

MILESTONE PLANNING AND RESEARCH, INC.

AI Innovation With Trust Program Competency Methodology Guide

Release 3 Methodology for Competency-Based AI Practitioner Development

Occupations A-D

Prepared June 2026

Release 3 · Competency Standard Edition

© 2026 Milestone Planning and Research, Inc.

Purpose and Intended Audience

This guide explains how the AI Innovation With Trust Program operates as a trust-production system — an apprenticeship-based program that generates verifiable, observable, attested evidence of AI practitioner competency. In an AI talent market where employers cannot distinguish accountable practitioners from credentialed-but-unaccountable ones, the qualification card produced by this program is the primary trust instrument. It is the reference document for program sponsors, program managers, mentors, journey workers, assessors, and faculty partners. It should be read before any training relationship is established and reviewed at every level transition.

Section 1: The Core Design Decision

1.1 Learn by Producing Real Deliverables

The central design decision of this program is unchanged from Release 1: the project is not a simulation. It is the learning context, the evidence generator, and the assessment environment simultaneously.

Following the apprenticeship model, practitioners do not complete generic AI training and then apply it. They apply AI within supervised work from the first day, and their work products become the primary evidence of competency attainment. This design produces three outcomes that classroom-only programs cannot: real employer value during the program period, a portfolio of verified deliverables that travel with the practitioner after completion, and mentor observations of behavior under actual work conditions rather than controlled instructional conditions.

1.2 Why Competency-Based Progression

Competency-based progression means that advancement is tied to demonstrated attainment of defined standards, not to time elapsed. A practitioner who demonstrates L2 competency in six months advances in six months. A practitioner who requires eighteen months to demonstrate the same standards advances after eighteen months. In both cases, the evidence record shows what was demonstrated and when.

This is the time-tested model for apprenticeship without an administrative burden, and it is the right model for AI workforce development because AI competency is genuinely uneven: someone may use AI tools fluently while having never run a contradiction audit or designed a falsification test. Time-based progression conceals that unevenness. Evidence-based progression reveals it and addresses it.

Section 2: The Know→Do→Become Architecture

2.1 Three Dimensions of Competency

Every competency in the framework is specified across three dimensions. These dimensions are not sequential stages — they are simultaneous aspects of professional competency that develop together through the apprenticeship.

Dimension	Definition	Evidence	DOL Equivalent
KNOW	Conceptual understanding of the principles, concepts, and standards underlying the competency. What the practitioner can explain, analyze, and reason about.	Short written explanation, quiz, oral questioning, module reflection, or technical note demonstrating understanding.	Related Technical Instruction (RTI)
DO	Observable performance in real work contexts. What the practitioner actually produces under supervision. Observable behavior reviewed by a mentor with direct access to the work context.	Real work product, sprint deliverable, quality gate artifact, or system output reviewed by mentor with direct observation of performance.	On-the-Job Learning (OJL)

Dimension	Definition	Evidence	DOL Equivalent
BECOME	Professional identity, judgment, and disciplined practice observed over time. The behavioral habits that persist under pressure. The disposition the practitioner brings to AI work, not just the skills they can perform when prompted.	Specific behavioral attestation by a mentor or journey worker describing what was directly observed in a real work context. Must describe a specific incident, pattern, or characteristic behavior — not a general recommendation.	Journey worker Judgment

2.2 The Become Dimension

The Become dimension is the most distinctive element of this framework — and the one that most differentiates it from standard AI training programs. Most programs can assess what a practitioner knows. Some can assess what they can do in a controlled setting. Very few can assess what they consistently do under pressure, over time, with real stakes attached. This is the dimension that produces trust. A certification tells an employer what a practitioner knows. A qualification card with Become attestations tells an employer what that practitioner can be trusted to do when it matters.

The Become dimension exists precisely to assess that third thing. A valid Become attestation must:

- Describe a specific observed incident, pattern, or characteristic behavior — not a general endorsement.
- Be based on direct observation in a real work context — not assessment of a submitted document.
- Be written by the mentor or journeyworker personally — not drafted by the practitioner or AI-assisted without substantial personal revision.
- Describe a professional behavior that required judgment, not a technical task that required skill.

