

AUTO DIGITID AFRICA

CERTIFICATION FRAMEWORK

2026 · APPROVED REVISED EDITION

From deployment competence to enterprise delivery leadership

POSITIONING Online certification builds employable practitioners and implementation leaders.
University develops architects, strategists, researchers and innovation leaders.

LEVEL 1 PROFESSIONAL Deploy & support	LEVEL 2 SPECIALIST Integrate & validate	LEVEL 3 EXPERT Lead delivery & assure
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Approved 29 July 2026 · Standards-led · Vendor-neutral · Africa-ready

01 / APPROVED FRAMEWORK

The approved three-level career system

This edition replaces the earlier Operator, Integrator and Architect promise with a deliberately protected progression: deployment, integration, then enterprise delivery and assurance. It keeps the online pathway commercially strong without presenting it as a substitute for University or TVET study.

APPROVED DECISION Retain Professional, Specialist and Expert. Reposition Expert from architecture and strategy creation to enterprise delivery and assurance.

Why this structure is stronger

- Each level is a complete employability destination and a clear step toward the next.
- Current standards and technology shifts are assessed explicitly, not left as optional notes.
- Security, data quality, observability and lifecycle practice run through all three levels.
- Expert remains a premium senior credential while University retains architecture, research, policy and original design.
- TVET retains equipment-rich workshop, maintenance and workplace-assessment value.

Approved certification signals

LEVEL	CERTIFICATION SIGNAL	PRIMARY VERB
Professional	I can deploy and support AIDC environments reliably.	DEPLOY
Specialist	I can connect AIDC technologies to secure, observable enterprise workflows.	INTEGRATE
Expert	I can lead and assure complex AIDC implementations in production.	ASSURE
University / BTech	I can research, model, design, justify and defend original AIDC architectures and transformation strategies.	DESIGN

Framework map

LEVEL	ROLE FAMILY	BOUNDARY	DURATION
L1 · Professional	Operator / Technician	Deploy, commission and support within an approved design	3–4 months
L2 · Specialist	Integrator / Systems Builder	Integrate devices and data into approved enterprise workflows	5–6 months
L3 · Expert	Enterprise Delivery & Assurance Lead	Lead and assure complex implementation against approved intent	6–9 months

02 / STANDARDS AND TECHNOLOGY CURRENCY

What modern AIDC competence must now include

The revised framework is organised around mature, consequential developments that affect real deployments. The annual curriculum board must review the watchlist in Section 12 and update labs, examples and assessments without changing award boundaries casually.

DEVELOPMENT	ASSESSED COVERAGE	PLACEMENT
2D barcode migration	GS1 Ambition 2027; DataMatrix/QR; Application Identifiers; scanner and backend readiness	Professional + Specialist
Physical-to-digital links	GS1 Digital Link syntax, redirection/resolver patterns and content lifecycle	Professional awareness; Specialist implementation
Traceability events	EPCIS 2.0.1 / CBV 2.0, JSON/JSON-LD, REST capture/query, sensors and certifications	Specialist core; Expert assurance
RAIN RFID	Gen2v3-era deployment, conformance, privacy and security awareness	Professional + Specialist
Digital Product Passports	Identifiers, carriers, exchange, persistence, APIs and interoperability	Specialist implementation; Expert assurance
Digital identity	Identity proofing, authentication, federation, wallets and verifiable credentials	All levels by role depth
Biometrics	Presentation-attack detection and evidence interpretation	Professional awareness; Expert assurance
RTLS and ranging	RFID, BLE Channel Sounding, UWB, GNSS and hybrid-location selection	Specialist core
Industrial connectivity	Private/industrial connectivity and 5G-Advanced awareness	Specialist elective
AI operations	Testing, monitoring, drift, human oversight and accountable change	Expert core; University design/research

03 / CERTIFIED AIDC PROFESSIONAL — DEPLOYMENT & SUPPORT

Certified AIDC Professional — Deployment & Support

OPERATOR / TECHNICIAN · “From Box to Reliable Operation”

KEY FACT	APPROVED DEFINITION
Primary outcome	Deploy, commission, support and troubleshoot within an approved design.
Recommended duration	120–160 guided hours over 3–4 months.
Entry	No prior AIDC experience; basic digital literacy.
Primary audience	Students, entry technicians, field support, presales/postsales support and junior analysts.
Portfolio evidence	Configured environment, commissioning record, troubleshooting evidence and support handover pack.
Boundary	Does not design enterprise architecture or own integration strategy.
Approved topic map	P1–P8; six assessed topics per module; approved 30 July 2026.

