

# National Commission for Certifying Agencies Guidance Document: Use of Artificial Intelligence in Certification Programs

PUBLIC COMMENT DRAFT Released December 9, 2024



# NCCA Guidance: Use of Artificial Intelligence in Certification Programs

This document provides general guidance on integrating Artificial Intelligence (AI) into certification program processes while ensuring compliance with NCCA Standards. For the purposes of this document, AI refers to data-processing systems capable of performing tasks typically associated with human intelligence, such as reasoning, learning, and self-improvement. While AI can enhance efficiency and support decision-making, a central tenet is that AI systems are not qualified human personnel (See Standard 5 below) and cannot replace them in any core certification or test-development decisions. Any work performed by AI to support these processes must be supervised and validated by qualified individuals to ensure integrity and accountability. In addition to adhering to the Guidance Document, AI must be used at all times in accordance with all applicable laws.

Accredited programs must comply with the provisions outlined in this document to maintain their standing under the NCCA Standards. Programs utilizing AI technologies are expected to ensure transparency in decision-making processes, mitigate potential biases, and uphold the validity of high-stakes assessments

The following considerations are related to specific NCCA Standards. Programs are responsible for describing and demonstrating compliance with the Essential Elements of the Standards regarding their use of AI in certification activities. Note that this list is not exhaustive, and accredited programs that use AI in other respects remain responsible for ensuring continued compliance with all Essential Elements.

## **Standard 2: Governance and Autonomy**

All systems cannot serve in the same capacity as qualified humans in the governance of certification programs. This includes decision-making responsibilities related to policymaking and approvals.

The influence of AI on **essential certification decisions** must be carefully evaluated. Essential certification decisions include eligibility standards, certification and recertification requirements, disciplinary determinations, examination development, administration, and scoring, as well as the selection of Subject Matter Experts (SMEs). (See Standard 2, Commentary 2)

Decisions **not considered essential** include those related to employee selection, office location, marketing efforts, and final budget or contract approvals, provided sufficient resources are allocated for the certification program and autonomy in essential certification decisions is maintained. (See Standard 2, Commentary 3).



## Standard 3: Education, Training, and Certification

A clear separation (See Standard 3, Commentary 2) must exist between AI systems involved in creating, endorsing, or delivering preparatory materials or training programs related to the certification examination and those used in essential certification decisions.

#### **Standard 5: Human Resources**

Programs must ensure that all activities are conducted by qualified personnel. Since AI systems are not "human personnel," any work performed by AI to support essential certification decisions must be supervised by qualified humans.

#### Standard 6: Information for Candidates

Programs that use Al-chatbots<sup>1</sup> or similar systems to generate publicly available information for candidates must verify the accuracy of the information provided.

## **Standard 7: Program Policies**

Programs utilizing AI systems must "comply with applicable laws and regulations" (See Standard 7, Commentary 8). AI-generated outputs cannot serve as the final determinant in adverse certification decisions. Program sponsors must make themselves aware of and comply with laws applicable to AI development, deployment, and use.

## **Standard 8: Awarding of Certification**

Al systems cannot be used to determine a candidate's certification status without the use of an examination that meets applicable NCCA standards. "Any procedure for granting a credential in the absence of evaluating the knowledge and/or skill of an individual by a program's examination is not permitted once the program has applied for accreditation" (See Standard 8, Essential Element 1).

## **Standard 9: Records Retention and Management Policies**

Al systems storing privileged and confidential candidate or examination information must adhere to records retention and management policies outlined in Standard 9.

#### **Standard 10: Confidentiality**

Al systems handling confidential candidate or examination information must comply with confidentiality policies as described in Standard 10. Furthermore, it is imperative to explicitly prohibit the incorporation of any such confidential information into any prompts or other inputs used to train an Al model that is accessible outside the organization.

<sup>&</sup>lt;sup>1</sup> a software application or web interface that is designed to mimic human conversation through text or voice interactions



#### Standard 12: Security

Al systems managing privileged applicant, candidate, and certificants personal information, applications, and scores or examination data must adhere to security requirements outlined in Standard 12. Furthermore, it is imperative to explicitly prohibit the incorporation of any such data into prompts or other inputs that may be used to train an Al model that is accessible outside of the organizational personnel authorized to access such data. The certification program must provide evidence that its use of Al is consistent with protecting the security and confidentiality of any secure test items.

#### Standards 13-22

All systems participating in core certification activities must comply with applicable NCCA Standards and have their decision-making and outputs reviewed and validated by qualified humans:

- Standard 13: Panel Composition
- Standard 14: Job Analysis
- Standard 15: Examination Specifications
- Standard 16: Examination Development
- Standard 17: Setting and Maintaining Passing Standards
- Standard 18: Examination Administration
- Standard 19: Scoring and Score Reporting
- Standard 20: Evaluation of Items and Examinations
- Standard 21: Maintenance of Certification
- Standard 22: Quality Assurance

Examination content, facts, references, rationales and calculations generated by AI systems must be verified by qualified personnel. Rationales for AI-based real-time determinations must be transparent and real-time AI-based decision making in applications such as test administration or scoring must be validated by appropriate research. Reports of the research must be available for review by the appropriate stakeholders.

Those who operate AI systems should receive appropriate training to understand the role AI plays within the certification program, as well as the potential risks associated with their use. Organizations should conduct ongoing evaluations of AI system accuracy and reliability, as well as evaluations of potential bias to ensure that AI does not disadvantage any demographic group. Regular updates and audits of AI security systems are necessary to adapt to new threats. All AI-assisted certification decisions must be approved by qualified human expert reviewers, who ensure that final determinations are accurate and align with professional and ethical standards. Policies should explicitly define the roles of human reviewers in validating AI-assisted decisions.



## **Standard 23: Maintaining Accreditation**

All use of Al systems in essential certification decisions should be reported to NCCA. Use of Al systems is **not** considered a "material change" to the program in and of itself unless Al use involves changes to:

- the legal status or governance structure of the certification organization;
- the purpose, scope, or activities of the certification program;
- the purpose, scope, or objectives of any certification examinations;
- the program name and/or designation; and
- examination development, administration, and/or evaluation procedures. (See, Standard 23, Commentary 2)

#### References:

NCCA Standards (2021)