Python or JavaScript to create intelligent, responsive systems.



#### **Building AI-Driven Applications with GeminiGen**



Our hands-on approach focuses on helping students build real projects using Gemini — from smart chat assistants and AI content tools to personalized recommendation systems and multilingual apps. At GrepUp Academy, students learn how to structure prompts, set context, handle model parameters like temperature and max tokens, and chain prompts for more advanced logic. We also explore how Gemini can be integrated with cloud services and productivity tools, preparing learners to build scalable, enterprise-grade solutions using Google's cutting-edge AI technology.



### Working with Meta's LLaMA API

#### **Understanding Meta's LLaMA and Its Capabilities**

Meta's LLaMA (Large Language Model Meta AI) is a cutting-edge family of open-source language models designed to perform tasks like text generation, summarization, translation, and question-answering with remarkable accuracy. LLaMA models are highly efficient, scalable, and lightweight compared to other large language models, making them easier to fine-tune and deploy in academic or enterprise settings. At GrepUp Academy, we introduce learners to the architecture of LLaMA, helping them understand how transformer-based models process and generate human-like text with contextual awareness.



## GrepUp

#### Hands-On with the LLaMA API



Working with the LLaMA API involves sending structured prompts to the model and receiving intelligent responses — similar to how you'd use APIs from OpenAI or Cohere. At GrepUp Academy, students learn how to access Meta's LLaMA via Hugging Face or custom endpoints, integrate it into Python applications, and finetune it for tasks like chatbots, content creation, or text classification. By building real projects and interacting with live APIs, learners gain valuable experience in deploying and scaling large language models for real-world use cases.



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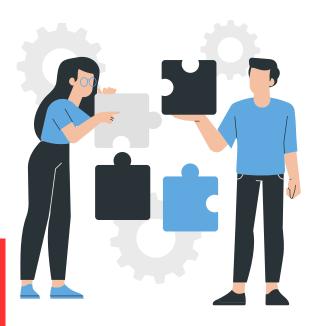
#### What is the Hugging Face Ecosystem?

The Hugging Face ecosystem is one of the most powerful and accessible platforms in the AI community, offering pre-trained models, datasets, and tools for Natural Language Processing (NLP), Computer Vision, and even Audio tasks. It is best known for its transformers library, which allows developers to easily access and fine-tune state-of-the-art models like BERT, GPT, RoBERTa, and LLaMA. At GrepUp Academy, we teach students how to explore Hugging Face's Model Hub, work with datasets, and use pipelines for tasks like text classification, sentiment analysis, summarization, translation, and more — all with just a few lines of Python code.



### Grepup

#### Hands-On Integration and Model Customization



At GrepUp Academy, learners dive deep into practical projects using Hugging Face — from building chatbots and QA systems to fine-tuning models with their own data using Trainer, AutoModel, and AutoTokenizer tools. We also cover integration with platforms like Google Colab, Kaggle, and cloud deployment for real-world application. Students gain experience using Spaces (Hugging Face's app hosting service), Datasets library for preprocessing, and even contributing to open-source models. By the end, they're not just users of AI — they become contributors to one of the world's most active AI communities.



## BuildingGen AI Apps Using Lang Chain

#### What is LangChain and Why It Matters?

LangChain is an open-source framework designed to build applications powered by Large Language Models (LLMs) with advanced logic, memory, and data integration. It helps developers go beyond simple prompts by enabling chains of interactions, real-time data access, retrieval from external sources, and dynamic tool use. At GrepUp Academy, we teach students how to use LangChain to create real-world AI applications like smart chatbots, AI agents, document summarizers, and question-answering systems — all with structured control over how the LLM behaves and responds.



#### Hands-On Projects with LangChain Architecture



At GrepUp Academy, students get hands-on experience working with LangChain components such as LLMs, Chains, Agents, Retrievers, and Memory. They learn how to integrate tools like OpenAI API, Google Gemini, Vector Databases (like FAISS), and external data sources like PDFs, websites, or SQL databases into their AI workflows. By combining LangChain with Python and Streamlit, learners build interactive, end-to-end AI applications that respond intelligently to users — preparing them for careers in AI product development, automation, and intelligent software design.