Core modules

COD E	MODULE	CORE COMPETENCE AND EVIDENCE
P1	AIDC Foundations & Physical-to-Digital Data Flow	Select appropriate capture technologies; map identification, capture, validation, transmission and system-of-record flow. Approved topic sequence — 30 July 2026 • P1-L01 — Why AIDC Exists • P1-L02 — What Are We Identifying • P1-L03 — Capture Technologies and Fit • P1-L04 — Physical-to-Digital Pipeline • P1-L05 — Controls, Exceptions and Trustworthy Data • P1-L06 — Transmission, Edge, Offline and System of Record
P2	GS1 Identifiers, 1D/2D Barcodes & Digital Link Readiness	Encode, scan, parse and validate identifiers, AIs, batch, serial and expiry data; prepare for dual-marking and 2D migration. Approved topic sequence — 30 July 2026 • P2-L01 — Identification Systems and Why GS1 Exists • P2-L02 — Core GS1 Identifiers (GTIN, GLN, SSCC, GIAI) • P2-L03 — Application Identifiers and Structured Data • P2-L04 — Barcode Symbolologies • P2-L05 — The 2D Transition and Scanner/Software Readiness • P2-L06 — GS1 Digital Link and Safe Redirection
P3	Barcode Printing, Verification & Quality Control	Produce and diagnose labels; distinguish scanning from verification; document corrective action. Approved topic sequence — 30 July 2026 • P3-L01 — Barcode Print Systems, Printer Languages and Production Control

COD E	MODULE	CORE COMPETENCE AND EVIDENCE
		• P3-L02 — Media, Ribbons, Adhesives and Environmental Fit • P3-L03 — Label Design, Quiet Zones, Sizing, Contrast and Placement • P3-L04 — Barcode Verification, Grades and Evidence • P3-L05 — Defect Diagnosis, Sampling and Corrective Action • P3-L06 — Healthcare, Regulated Labels and Practical Quality Lab
P4	RFID, OCR, Biometrics, Machine Vision & Sensor Essentials	Complete practical RFID and identity/vision pathways with tag/inlay, encoding, Gen2v3, Gen2X awareness, PLC/GPIO, cards, PAD, IoT and RTLS evidence. Approved topic sequence — 30 July 2026 • P4-L01 — RFID Foundations, Frequency Bands, Tags and Inlays • P4-L02 — RFID Readers, Antennas, Zones, Encoding and Site Survey • P4-L03 — EPC Gen2v3, Gen2X Awareness, Memory, Privacy and Security • P4-L04 — OCR, Industrial Machine Vision, Fixed Scanners, PLC and GPIO • P4-L05 — Biometric Modalities, PAD, Cards, Security and Privacy • P4-L06 — IoT Sensors, RTLS, Location Evidence and Technology Selection
P5	Devices, Power, Accessories, Safety & Environmental Fit	Complete site-readiness, bill-of-material, environmental, power, ergonomics, safety, commissioning and preventive-maintenance checks. Approved topic sequence — 30 July 2026 • P5-L01 — Device Classes, Roles and Selection • P5-L02 — Power, Batteries, Charging and Spares • P5-L03 — Accessories, Mounting, Ergonomics and Safety • P5-L04 — Environmental Fit: IP, ESD and Operating Limits • P5-L05 — Site Survey, Bill of Material and Deployment Readiness • P5-L06 — Device Commissioning and Preventive Maintenance
P6	Connectivity, Edge & Offline-First Operations	Configure device-to-edge connectivity, Wi-Fi mobility and operational voice; recover safely from outages and reconcile offline data. Approved topic sequence — 30 July 2026 • P6-L01 — Network Foundations: IP, DNS, DHCP, Time and Ports • P6-L02 — Wi-Fi Mobility, Roaming, QoS and Device Visibility Metrics • P6-L03 — Bluetooth Pairing, PAN and Peripheral Reliability • P6-L04 — Cellular, Private-Network Awareness and Edge Gateways • P6-L05 — Push-to-Talk Architecture and VoIP • P6-L06 — Offline-First Store-and-Forward, Retry and Reconciliation
P7	Device Software, Security Baselines & Fleet Lifecycle	Apply and document firmware, DataWedge-class capture profiles, printer languages, credentials, certificates, patching, MDM/EMM, visibility and decommissioning controls. Approved topic sequence — 30 July 2026 • P7-L01 — Firmware, Drivers, SDKs, Utilities and Compatibility • P7-L02 — DataWedge Profiles, Intents and Capture Workflows • P7-L03 — Printer Languages, Templates and Configuration Automation • P7-L04 — Security Baselines, Device Identity, Certificates and Secure Onboarding • P7-L05 — MDM/EMM Device Management and Application Lifecycle • P7-L06 — Fleet Inventory, Visibility, Metrics, Remote Support and Decommissioning
P8	Troubleshooting, Observability, Commissioning & Support Capstone	Deploy, secure, commission, observe, troubleshoot and hand over a small AIDC environment through a defended professional capstone.

