Pi Bi Tech – Al Product Developer & Industry Internship Certification Program - A launchpad for innovation and career success.

Duration: 60 Hours, (Weekdays + Weekend Batches Available)

Outcome: Build your own AI product from scratch, own the IP, pitch to VCs, and take it to market. Job-Ready AI Product Developer — eligible for top product companies globally.

All-in-One Certification: No specialization tracks — learners gain **complete AI product knowledge** from concept to deployment to growth strategy.

Course Learning Objectives

By the End of This 45-Day Program, You'll:

- \checkmark Launch your own Al-powered product (hosted by Pi Bi Tech)
- Pitch for VC funding and business mentorship
- \checkmark Become a certified AI Product Developer ready for high-paying roles
- \checkmark Have a GitHub-backed portfolio with real-world experience
- \sqrt{R} eceive an Internship + Experience Certificate for top product roles

Course Modules

Module 1: Al Product Design & Prototyping (6 Hours)

- Design Thinking for AI Products
- Wireframes, Personas & User Journeys

Rapid Prototyping using AI tools

Tools: Figma, Miro, Whimsical, Voiceflow, Balsamiq

Module 2: Programming Fundamentals & Backend Setup (5 Hours)

- Python, JavaScript, Go Crash Introduction
- RESTful APIs & FastAPI/Flask Basics
- Working with JSON, APIs & Integrating LLMs

Tools: Python, Postman, Swagger, FastAPI

Module 3: Full-Stack Application Development (6 Hours)

Frontend: ReactJS + Tailwind for AI UI

• Backend: Flask/FastAPI with DB

Connecting AI APIs to UI

Tools: React, FastAPI, MongoDB, PostgreSQL

Module 4: Databases for AI (4 Hours)

- RDBMS vs NoSQL
- Graph Databases for knowledge representation
- Vector Databases for embedding search

Tools: PostgreSQL, MongoDB, Neo4j, Pinecone, Weaviate

Module 5: Data Engineering & Pipeline Building (5 Hours)

- ETL/ELT Concepts
- Data Cleaning & Transformation
- Batch vs Streaming Pipelines

Tools: Apache Airflow, Pandas, Spark, dbt

Module 6: AI & Machine Learning Essentials (6 Hours)

- ML Lifecycle & Supervised Learning
- Feature Engineering & Model Evaluation
- Model Deployment Basics

Tools: Scikit-learn, TensorFlow, MLflow

Module 7: Generative AI & LLMs (6 Hours)

- Introduction to LLMs: GPT-4, Claude, Mistral, Llama3
- Prompt Engineering Best Practices
- LangChain, LlamaIndex, LangGraph for LLM apps

Tools: OpenAI, LangChain, Hugging Face, LlamaIndex, LangGraph

Module 8: Retrieval-Augmented Generation (RAG) (4 Hours)

- RAG Architecture for Enterprise AI
- Chunking, Embeddings & Retrieval Pipelines
- Indexing with Vector DBs

Tools: Pinecone, Weaviate, FAISS, LangChain

Module 9: Al Agents & Agentic Workflows (5 Hours)

- Understanding Al Agents: Planning, Memory, Execution
- Building Multi-agent systems for tasks
- Use Cases: AutoGPT, CrewAl, LangGraph

Tools: CrewAI, AutoGPT, LangGraph

Module 10: Cloud & DevOps for AI (4 Hours)

- Cloud Deployment (AWS, GCP)
- CI/CD Pipelines
- Dockerization, Microservices, API Gateway

Tools: Docker, GitLab CI/CD, AWS Lambda, ECS, API Gateway

Module 11: AI Product Strategy & Business (5 Hours)

- Building a Business Model for AI Products
- Ethical AI, Governance, and Compliance
- Monetization Models for AI Tools

Tools: Notion, Lean Canvas, Tableau, Google Sheets

Module 12: Go-To-Market & Product-Led Growth (4 Hours)

- Positioning & Messaging AI Products
- Product-Led Growth (PLG) Frameworks
- Building Launch Strategy & Feedback Loops

Tools: HubSpot, Mixpanel, Amplitude, SEMrush

Capstone Project (Integrated Throughout Course)

Objective: Build a complete AI product prototype \rightarrow MVP \rightarrow deploy \rightarrow prepare GTM. Includes:

What Makes This Program Unique?

• Build Your Own Product from Scratch

From idea to prototype to full-stack AI app — develop your **own AI-powered product** by the end of the training.

• You Own Your Product IP

Unlike traditional bootcamps, you retain full ownership of the product you build.

• VC Funding Support from Pi Bi Tech

We help high-potential learners **pitch to VCs and investors**, with mentorship and pitch deck assistance to bring your product to market.

Product Hosting & Launch Support

Pi Bi Tech provides **cloud hosting and go-to-market support** so your product can go live and scale.

• Expert Internship Experience Certificate

Get an **Industry-Recognized Internship Certificate** from Pi Bi Tech, signed by top mentors and practitioners.

Placement Support

We help you land **top AI product roles** in leading product companies — with **resume reviews**, **mock interviews**, and **referrals**.