

SPECIAL SESSION

The Future of NDT Qualification: Mastering Competency Over Time

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OBJECTIVE AND TOPICS: Current NDT personnel qualification schemes, including ISO 9712, SNT-TC-1A, and NAS 410, rely heavily on "time-in-seat" metrics, training hours and experience duration, as proxies for proficiency. However, the rapid evolution of NDE 4.0 and digital technologies demands a more rigorous and verifiable method of assessing technician skills. This special presentation examines the industry's transition from time-based models to competency-based education and training, a necessary shift.

We will explore the structural flaws of legacy time-based systems and outline a new framework focused on demonstrated mastery. Key topics include the development of granular competency frameworks, the shift toward performance-based assessments and simulation, and the introduction of micro-credentials and digital badges. Attendees will review a proposed 36-month implementation roadmap, spanning from pilot programs to full-scale implementation, designed to reduce defect escape rates, accelerate time-to-competency, and provide employers with reliable, transportable evidence of NDT expertise.

Areas of interest include, but are not limited to:

- Compare & Contrast: Understand the critical differences between time-based (SNT-TC-1A/ISO 9712) and competency-based models.
- The Framework: Learn the four pillars of the new system: Competency Frameworks, Assessment Strategies, Learning Pathways, and Recognition (Badging).
- The Roadmap: Review a staged, 3-year implementation plan, addressing change management, risk mitigation, and the elimination of "grandfathering" in favor of verifiable skills.

All the instructions for paper submission are included in the conference website: <https://www.ecndt2026.org>