COD E	MODULE	CORE COMPETENCE AND EVIDENCE
		Approved topic sequence — 30 July 2026 • P8-L01 — Structured Troubleshooting and Fault Domains • P8-L02 — Logs, Telemetry, Health Checks and Device Visibility • P8-L03 — Incident Classification, Escalation and Root Cause • P8-L04 — Commissioning, Acceptance Tests and As-Built Records • P8-L05 — Preventive Maintenance, SLA Support and Handover • P8-L06 — Professional Deployment and Support Capstone

Capability boundary

- Configure, secure and bring approved devices online.
- Verify data-carrier quality and capture accuracy.
- Apply connectivity, offline and edge operating procedures.
- Diagnose field issues across media/tag, device, network and application boundaries.
- Commission, document, maintain and decommission device fleets.

Assessment model

COMPONENT	WEIGHT	EVIDENCE
Configuration and commissioning labs	40%	Working setup, baseline, acceptance record
Troubleshooting simulation	30%	Structured fault isolation and recovery
Professional capstone and handover pack	20%	Deployed environment and documentation
Knowledge checks	10%	Standards, safety, security and data quality

MANDATORY GATES Safety, security and data quality must each be passed. Strong performance elsewhere cannot compensate for a failed gate.

Delivery requirements

- Mandatory hands-on access to barcode and mobile data-capture equipment.
- One assessed practical pathway in RFID or identity and machine vision.
- An offline or edge interruption scenario with safe recovery and reconciliation.
- Site-ready commissioning, acceptance and support records.
- Direct assessor observation of recovery from an injected fault.

GRADUATE OUTPUT A technician-ready portfolio showing that the learner can deploy, support and recover a small AIDC environment safely.

04 / CERTIFIED AIDC SPECIALIST — INTEGRATION & TRACEABILITY

Certified AIDC Specialist — Integration & Traceability

INTEGRATOR / SYSTEMS BUILDER · “From Deployment to Observable Integration”

KEY FACT	APPROVED DEFINITION
Primary outcome	Integrate AIDC devices and data into secure, observable enterprise workflows.
Recommended duration	180–240 guided hours over 5–6 months.
Entry	Professional award or verified equivalent deployment competence.
Primary audience	Solution engineers, systems analysts, automation engineers and mid-career upskillers.
Portfolio evidence	Working integration, API/event artefacts, tests, observability and stakeholder documentation.
Boundary	Does not act as accountable enterprise design authority.