### Intro To RAG

#### What is RAG (Retrieval-Augmented Generation)?

Retrieval-Augmented Generation (RAG) is a powerful technique that enhances the performance of Large Language Models (LLMs) by combining them with external knowledge sources. Instead of relying solely on what the model was trained on, RAG fetches relevant information from live documents, databases, or knowledge bases, and feeds it into the model at runtime. This makes responses more accurate, current, and contextually rich — especially for tasks like answering domain-specific questions, summarizing documents, or building enterprisegrade chatbots.



## GrepUp

#### How We Use RAG at GrepUp Academy



At GrepUp Academy, we teach students how to build RAG-powered applications using tools like LangChain, FAISS (vector databases), OpenAI, and ChromaDB. They learn how to chunk and embed documents, perform semantic search, and pass the retrieved results into LLMs for dynamic response generation. By working on real-world projects — such as chatbot assistants trained on custom PDFs or knowledge-rich AI systems — learners gain hands-on experience in bridging unstructured data with AI reasoning.

RAG is a future-proof skill that gives our students a major edge in building smart, scalable AI apps.



### Stable Diffusionby Stability AI

#### What is Stable Diffusion by Stability AI?

Stable Diffusion is a powerful open-source generative AI model developed by Stability AI that creates high-quality images from text prompts. Unlike earlier models that were resource-heavy and closed-source, Stable Diffusion is lightweight, fast, and runs on consumer hardware — making creative AI accessible to everyone. At GrepUp Academy, we teach students how this model works using latent diffusion techniques, how it interprets natural language inputs, and how it transforms them into realistic, artistic, or even surreal images — all with just a few lines of code or a click in a UI.



## GrepUp



#### **Using Stable Diffusion for Real Projects**

At GrepUp Academy, learners get hands-on experience with Stable Diffusion through tools like AUTOMATIC1111 Web UI, Google Colab, and Hugging Face Spaces. They explore how to finetune prompts, add negative prompts, and even customize outputs with models trained on specific styles or themes. Whether students are interested in AI art, product mockups, game assets, or creative storytelling, Stable Diffusion empowers them to generate visuals that were once impossible without professional design skills. It's a perfect fusion of creativity and AI—and a valuable skill in today's visual-first digital world.



### Why Choose Us?

#### Practical Learning That Gets You Hired

At GrepUp Academy, we focus on real-world skills — not just theory. Every course includes hands-on projects, live tools, and real datasets to make sure you're job-ready from day one. You'll build things that matter, practice industry workflows, and create a portfolio that speaks for your skills.



#### **@ Beginner-Friendly and Mentor-Led**

Our courses are designed for complete beginners as well as upskillers. You'll learn step-by-step with simple explanations and personal guidance from expert mentors. Doubts? We offer regular doubt-clearing sessions and one-on-one support to help you stay on track and grow with confidence.



#### Updated Content with Industry-Relevant Tools

We teach what the industry needs. From Python and SQL to Tableau, Power BI, TensorFlow, and React — our content is always updated to reflect the latest tools, technologies, and job requirements. You won't just learn — you'll stay relevant in a fast-moving tech world.



#### End-to-End Career Support

We don't stop at teaching — we help you land the job. Our students receive complete career assistance including resume writing, mock interviews, LinkedIn optimization, and portfolio reviews. Many have gone on to secure roles with packages up to ₹45 LPA, proving our system works.



#### \* A Trusted Learning Community of 9.5K+ Students

With over 9,500 learners across India, GrepUp is building a strong tech education community. Students trust us for our teaching style, personalized support, and career-driven focus. When you choose GrepUp, you're joining a growing network of future-ready professionals.





## Work with top GenAI tools like ChatGPT, Gemini, Midjourney & Stable Diffusion in real-world projects.



ChatGPT, developed by OpenAI, is a powerful conversational AI model that understands and generates human-like text based on the input it receives. It can be used for answering questions, writing content, coding, tutoring, brainstorming, and more. At GrepUp Academy, we help students harness ChatGPT's capabilities to boost productivity, automate tasks, and build smart AI-driven applications. Whether it's integrated into chatbots, writing tools, or customer support systems, ChatGPT opens the door to real-world use cases that blend communication with intelligence.



MidJourney is one of the most popular AI image generation tools, known for producing highly artistic and detailed visuals based on text prompts. As of now, MidJourney has over 16 million users on its official Discord, generating more than 30 million images per day. Its rapid growth highlights how creative professionals, marketers, educators, and AI enthusiasts are adopting generative tools for design, storytelling, branding, and concept art. At GrepUp Academy, we introduce learners to MidJourney's capabilities, how prompt crafting impacts results, and how to use AI art in real-world projects — from digital marketing to UI/UX design.



