

3 DAYS / LIVE INSTRUCTOR-LED, VIRTUAL OR ONSITE

AI Engineering Boot Camp

From Opportunity to Implementation

Ride the AI wave with a team that can make it work.

AI is changing what teams are expected to deliver. Keeping pace takes more than learning a new tool: your people need to understand where AI helps, build the surrounding application, and evaluate the behavior they are asking the business to trust.

This three-day boot camp combines AI Implementation: From Opportunity to Architecture with the two-day Applied AI Engineering course. Begin with the decisions behind a useful, bounded AI system. Then implement the patterns in code and examine how they behave with real application constraints.

The result is one connected learning experience, from opportunity selection to data, tools, agents, evaluation, security, and operations. Give your team a common language and practical experience it can carry into the next implementation conversation.

In this course, you will learn how to

- Translate a business workflow into an AI use case with clear boundaries and success criteria.
- Choose model, hosting, knowledge, and integration patterns for the job.
- Implement retrieval and tool use while keeping permissions and exact business rules in code.
- Develop bounded workflows with approval, recovery, and stopping behavior.
- Evaluate answers and actions, compare execution paths, and measure cost and latency.
- Explain readiness gaps and plan the next stage of an enterprise AI pilot.

AUDIENCE + COURSE AGENDA

Make the time count.

Who should attend

Engineering teams, technical leads, architects, platform professionals, and technical consultants who need the complete path from AI architecture to application implementation.

Learning experience

The course combines demonstrations, guided architecture activities, discussion, hands-on implementation, and evaluation. A shared application scenario connects the decisions to the behavior of the system. The instructor adapts the pace to the group.

Course agenda

Topics covered
Understand AI, select an opportunity, and compare architecture choices
Knowledge, actions, evaluation, security, and pilot planning
Build the application foundation and retrieval path
Implement tools and bounded workflows
Evaluate behavior and compare routing strategies
Test failure behavior and review readiness

Topic order, pacing, and time spent on each subject vary with the group’s experience, questions, and learning needs. Topics are not assigned to fixed times or days. Plan to attend the full course.

DETAILED COURSE OUTLINE

What you will explore.

Part 1: Understand AI and select a useful opportunity

Begin with the business workflow and learn where probabilistic models fit alongside conventional software. Compare model and hosting options, then scope a pilot that is small enough to evaluate and meaningful enough to matter.

- Orientation; AI terminology, context, and model behavior
- Code, AI, or hybrid; augmentation versus automation
- Model selection, hosting tradeoffs, routing, and workflow cost

Part 2: Design knowledge and action boundaries

Follow information and proposed actions through the system. Choose authoritative sources, understand retrieval, and define what tools and agents may do before deciding how much autonomy to give them.

- Embeddings, RAG, APIs, and evidence quality
- Structured output, permissions, approval, and idempotency
- Agent workflows, durable state, stopping limits, and MCP

Part 3: Evaluate trust and production readiness

Define how you will recognize acceptable behavior and unacceptable failures. Connect evaluation, security, and operations to a first-pilot plan that your engineering and business stakeholders can discuss.

- Evaluation datasets, deterministic checks, and AI review
- Prompt injection, data boundaries, observability, and recovery
- Acceptance criteria, ownership, readiness gaps, and pilot planning

What you take back to work

A connected understanding of AI architecture and implementation, practical engineering experience, and a clearer plan for building and evaluating your next pilot.

Bring the complete program to your team, or discuss the one-day and two-day courses as separate stages of the same learning path.

Plan private training for your team

Discuss audience fit, delivery dates, and learning goals at www.attainable.tech/contact.html.

DETAILED COURSE OUTLINE / CONTINUED

Connect learning to practice.

Part 4: Build the foundation and retrieval path

Move from architectural choices into code. Connect a model to the application, add structured validation, and implement a knowledge path whose evidence can be inspected.

- Application inputs, outputs, and model integration
- Retrieval, authorized context, and citations
- Baseline comparison and grounded-answer checks

Part 5: Connect tools and bounded workflows

Implement controlled application actions and the workflow that surrounds them. Explore direct APIs and MCP while keeping permissions, approvals, and recovery in application logic.

- Tool contracts and permission enforcement
- Approval for the exact action; retries and duplicate prevention
- Workflow and agent state, budgets, and stopping conditions

Part 6: Evaluate behavior and optimize routing

Build repeatable evidence for quality and efficiency. Compare models and execution paths against the same criteria, keeping severe failures separate from average performance.

- Evaluation cases, rubrics, and regression checks
- Reviewer evaluation, escalation, and human oversight
- Quality, latency, cost, and model-routing decisions

Part 7: Challenge failures and review the pilot

Exercise the system with malicious inputs and dependency failures. Review the actual outcomes and identify the next work needed before a training implementation becomes an enterprise pilot.

- Injection, unauthorized actions, timeouts, and partial failure
- Audit trails, graceful degradation, and versioned changes
- Integrated readiness review and next-iteration planning