

ENTERPRISE PROGRAM BRIEF

Forward Deployed Engineering for AI and Data Solutions

Develop the skills to work directly with customers, investigate business workflows, and deliver useful software, data, and AI solutions. Participants follow a simulated engagement from discovery and opportunity assessment to a working pilot, operational planning, and stakeholder review.

VNode ITes

VAI-200

Coming soon

DURATION

40 hours

LEVEL

Intermediate

FORMAT

Private cohort

AUDIENCE PROFILE

Built for these roles

For solution architects, software engineers, AI engineers, data engineers, and technical consultants who already build technical solutions and want stronger customer delivery skills.

OVERVIEW

Executive overview

Develop the skills to work directly with customers, investigate business workflows, and deliver useful software, data, and AI solutions. Participants follow a simulated engagement from discovery and opportunity assessment to a working pilot, operational planning, and stakeholder review.

READINESS

Prerequisites

- Participants need practical Python or C# experience, REST API and database fundamentals, Git familiarity, and basic cloud and identity knowledge. AI labs assume introductory knowledge of retrieval-augmented generation. This course does not teach programming from the beginning.

PROGRAM OUTCOMES

Capabilities your teams will gain

- Translate a broad customer request into a problem statement, workflow map, and agreed scope.
- Assess business value, data readiness, feasibility, and delivery risks before committing to a pilot.
- Design and build an integrated solution with explicit architecture decisions and access boundaries.
- Evaluate functional behaviour, AI response quality, failure handling, latency, and cost.
- Present evidence to stakeholders and plan adoption, operations, handover, and continuous improvement.

ENTERPRISE CUSTOMIZATION

Enterprise customization

Tailor this program to your organization's priorities: Take a customer problem through discovery, engineering, and pilot delivery

- 5 learning days of 8 hours, or 10 sessions of 4 hours. Learning hours exclude breaks and include module exercises and capstone time. Setup is completed before the course.

CURRICULUM

Curriculum roadmap

1 MODULE 1 · 2 PROPOSED HOURS

FDE responsibilities and engagement lifecycle

Understand how an FDE works with customers and engineering teams to deliver outcomes.

- Role boundaries and collaboration with sales, product, architecture, engineering, and customer operations.
- Engagement stages, responsibilities, stakeholder expectations, and decision ownership.
- Working with incomplete requirements, documenting assumptions, and escalating blockers.
- Customer-specific implementation versus reusable product capability; feeding lessons back to product teams.

Planned lab: Review a vague customer request and create an engagement brief with responsibilities, assumptions, and initial questions.

Expected output: Engagement brief and stakeholder responsibility map.

2 MODULE 2 · 5 PROPOSED HOURS

Customer discovery and workflow analysis

Establish what users do today and identify where a technical intervention could help.

- Interview the sponsor, process owner, frontline users, data owners, and security stakeholders.
- Map workflow steps, systems, decisions, exceptions, workarounds, and approval points.
- Separate observed facts from assumptions and proposed features.
- Identify data sources, access boundaries, dependencies, and gaps in evidence.
- Define the current baseline and translate findings into a concise problem statement.

Planned lab: Conduct a discovery role play, map the current support workflow, and review sample tickets and knowledge documents.

Expected output: Discovery summary, workflow map, stakeholder map, and open-question log.

3 MODULE 3 · 4 PROPOSED HOURS

Opportunity qualification and business value

Decide whether an opportunity is valuable and sufficiently ready for a bounded pilot.

- Assess user impact, frequency, sponsor commitment, workflow fit, and technical feasibility.
- Review data quality, permissions, integration access, and operational ownership.
- Compare process improvement, deterministic automation, analytics, and AI options.
- Estimate potential value using stated assumptions, baseline effort, delivery cost, and operating cost.
- Prioritise scope; define success measures, exclusions, acceptance criteria, and go or no-go conditions.

Planned lab: Compare three candidate opportunities and justify a pilot recommendation.

Expected output: Opportunity assessment, assumptions-based value estimate, and pilot scope.

4 MODULE 4 · 5 PROPOSED HOURS

Solution architecture and delivery planning

Translate the selected opportunity into an implementable design and delivery plan.

- Define system boundaries, data flows, source ownership, and integration contracts.
- Choose between search, RAG, deterministic workflows, and agentic tool use based on requirements.
- Plan authentication, authorisation, secret handling, data minimisation, and environment separation.
- Record architecture decisions and trade-offs for reliability, cost, latency, and maintainability.
- Create a delivery backlog, milestones, dependency register, change process, and acceptance gates.

Planned lab: Design the capstone architecture and validate a critical integration using a small technical spike.

Expected output: Architecture diagram, decision records, integration contract, and delivery backlog.