Core modules

COD E	MODULE	CORE COMPETENCE AND EVIDENCE
S1	Process Discovery, Personas & Requirements	Produce current/future-state maps, exception paths, non-functional requirements and acceptance criteria.
S2	Enterprise Systems & Canonical Data Modelling	Map ERP/WMS/TMS/POS/EMR/MES records, GS1 master data, lineage, schemas and quality controls.
S3	Secure APIs, Webhooks & Data Contracts	Build and validate REST/asynchronous interfaces with schemas, versioning, auth, rate limits and error contracts.
S4	Event-Driven Integration & Messaging	Implement queues, MQTT/AMQP concepts, ordering, deduplication, idempotency, retries, dead letters and replay.
S5	GS1 Digital Link, EPCIS 2.0.1 / CBV 2.0 & Traceability Events	Create and query valid events; use Digital Link, JSON/JSON-LD, sensors and certification data.
S6	Edge/Cloud Integration & Offline Synchronisation	Implement store-and-forward, conflict resolution, eventual consistency, secure update and rollback.
S7	RTLS, Sensors & Location Integration	Select and integrate RFID, BLE ranging, UWB, GNSS or hybrid location by accuracy, latency, battery, risk and cost.
S8	Industry Integration Pattern Studio	Apply one concentration across logistics, retail, healthcare, manufacturing or public-sector identity.
S9	Digital Product Passport Implementation	Implement DPP identifiers, data carriers, lifecycle APIs, access, persistence, privacy and interoperability.
S11	Integration Testing, Observability, Reliability & Capstone	Deliver a working, observable integration with contract, failure, recovery and support evidence.

Capability boundary

- Map end-to-end processes and identify integration points and exception paths.

- Connect AIDC devices to enterprise systems through secure interfaces and event flows.
- Implement standards-based traceability, location and product-passport patterns.
- Design test evidence, observability, retries, reconciliation and recovery.
- Translate stakeholder requirements into implementation specifications.

Assessment model

COMPONENT	WEIGHT	EVIDENCE
Working integration and artefacts	45%	Working code/configuration and demo
Data, API and event model	20%	Schemas, contracts, traceability events
Testing, observability and recovery	20%	Failure evidence, dashboards/logs and runbooks
Requirements and stakeholder brief	15%	Process, constraints, acceptance criteria

Mandatory evidence

- A working integration at the learner's own keyboard, not screenshots alone.
- Versioned schemas, API or event contracts and representative test data.
- Failure injection covering retries, duplicate events, outages or reconciliation.
- Observable evidence through logs, metrics, traces or operational dashboards.
- A concise stakeholder brief defining constraints, acceptance and support ownership.

GRADUATE OUTPUT An implementation portfolio proving that the learner can make devices, data and enterprise workflows work together reliably.

05 / CERTIFIED AIDC EXPERT — ENTERPRISE DELIVERY & ASSURANCE

Certified AIDC Expert — Enterprise Delivery & Assurance

IMPLEMENTATION LEAD / PLATFORM OWNER / DELIVERY ASSURANCE LEAD · “From Integration to Production Assurance”

KEY FACT	APPROVED DEFINITION
Primary outcome	Lead and assure complex implementations against approved business and architectural intent.
Recommended duration	220–300 guided hours over 6–9 months.
Entry	Specialist award plus verified integration experience.
Primary audience	Senior integrators, implementation leads, platform owners, technical delivery managers and delivery consultants.
Portfolio evidence	Delivery portfolio, security/resilience exercise and defended production-readiness capstone.
Protected boundary	Interprets and challenges architecture; does not replace the accountable architect, researcher or strategist.

Core modules

COD E	MODULE	CORE COMPETENCE AND EVIDENCE
E1	Blueprint Interpretation & Delivery Planning	Read approved solution views; identify constraints, dependencies, delivery risks, environments and acceptance strategy.
E2	Secure-by-Default Enterprise AIDC Rollouts	Operationalise device/service identity, secrets, certificates, least privilege, segmentation and supply-chain security.
E3	Resilience, Capacity, Performance & High Availability	Produce workload, sizing, availability, failover, back-pressure and graceful-degradation evidence.
E4	Multi-Site Cutover, Migration & Change Enablement	Lead pilots, rollout waves, data migration, coexistence, rollback, training, hypercare and go/no-go decisions.
E5	Platform Operations, SRE, Observability & Incident Management	Define service indicators, alerts, runbooks, on-call readiness, incident/problem practice and reliability improvement.
E6	Edge AI & Machine-Vision Deployment Assurance	Validate approved models, representativeness, TEVV evidence, drift, false results, human oversight and rollback.
E7	Operational Data Governance, Privacy & Compliance Evidence	Operationalise ownership, lineage, retention, access, DPP, digital-identity and biometric/PAD evidence.
E8	Vendors, SLAs, TCO & Service Transition	Evaluate proof of capability, contracts, warranties, licences, service measures, TCO and knowledge transfer.
E9	Business Continuity, Disaster Recovery & Lifecycle Sustainability	Demonstrate recovery objectives, spares, restoration, obsolescence, secure decommissioning and circularity.
E10	Defended Enterprise Delivery Assurance Capstone	Implement and assure a solution slice against a supplied reference architecture; defend production readiness.

