SEQATO LLM Awareness and Portfolio Development Program

1. Introduction

In the era of AI-driven software development, proficiency in **Large Language Models (LLMs)** is becoming a critical skill across all engineering levels. As part of SEQATO's growth and innovation roadmap, all engineers are expected to build foundational and practical knowledge in LLM development.

This document outlines the **SEQATO LLM Awareness and Portfolio Development Program**, inspired by industry best practices.

2. Target Audience

Category	Timeline to Complete
Engineers **not assigned** to any client project	3 months
Engineers **assigned** to active projects	5 months

All participants must pursue this initiative alongside their regular work responsibilities.

3. Objectives

- Build awareness and hands-on expertise in **LLMs** and **Generative AI**.

- Develop a **personal LLM engineering portfolio**.

- Enable SEQATO to showcase an **AI-competent workforce** to clients.

- Prepare engineers for **future AI-centered projects** and **internal innovation opportunities**.

4. Structure and Phases (Based on 3-Month Roadmap)

Phase	Focus	Deliverables
Month 1	**Foundations & Setup**	1-2 mini-projects: Local LLM Chat App with Streamlit, Document Summarization Tool.
Month 2	**Skill Building & Specialized Tools**	Mid-level projects: Global News Topic Tracker, Multi-Modal Assistant, Meeting Notes and Action Item Extractor.

Phase	Focus	Deliverables
Month 3	**Portfolio Project**	Full-fledged project: Custom Chatbot Q&A (RAG Application), Multi-Agent System using LangGraph, Optional Bonus Project (Fine-Tuning Open-Source LLMs for Price Prediction).

For employees taking 5 months: same activities spread over double the time.

5. Suggested Projects

Phase 1 (Month 1) — Mini Projects

- **Local LLM Chat App with Streamlit**: Create a real-time chat application using Streamlit, Ollama's local LLMs, and FastAPI.

- **Document Summarization Tool**: Build a tool to upload PDFs and generate a summary using Hugging Face transformers.

Phase 2 (Month 2) — Intermediate Projects

- **Global News Topic Tracker**: Scrape Google News and summarize trending topics using LLMs.

- **Multi-Modal Assistant**: Build an assistant capable of answering queries based on both text and images.

- **Meeting Notes and Action Item Extractor**: Create an app to convert meeting audio into structured notes and task lists using Whisper and OpenAI APIs.

Phase 3 (Month 3) — Portfolio Project (Final)

Pick at least **one**:

- **Custom Chatbot Q&A (RAG Application)**: Develop an AI system using LangChain and ChromaDB for document Q&A.

- **Multi-Agent System using LangGraph**: Build a multi-agent system for coding, testing, and debugging automation.

- **Fine-Tuning Open-Source LLMs for Price Prediction (Optional Bonus Project)**: Fine-tune an open-source model using QLoRA to predict product prices.

Participants must document:

- Problem statement

- Solution architecture

- Code repository (GitHub)

6. Expectations from Participants

- Allocate **4–6 hours per week** outside office hours.

- Maintain a **personal GitHub repository**.

- Attend **biweekly internal check-ins**.

- Maintain a **learning log** (topics learned, issues faced, solutions applied).

7. Evaluation and Certification Plan

Stage	Evaluation Method	Responsible Team/Person
Every 4 weeks	Demo session + Learning Log submission	Assigned Mentor / Engineering Lead
Final	Full project review, GitHub repo evaluation, panel presentation	Manager

8. Support Structure

- **Mentorship Group**: Leads/Seniors assigned as mentors.

- **Resource Bank**: Curated folder with tutorials, code samples, articles, videos.

9. Kickoff Timeline

Program Launch: 1st June 2025

Activity	Tentative Date for Engineers **not assigned** to any client project	Tentative Date for Engineers **assigned** to active projects
1st Check-in Session	1st June + 1st Month	1st June + 2nd Month
Mid-term Evaluation	1st June + 2nd Month	1st June + 3rd Month
Final Portfolio Submission	1st June + 3rd Month	1st June + 5th Month