5 MODULE 5 · 6 PROPOSED HOURS

Rapid prototyping and customer feedback

Build one useful workflow end to end and use feedback to refine it.

- Select the smallest useful workflow and create a reproducible development environment.
 - Prepare synthetic documents, metadata, and ticket data with quality and freshness checks.
 - Implement retrieval, source-backed responses, and a simple user interaction.
 - Connect a ticket API or mock service and implement one explicit human-approved action.
 - Demonstrate the workflow, capture feedback, triage changes, and revise the backlog.
- Planned lab: Build a support assistant that retrieves approved guidance and prepares a ticket escalation for review.
Expected output: Working prototype, demonstration script, feedback log, and revised backlog.

6 MODULE 6 · 7 PROPOSED HOURS Engineering for reliable delivery

Strengthen the prototype and collect evidence for a pilot release decision.

- Validate APIs, input schemas, timeouts, retry limits, duplicate action prevention, and failure messages.
 - Enforce access checks in the retrieval and action paths; test unauthorised requests.
 - Create evaluation cases for answerability, source support, relevance, refusal, and tool behaviour.
 - Test prompt injection scenarios, stale documents, unavailable services, and malformed inputs.
 - Add structured logs and traces; measure response latency, model usage, and approximate cost per task.
 - Version application configuration and prompts; run a deployment check and practise rollback.
- Planned lab: Run the evaluation set, investigate failures, repair priority defects, and capture release evidence.
Expected output: Test and evaluation report, telemetry evidence, deployment steps, and known limitations.

7 MODULE 7 · 4 PROPOSED HOURS Pilot delivery and adoption

Prepare users and operators to run a bounded pilot and judge its results.

- Define pilot users, environment, duration, support route, and acceptance responsibilities.
 - Prepare user guidance, feedback collection, and a comparison with the baseline workflow.
 - Assign owners for incidents, access changes, document updates, cost monitoring, and releases.
 - Write a runbook covering service failures, rollback, recovery assumptions, and escalation.
 - Review adoption and outcomes; agree whether to improve, expand, pause, or retire the solution.
- Planned lab: Rehearse a pilot kickoff and incident scenario, then review the handover with a customer operations role.
Expected output: Pilot plan, adoption measures, operating runbook, and handover checklist.

8 MODULE 8 · 7 PROPOSED HOURS Capstone integration and stakeholder review

Bring the engagement evidence together and defend the pilot recommendation.

- Integrate the module outputs and resolve gaps against the agreed acceptance criteria.
 - Demonstrate the happy path, an unauthorised request, and a dependency failure.
 - Present the business problem, architecture decisions, evaluation evidence, and cost assumptions.
 - Explain remaining risks, limitations, ownership, and the work needed for a production release.
 - Respond to stakeholder questions and propose the next delivery stage.
- Planned lab: Deliver the integrated solution and a stakeholder presentation, followed by peer and trainer review.
Expected output: Demonstration, repository, engagement evidence pack, and next-stage recommendation.

CAPSTONE Capstone

A simulated support organisation needs approved troubleshooting guidance and consistent escalations. Retrieve permitted sources, prepare a human-approved escalation, enforce at least two user roles, and demonstrate service failure handling and repeatable deployment or rollback.

ASSESSMENT

Assessment

Problem understanding and value definition 20%; architecture and integration decisions 20%; working implementation and engineering quality 25%; evaluation and operational readiness 20%; communication and customer handover 15%. Proposed pass: 70% overall, with no unresolved critical access-control failure or unapproved state-changing action in assessed scope.

DELIVERABLES

Participant deliverables

- Discovery summary, workflow map, scope and value assumptions
- Architecture decisions, integration contract and delivery backlog
- Working prototype, source repository and setup instructions
- Test and evaluation evidence, cost assumptions and known limitations
- Pilot plan, operating runbook and stakeholder presentation

SCOPE

Scope boundaries

A single Azure implementation path and supplied scaffolding keep the course within 40 hours. Broad cloud foundations, full-stack development from scratch, model training, multiple agent frameworks, and platform administration are outside scope. Production rollout is planned and rehearsed in a lab; live enterprise deployment is not included. ****Delivery options:**** 5 learning days of 8 hours, or 10 sessions of 4 hours. Learning hours exclude breaks and include module exercises and capstone time. Setup is completed before the course.

DELIVERY

Delivery options

5 learning days of 8 hours, or 10 sessions of 4 hours. Learning hours exclude breaks and include module exercises and capstone time. Setup is completed before the course. Proposed hours exclude breaks and are subject to pilot validation.

PRIVATE DELIVERY

Plan a private cohort for your team

Scope delivery format, role mix, and rollout timeline with our solutions team.

[Plan Private Delivery](#)
[Book advisory call](#)