

Build, Create, Deploy with AI - GenAI Accelerator Bootcamp for Students

Welcome to the Future of Work with AI. This bootcamp is designed for students who don't just want to learn about AI but want to build with AI, create using AI, and deploy through AI.

RVIT, Bengaluru | 18 Hours Over 3 Days - Project Based Learning Workshop

Motto: "Don't just learn about AI - Build with AI, Deploy with AI, Innovate with AI!"

Day 1 — Demystifying AI, Generative AI, and Agentic AI

Objective: Build first-principles understanding.

Morning (2 hrs):

- Socratic intro: How has "AI" evolved? What is ML vs AI vs Generative AI vs Agentic AI?
- Group activity: Visualize the transition using mind-mapping tools.
- Mini-case: India's evolution in the global AI scene.

Midday (2 hrs):

- Short demo: LLMs, transformers, tokenization, embeddings, attention (with clear, non-jargon analogies and visualizations).
- Hands-on:
 - Use Ollama to download and run a pre-trained model locally (guided walkthrough).
 - Critical analysis: Compare what's possible with small models vs large, and open vs closed.

Afternoon (2 hrs):

- Mini-project (pairs):
 - Document a "Day in the Life of an AI Agent" (real or imagined). Use diagrams + written reflection.
 - Peer review and group sharing.
- Recap and Q&A.

Day 2: Prompt Engineering Deep Dive

Objective: Master prompt design and analysis for text, code, and multimodal AI.

Morning (1.5 hrs):

- Interactive lecture: Anatomy of a prompt. Zero/few/one-shot. Chain of Thought. Prompt failures and what causes them.
- Hands-on: Live "fix the broken prompt" challenges.

Midday (2 hrs):

- Research lab:
 - Experiment with ChatGPT, Claude, Gemini.
 - Implement advanced techniques: Tree of Thought, step-back prompting, persona blending.
 - Group debate: Jailbreaking, bias, responsible use – should you ever "break" an AI? Why/why not?



Afternoon (2.5 hrs):

- Major project:
 - Teams select a real-world scenario (customer support bot, creative writing, code review, etc.).
 - Each team crafts and tests prompts, iterating toward a "mega prompt" for their scenario.
 - Deliverable: Short video demo + prompt documentation for peer critique.

Understand Prompt Anatomy

Learn the structure of effective prompts and how different components influence AI responses.

Experiment with Advanced Techniques

Practice Tree of Thought, step-back prompting, and persona blending across multiple AI platforms.

Create Real-World Applications

Develop and document a comprehensive "mega prompt" for practical scenarios with video demonstration.

Day 3 : Coding with and for LLMs

Objective: Move from manual coding to AI-augmented development.

Morning (2 hrs):

- *Workshop:*
 - Vibe Coding: Rapid prototyping with LLMs.
 - Prompt engineering for code (for both beginners and those with prior experience).

Midday (2 hrs):

- *Lab:*
 - Use GPT-4o or Claude Sonnet for real code tasks (Python, JS, etc.).
 - Try “English as code” vs “Python as code” – critically analyze output, correctness, and safety.

Afternoon (2 hrs):

- *Group project:*
 - Build a simple RAG app or chatbot that answers questions about a sample dataset (docs or website).
 - *Presentations and code walk-throughs* (focus on what the AI did well, and what needed human fixes).