Capability boundary

- Interpret and challenge approved reference architecture for implementability.
- Lead pilots, migrations, cutovers, service transition and multi-site rollout.
- Assure security, performance, reliability, data quality and support readiness.
- Operationalise approved governance and AI controls with auditable evidence.
- Manage vendors, acceptance, operational TCO and continuous improvement.

What Expert does not certify

- Original enterprise architecture as the accountable design authority.
- Academic research equivalence or an academic capstone.
- Public policy or enterprise AI-governance strategy formulation.
- Original AI, machine-vision or positioning algorithm design.
- Automatic qualification for architect, strategist or research roles.

Assessment model

COMPONENT	WEIGHT	EVIDENCE
Delivery and assurance portfolio	25%	Plans, controls, evidence and service transition
Security, resilience and recovery exercise	25%	Demonstrated control and recovery evidence
Defended enterprise delivery capstone	50%	Implementation, cutover, readiness and panel defence

CAPSTONE RULE The Expert capstone uses a supplied reference architecture and validates delivery leadership. It is separate from the BTech's original architecture and research capstone.

Assurance evidence required

- A traceable delivery plan connecting requirements, controls, tests and acceptance.
- Security, resilience, capacity and recovery evidence from realistic scenarios.
- Cutover, rollback, service-transition and operational-readiness artefacts.
- A panel defence that distinguishes implementation decisions from accountable architecture decisions.

06 / INDUSTRY CONCENTRATION BADGES

Vertical depth without creating a fourth level

Industry badges add sector fluency to the horizontal Professional–Specialist–Expert ladder. They do not create Level 4 and must never weaken the role boundary of the holder’s main certification.

CONCENTRATION	EXAMPLE EMPHASIS
Logistics & 3PL	Warehousing, transport, EPCIS events, cold chain and RTLS
Healthcare	Patient/product identity, GS1 DataMatrix, UDI, privacy and safety
Retail & Omnichannel	2D POS migration, Digital Link, inventory and consumer information
Manufacturing	MES, work-in-progress, RFID, vision, sensors and industrial connectivity
Public Sector & Identity	Proofing, credentials, biometrics, PAD, privacy and service delivery
Banking & Financial Services	Identity, authentication, fraud evidence and secure workflows
Energy & Utilities	Asset identity, field service, rugged operations and lifecycle evidence
Courier, Express & Postal	Parcel identity, events, sortation, delivery and exception handling

Badge rules

- Available after Specialist; Expert holders complete an assurance-level extension where applicable.
- Requires an industry case or project, sector assessment and assessor sign-off.
- Assessed against current regulation, workflow, stakeholder and data requirements.
- Reviewed or renewed every two years, or earlier after material regulatory change.

07 / CAPABILITY BOUNDARIES

One ladder, four distinct professional ceilings

DIMENSION	PROFESSIONAL	SPECIALIST	EXPERT	UNIVERSITY / BTECH
Primary verb	DEPLOY	INTEGRATE	ASSURE	DESIGN
Scope	Devices/endpoints	Systems/workflows	Enterprise delivery	Enterprise architecture/society
Owns	Configuration and support	Working data flow	Production readiness	Original architecture and strategy
AI	Operate safely	Integrate approved model	Validate/monitor deployment	Design/evaluate models and algorithms
Security	Apply baseline	Secure interfaces/events	Assure controls/evidence	Design trust/security architecture
Decisions	How to make it work	How to make systems talk	How to deliver it safely at scale	What should be designed and why
Capstone	Deployment	Integration	Delivery assurance	Original research/architecture
Hiring signal	Technician	Solution/integration engineer	Implementation/delivery lead	Architect/strategist/researcher

READER SHORTCUT The online ladder ends at expert practitioner and delivery leadership. The degree advances the learner into accountable architecture, strategy, research and innovation.