## Work with top GenAI tools like ChatGPT, Gemini, Midjourney & Stable Diffusion in real-world projects.



Stable Diffusion, developed by Stability AI, is a powerful open-source text-to-image model that allows users to generate high-quality, detailed visuals simply by typing a prompt. Unlike closed-source tools, Stable Diffusion can run locally on a personal computer, giving creators full control and customization. It supports techniques like prompt engineering, negative prompts, and model fine-tuning, making it popular among AI artists, developers, and content creators. At GrepUp Academy, we teach students how to use Stable Diffusion through tools like AUTOMATIC1111 Web UI, Google Colab, and Hugging Face — enabling them to build AI-generated visuals for branding, storytelling, product design, and more.



Runway is a cutting-edge AI platform designed to revolutionize creative workflows by combining generative models with intuitive video, image, and audio editing tools 10web.io+15runwayml.com+15siteefy.com+15monica.im+1skimai.com+1. Its web-based editor enables users—from filmmakers to content creators—to generate and refine multimedia content in real time, without needing special hardware. Using Gen-3 Alpha and the recent Gen-4 model, Runway supports text-to-video, image generation, super-slow motion, green-screen compositing, and audio editing — all powered in the cloud for accessibility and collaboration monica.im+5eweek.com+5research.contrary.com+5.



## Work with top GenAI tools like ChatGPT, Gemini, Midjourney & Stable Diffusion in real-world projects.



Gemini is Google DeepMind's state-of-the-art large language model that excels across text, image, audio, video, and even code. It's available in multiple sizes—Nano, Pro, Ultra, and the latest Gemini2.5 Pro—each tailored for varied tasks from on-device efficiency high-complexity reasoning theverge.com+9tomsguide.com+9workspace.google.com+9economictimes.indiatimes.co m+10blog.google+10en.wikipedia.org+10. Gemini2.5 Pro sets new benchmarks in multimodal understanding and step-by-step reasoning, outperforming competitors blog.google+4theverge.com+4deepmind.google+4. across 30+ academic tasks Seamlessly integrated into tools like Gmail, Search, Android, and Google Cloud, Gemini is accessible via API and platforms like Google AI Studio and Vertex AI en.wikipedia.org. At GrepUp Academy, we teach how to work with Gemini-from setting up prompts and reasoning chains to integrating it into real-world applications—so students can harness its advanced capabilities for AI-driven solutions.

### ||Eleven ||Labs

**ElevenLabs** is a London/New York-based AI startup specializing in advanced text-to-speech (TTS) and voice cloning technology. Its flagship offering, Eleven v3 (alpha), now supports over 70 languages, can express nuanced emotions via audio tags like [whispers], and handles realistic dialogue transitions — marking a huge speech synthesis leap expressive elevenlabs.io+15ciol.com+15toolkitly.com+15reu ters.com+2en.wikipedia.org+2reddit.com+2. The company also provides multilingual support, voice cloning, dubbing studio, conversational AI, and speech-to-speech tools — making it a fullfeatured platform for creators and developers.



### **Top Hiring Companies**





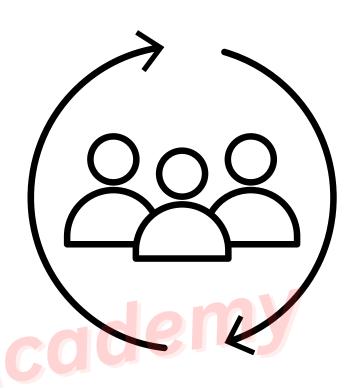


Our students at GrepUp Academy are hired by some of the most respected and fastest-growing companies in the tech, analytics, and software sectors. From established multinational firms to cutting-edge startups, employers are constantly looking for skilled professionals who can solve real-world problems using data, code, and creativity. With our hands-on training, job-focused curriculum, and interview preparation support, learners become confident and job-ready — and many go on to secure roles with impressive salary packages and long-term growth potential.



### **Contact Support**

At GrepUp Academy, we believe in supporting our students at every step of their learning journey. Whether you have questions about a course, need help choosing the right path, or want guidance on placements — our team is just a message away. You can reach out to us anytime through our official WhatsApp, email, or contact form. Your success is our priority, and we're providing committed to mentorship, feedback, and personal support you need to grow confidently in your tech career. Let's build your future, together.



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