An invalid Become attestation sounds like: “Jane has demonstrated strong competency in AI governance.”

A valid Become attestation sounds like: “During the Q3 model review, the practitioner noticed that the monitoring dashboard showed a drop in prediction confidence two weeks before the quarterly report was due. Rather than proceeding with the scheduled run, they raised the question of regime shift with the project team, delayed the report by one week, and confirmed through walk-forward analysis that the drop reflected a genuine distributional shift. This is the fourth time I have observed this pattern: the practitioner consistently treats anomalies as signals rather than inconveniences.”

Section 3: Apprenticeship Alignment Without the Administrative Burden

3.1 DOL Requirements and Program Alignment

The program is designed to meet the key requirements of 29 CFR Part 29 — the federal regulations governing competency development programs. The key requirements and their program alignment are:

29 CFR Part 29 Requirement	How This Program Meets It
Competency-based progression	Every competency has explicit Know, Do, and Become standards with defined evidence requirements. Advancement gates at L1 through L4 require demonstrated attainment, not time alone.
Related Technical Instruction (minimum 144 hours/year)	The Know dimension of every competency specifies RTI hours. Total RTI hours across the Common Trunk and any one occupation exceed 288 hours. Detailed RTI schedule to be developed by program sponsor.
Supervised On-the-Job Learning	Every Do-dimension signoff requires direct mentor observation of performance on real work. Unreviewed AI-generated work products do not qualify as Do evidence.
Competency Records	Qualification cards provide the per-competency evidence record. Know, Do, and Become each require separate signoff by a named assessor. Records are version-controlled.

29 CFR Part 29 Requirement	How This Program Meets It
Periodic Review	Level transition gates (L1→L2→L3→L4→Journeyworker) provide structured periodic review points with evidence requirements.
Interim Credentials	L1 through L4 qualification card completion produces verifiable interim credentials aligned with the AI Associate→AI Specialist occupational progression.
Employer Participation	Employers provide paid work, mentors, journey workers, project access, data access, and supervision. Employer responsibilities are defined in the Employer Partnership Guide.

3.2 Know→Do→Become as Apprenticeship Architecture

The three dimensions of the competency framework map directly and precisely to the three core elements of traditional apprenticeship:

- **Know → Related Technical Instruction.** The RTI component of apprenticeship develops the conceptual, theoretical, and technical knowledge that gives the practitioner a framework for understanding what they are doing and why. Know standards are assessed through RTI artifacts.
- **Do → On-the-Job Learning.** The OJL component of apprenticeship develops occupational skill through supervised work performance. Do standards are assessed through real work products observed by a qualified mentor.
- **Become → Journey worker Standard.** The traditional apprenticeship concept of the journey worker — the practitioner who has developed not just skill but craft judgment, professional standards, and the values of the occupation — is exactly what the Become dimension is designed to assess. In the context of the AI labor market, the journey worker attestation is the trust signal: it converts the qualification card from a self-reported record into an independently verified, named, attested declaration that this practitioner exercises the judgment of a trusted professional. This has a direct mathematical implication: trust is proportionate to the inverse of residual risk. As verified practitioner trustworthiness increases, the residual risk of AI deployment decreases proportionally. Occupations that include risk management as an assessed competency produce a compounding return — direct risk reduction from active risk management work, and trust-channel risk reduction from the attested evidence that the judgment was verified. This is why risk management is embedded as a structured competency across all five occupational pathways, calibrated to the scope of each occupation's accountability. Become attestations are signed by a journey worker who has directly observed the professional behavior over time.