Capabilities, evidence and defensible awards

No award may be earned through multiple-choice testing alone. Every level requires authentic work, evidence, documentation and demonstrated recovery from failure—not only a happy-path demo.

TIER	ASSESSMENT CENTRE	NON-COMPENSABLE REQUIREMENTS
Professional	Commissioning, troubleshooting and support evidence	Safety, security and data quality gates
Specialist	Working, observable integration with event/API/test artefacts	Demonstrable integration and recovery
Expert	Defended delivery-assurance capstone against supplied architecture	Security/resilience exercise and panel defence

Assessment governance

- Publish rubrics and evidence requirements before delivery.
- Use version-controlled scenarios, reference environments and assessor guides.
- Separate teaching support from final moderation where practical.
- Moderate capstones using mixed academic and industry panels without conflating certification and degree outcomes.
- Retain sufficient evidence for audit, appeal, verification and credential renewal.
- Issue secure, verifiable digital credentials with transparent level and capability metadata.

09 / CAREER AND ROLE MAP

What graduates are hired to do

AWARD / PATH	REPRESENTATIVE ROLES
Professional	AIDC Technician; Device Configuration Specialist; Support Engineer; Field Service Technician; Junior Systems Analyst; Pre/Post-sales Support
Specialist	AIDC Solution Engineer; Integration Engineer; Workflow Automation Analyst; IoT Systems Engineer; Warehouse Systems Analyst; RFID/RTLS Implementation Specialist
Expert	Enterprise AIDC Implementation Lead; Technical Delivery Manager; AIDC Platform Owner; Deployment Assurance Lead; Senior Integration Consultant; Service Transition Lead
University / BTech progression	Solutions Architect; Enterprise Systems Architect; AI/Automation Consultant; Digital Transformation Strategist; Researcher; Policy/Innovation Lead

MARKET PROMISE Certification proves role competence and production evidence. The degree expands the learner’s professional ceiling through theory, research, architecture and strategic design.

10 / COMMERCIAL MODEL

Three buyer segments without academic substitution

TIER	PRIMARY MARKET	BAND	DELIVERY EXAMPLES
Professional	Students; entry technicians; field/support teams	Low–Mid	Self-paced plus labs; cohorts; TVET/university-bundled practical credential
Specialist	Working professionals; solution engineers; integration teams	Mid	Instructor-led cohorts; project bootcamps; corporate bundles
Expert	Senior integrators; delivery leads; platform teams; public programmes	High	Enterprise cohorts; implementation assurance programmes; government delivery capability

Sustainable revenue layers

- Corporate enrolment bundles and role-based team pathways.
- Practical lab access, assessment, moderation and credential-verification services.
- Industry concentration badges on a two-year cycle, and three-year certification renewals.
- Academic licensing with clear separation between certification and academic credit.
- Government and donor workforce programmes focused on deployable national capacity.
- Alumni practitioner, assessor and implementation partner networks—without using Expert as an architect substitute.

11 / UNIVERSITY AND TVET ARTICULATION

Certification should create demand for deeper study

The articulation model must reward practical competence while protecting academic depth. Certification can reduce duplication in selected laboratories or electives through formal recognition of prior learning; it must not remove mathematics, computing, research, architecture, governance or the academic capstone.

ACADEMIC STAGE	RECOMMENDED CERTIFICATION RELATIONSHIP	PROTECTED ACADEMIC VALUE
BTech Years 1–2	Professional may be taken in parallel or recognised as practical evidence	Mathematics, programming, systems foundations, technical writing
BTech Year 3	Specialist may be taken in parallel or after verified integration work	Integration architecture, modelling, sector design and research methods
BTech Year 4	Expert is separate and may require additional field evidence; no automatic dual award	All/model design, governance/policy, strategy, original research and defended capstone
TVET	Professional/Specialist may complement trade pathways and workplace evidence	Workshop hours, equipment practice, maintenance, safety and employer assessment

Recognition of prior learning rules

- RPL decisions belong to the accredited institution, not the certification provider alone.
- Certification may support exemption from selected practical laboratories or electives where outcomes and evidence match.
- No exemption from academic research, architecture, mathematics, programming or the original degree capstone.
- Certificate-first entrants may require bridges in academic writing, mathematics, programming, research methods and systems modelling.
- The Expert delivery capstone and the BTech research/design capstone always use different briefs and decision rights.