Section 4: Occupational Architecture

4.1 Common Trunk

All five occupations share a Common Trunk of fourteen competency areas (T-2.1 through T-2.14) that establish the foundational professional standards of the program. These competencies are required at all occupational levels before occupation-specific L3 and L4 competencies may be pursued. T-2.1 through T-2.9 represent the core intellectual commitments of the program: probabilistic literacy, evidence discipline, human authority, falsification, problem-finding, AI security awareness, AI-enabled innovation judgment, and AI-assisted decision quality — assessed across Know, Do, and Become. The three newest of these extend the foundation in directions essential to responsible AI practice: T-2.7 AI Security Awareness: Every practitioner, regardless of pathway, must understand the AI-specific threat landscape — prompt injection, adversarial inputs, data poisoning, model inversion, and exploitation of AI system integrations. Security awareness is not an IT function delegated elsewhere. It is a practitioner responsibility assessed at the Know, Do, and Become levels before any practitioner enters an occupational pathway. T-2.8 AI-Enabled Innovation Judgment: Distinguishes AI adoption (doing existing things faster) from AI transformation (doing things not previously possible). Requires at least one documented mentor-practitioner thinking partnership session directed at a novel AI application not yet established in the organization. The Do standard produces an innovation artifact traceable to a real organizational context. The Become attestation describes the joint reasoning of mentor and practitioner — making the thinking partnership itself an assessable event, not merely a program aspiration. T-2.9 AI-Assisted Decision Quality: Addresses the gap between AI output accuracy and AI-assisted decision quality — two things that frequently diverge. Requires practitioners to assess, before any consequential decision, whether the AI system's domain knowledge is aligned with the decision context, whether the

decision mode is appropriate for the stakes, and whether decision-makers are exercising independent judgment rather than delegating it to the AI output.

T-2.10 through T-2.14 are the Organizational Context Competencies — assessed at Know level only. They address the governance environment in which all AI work occurs: AI risk governance framework awareness (T-2.10), organizational process alignment (T-2.11), AI ownership and oversight structures (T-2.12), organizational AI policies and training requirements (T-2.13), and regulatory compliance and legal considerations (T-2.14). These competencies are Know-only because the underlying responsibilities — framework selection, policy architecture, oversight design, and compliance determination — belong to the organization, not the individual practitioner. The practitioner’s assessed role is awareness, navigation, and escalation: knowing which frameworks the organization uses, where the policies are, who owns the AI systems they work with, and when to escalate a regulatory question to the appropriate legal or compliance function. Every practitioner completes T-2.10 through T-2.14 at L1 before entering any occupational pathway. The full standards for each are published in the AI Occupational Standards Manual: Occupations A–D.

4.2 Five Occupational Pathways

Occupation	Primary Work	Unique Contribution
AI Analyst	AI-assisted analysis, decision support, workflow improvement, quality management of AI deliverables.	Establishes the verified, accountable AI user as a distinct professional role — not a secondary capability of any knowledge worker.
AI Operations and Governance Specialist	AI governance design, controls, model risk, monitoring, audit, charter management, project accountability. As the primary risk occupation, Occupation B practitioners maintain AI risk registers, manage governance lifecycle risk, and are responsible for project risk management on governance implementation programs.	Brings AI governance out of the IT function and into a dedicated professional role aligned with NIST AI RMF and 29 CFR Part 29.
AI Quality and Validation Specialist	Test design, benchmark construction, falsification engineering, IV&V, explainability assessment, assurance reporting.	Creates the AI equivalent of the quality engineer: a professional whose job is not to build AI but to ensure it performs as claimed under real conditions.
AI Developer	Designs, builds, and deploys AI systems that are reproducible, auditable, and governed from the point of development. Applies probabilistic reasoning, human-in-the-loop design, and validation discipline to production AI work.	Embeds governance and validation into the development occupation itself, rather than treating them as downstream review functions.
AI Business Process Architect	Maps current-state business processes to AI transformation opportunities; designs AI-enabled future-state processes with measurable revenue or cost impact; uses AI to build AI-enabled solutions; owns the business case from discovery through measured value realization.	Closes the loop between AI deployment and measured business value — the practitioner who can identify which processes are worth transforming, build a defensible financial case, prototype the solution, measure whether it delivered the projected value, and report that result to a CFO. Business-value realization is a signoff competency, not a course topic.

Section 5: Quality Gates

5.1 Quality Gate Design

Quality gates are simultaneously project milestones and competency verification points. Every quality gate has three components: an objective evidence requirement (what must be demonstrated), a behavioral observation requirement (what the mentor must directly observe), and a sign-off record (who verified what and when).

A quality gate is passed only when all three components are satisfied. Attendance is not attainment. A fluent document is not attainment. A completed task without evidence review is not attainment. Attainment requires defensible evidence reviewed by a named assessor who observed the work.