12 / CURRICULUM GOVERNANCE AND CURRENCY

Keep the framework current without chasing every trend

A standing curriculum board should review standards, regulations, employer evidence and assessment performance annually. Major award-boundary changes require academic and industry approval; routine lab and version updates can follow controlled change management.

LIVING CURRICULUM Coursework will evolve as technology trends, standards and industry requirements change. The framework is deliberately flexible so examples, tools, laboratories and assessments can be updated through controlled curriculum governance while the purpose and capability boundary of each certification remain clear.

WATCHLIST	REVIEW QUESTION
GS1 2D migration and Digital Link	Do scanners, software, data and labs reflect current transition milestones?
EPCIS/CBV and RFID standards	Are examples, schemas, conformance and event practices on current ratified versions?
DPP rules and standards	Have product-specific obligations, APIs and interoperability requirements changed?
Digital identity and biometrics	Are proofing, wallets, passkeys, PAD, privacy and fraud controls current?
Location and industrial connectivity	Have BLE/UWB/private-network capabilities changed selection or testing practice?
AI and machine vision	Do TEVV, monitoring, human oversight, impact and governance controls match current guidance?
Sector regulation	Have healthcare, food, pharmaceutical, public identity or safety obligations changed?

Change-control principles

- Record curriculum version, effective date, owner and rationale.
- Map every change to outcomes, learning hours, assessment and educator enablement.
- Pilot material changes before high-stakes assessment use.
- Retire obsolete vendor/version details without removing enduring principles.
- Publish transition arrangements for learners already enrolled.

From practitioner to implementation leader—and onward to architect

APPROVED MARKET LINE Master the deployment, integration and production assurance of the AIDC + AI systems powering modern operations.

Universities adopt the framework because it supplies credible practical milestones without replacing the degree. Corporates adopt it because it creates deployable capability and production evidence. Governments adopt it because it develops implementation capacity. Individuals adopt it because every level improves employability while leaving a visible next professional ceiling.

What changed in this approved edition

- Professional expanded from six broad modules to eight assessed deployment competencies.
- Specialist expanded to secure APIs, event messaging, EPCIS, Digital Link, RTLS, DPP, testing and observability.
- Expert repositioned from Architect/Consultant to Enterprise Delivery & Assurance.
- Expert and BTech capstones separated by purpose, evidence and decision rights.
- Architecture, strategy, policy, original AI design and academic research protected for University.
- Security, data quality, lifecycle management and observability embedded across the full ladder.

Primary standards and guidance

- GS1 — 2D Barcodes at Retail Point-of-Sale Implementation Guideline.
- GS1 — EPCIS/CBV 2.0 and EPCIS 2.0.1 archive.
- GS1 — EPC UHF Gen2 Air Interface Protocol, version 3.0.1.
- European Union — Regulation (EU) 2024/1781 and Implementing Decision (EU) 2026/1736 on DPP standards.
- NIST — SP 800-63-4 Digital Identity Guidelines; Cybersecurity Framework 2.0; SP 800-207 Zero Trust Architecture; AI Risk Management Framework.
- W3C — Verifiable Credentials Data Model 2.0.
- ISO — ISO/IEC 30107-3:2023 biometric PAD testing; ISO/IEC 42001:2023 AI management systems.
- Bluetooth SIG — Bluetooth Core 6.0 Channel Sounding; 3GPP — Release 18.

AUTO DIGITID AFRICA

Professional | Specialist | Expert | University / BTech progression

Release Alignment Addendum — 2 August 2026

This addendum reconciles the approved certification boundaries with the released topic inventory. It does not expand the University/BTech design and research boundary.

Certified AIDC Professional

Module	Status	Topics	Release rule
P0 — AIDC Technology Primer (Foundational)	Core and examinable	6	Controlled release
P1 — AIDC Foundations and Physical-to-Digital Data Flow	Core and examinable	6	Controlled release
P2 — GS1 Identifiers, 1D-2D Barcodes and Digital Link Readiness	Core and examinable	6	Controlled release
P3 — Barcode Printing, Verification and Quality Control	Core and examinable	6	Controlled release
P4 — RFID, OCR, Biometrics, Machine Vision and Sensor Essentials	Core and examinable	6	Controlled release
P5 — Devices, Power, Accessories, Safety and Environmental Fit	Core and examinable	7	Controlled release
P6 — Connectivity, Edge and Offline-First Operations	Core and examinable	9	Controlled release
P7 — Device Software, Security Baselines and Fleet Lifecycle	Core and examinable	7	Controlled release
P8 — Troubleshooting and Support Capstone	Core and examinable	6	Controlled release
P9 — AI in AIDC (Introduction, Supplementary)	Supplementary, optional, non-exam	9	Living enrichment release

Certified AIDC Specialist

Module	Status	Topics	Release rule
S01 — Process Discovery, Personas and Requirements	Core and examinable	6	Controlled release
S03 — Enterprise	Core and examinable	6	Controlled release

Systems and Canonical Data Modelling			
S04 — Secure APIs, Webhooks and Data Contracts	Core and examinable	6	Controlled release
S05 — Event-Driven Integration and Messaging	Core and examinable	6	Controlled release
S06 — GS1 Digital Link, EPCIS 2.0.1, CBV 2.0 and Traceability Events	Core and examinable	6	Controlled release
S07 — Edge-Cloud Integration and Offline Synchronisation	Core and examinable	7	Controlled release
S08 — RTLS, Sensors and Location Integration	Core and examinable	6	Controlled release
S09 — Industry Integration Pattern Studio	Core and examinable	7	Controlled release
S10 — Digital Product Passport Implementation	Core and examinable	6	Controlled release
S11 — Integration Testing, Observability, Reliability and Capstone	Core and examinable	6	Controlled release
S12 — Integrating AI into AIDC Workflows (Supplementary)	Supplementary, optional, non-exam	8	Living enrichment release
S13 — Integrating Mission-Critical Communications (Supplementary)	Supplementary, optional, non-exam	6	Living enrichment release
S02 — AIDC Device Integration Basics (Integration 101, Supplementary)	Supplementary, optional, non-exam	6	Living enrichment release

Certified AIDC Expert

Module	Status	Topics	Release rule
E01 — Blueprint Interpretation and Delivery Planning	Core and examinable	6	Controlled release
E02 — Secure-by-	Core and examinable	7	Controlled release

Default Enterprise AIDC Rollouts			
E03 — Resilience, Capacity, Performance and High Availability	Core and examinable	7	Controlled release
E04 — Multi-Site Cutover, Migration and Change Enablement	Core and examinable	6	Controlled release
E05 — Platform Operations, SRE, Observability and Incident Management	Core and examinable	6	Controlled release
E06 — Edge AI and Machine-Vision Deployment Assurance	Core and examinable	7	Controlled release
E07 — Operational Data Governance, Privacy and Compliance Evidence	Core and examinable	7	Controlled release
E08 — Vendors, SLAs, TCO and Service Transition	Core and examinable	7	Controlled release
E09 — Business Continuity, Disaster Recovery and Lifecycle Sustainability	Core and examinable	6	Controlled release
E10 — Defended Enterprise Delivery Assurance Capstone	Core and examinable	6	Controlled release
E11 — Governing AI in AIDC (Supplementary)	Supplementary, optional, non-exam	8	Living enrichment release
E12 — Governing Mission-Critical Communications (Supplementary)	Supplementary, optional, non-exam	6	Living enrichment release

Standards naming correction

The Specialist traceability module uses the precise naming EPCIS 2.0.1 and Core Business Vocabulary (CBV) 2.0. Future maintenance releases are governed by the topic source registers and living-curriculum policy.

Living curriculum statement

Coursework will change as standards, technology, regulation, industry practice and employer requirements change. Every change is versioned and passed through the published release gates before learner use.