5.2 Relevant Certifications

The AI certification market is large and uneven. Many credentials cover AI awareness at a high level. Practitioner-oriented credentials with rigorous assessment standards, defined prerequisites, and proctored examination are far fewer. The two certifications listed below are administered by ISACA — which has set governance and audit credentialing standards for over 55 years — are examples of certifications from established organizations that are directly relevant to the occupational pathways and governance emphasis of this program. They are independent of this program; ISACA administers their own eligibility, examination, and maintenance requirements. Practitioners, mentors, and employers who want to signal demonstrated competency in AI governance and risk domains should consider these credentials in addition to the program's own qualification card framework.

AAIA™ — Advanced in AI Audit (ISACA, launched May 2025)

The AAIA validates the skills to audit AI governance frameworks, assess AI operational controls, evaluate algorithmic fairness and data integrity, ensure regulatory compliance, and apply AI tools to improve audit efficiency and accuracy. The examination is organized around three domains: AI Governance and Risk, AI Operations and Implementation, and AI Auditing Tools and Techniques. The exam tests applied judgment through scenario-based questions rather than theoretical knowledge recall — a format well aligned with the Do and Become evidence standards of this program.

Program relevance: Most directly relevant to the AI Operations and Governance Specialist and AI Quality and Validation Specialist occupations. The AAIA's emphasis on governance controls, audit evidence, and operational oversight maps closely to the B and C occupation competency chains in this program.

AAIR™ — Advanced in AI Risk (ISACA, launched April 2026)

The AAIR validates the skills to evaluate AI-related vulnerabilities, assess AI opportunities and impacts, and manage the full AI risk lifecycle across the enterprise. It is organized around three practice areas: AI Risk Governance and Framework Integration, AI Lifecycle Risk Management, and AI Risk Program Management. The credential is designed for experienced risk professionals who need to extend their existing risk management rigor into AI-specific domains — including model risk, data risk, deployment risk, and the governance failures that occur when AI systems are trusted without adequate validation.

Program relevance: Most directly relevant to the AI Operations and Governance Specialist occupation. The AAIR's risk lifecycle framework and governance integration emphasis maps closely to the B occupation competency chain and to the risk governance standards embedded in the Common Trunk.

For current eligibility requirements, examination details, and CPE maintenance requirements, visit isaca.org/credentialing/aaia and isaca.org/credentialing/aaair.

Section 6: Mentor/Coach and Journey Worker Roles

6.1 The Mentor/Coach Role

Mentors observe how practitioners work — not merely what they submit. The most important mentor behaviors are:

- Ask evidence-based questions: What did you check? What assumption did you document? What would have changed your conclusion?
- Observe the work in context, not just review the artifact after completion.
- Write Become attestations that describe specific incidents rather than general competency endorsements.
- Refuse to sign off on Do competencies from documentation review alone when direct observation was not performed.

6.2 The Journey Worker Role

Journey workers are responsible for L3 and L4 signoffs requiring statistical understanding and for the Journey worker completion review. A journey worker should have demonstrated competency at the journey worker level in the relevant occupation and should be able to assess whether an AI practitioner has developed the professional judgment characteristic of that occupation — not just the technical skills.

A journey worker panel review for completion should assess: Does this practitioner approach AI work with the right professional dispositions? Would I trust their governance judgment on a production AI system? Do they know when to stop, when to escalate, and when to say the evidence is insufficient?

Section 7: Employer and College Operating Model

7.1 Employer Responsibilities

Employers who participate in the program commit to: providing paid work on real projects, naming a program sponsor, assigning qualified mentor/coaches and journey workers, providing appropriate data and systems access, participating in quality gate reviews, reviewing and signing qualification cards, and supporting the practitioner's time for related technical instruction.

7.2 College and University Responsibilities

Academic partners commit to: providing related technical instruction aligned with the competency Know standards, assigning faculty advisors who understand the program architecture, coordinating with employer mentors on capstone and internship alignment, and supporting credit articulation for program completion where appropriate.

7.3 Three-Way Integration

The program is strongest when the same project provides employer business value, academic capstone or internship credit, and program evidence simultaneously. The program manager and faculty advisor should design each program placement to optimize for this three-way alignment from the start.