



# Industry-Recognized Credentials

**Draft of Proposed Definition & Core  
Characteristics | CTE Committee**

***November 2023***



# Overview

In Maryland, as with the rest of the nation, the journey toward economic stability and independence has evolved dramatically in our post-pandemic economy. Transformative economic shifts, driven by rapid technological innovation and the long-term impacts of the Great Recession and other economic headwinds, have reshaped the landscape of education and employment. Entry-level employment qualifications have expanded to include industry-recognized credentials, occupational licenses, and apprenticeships - all aimed at helping students secure quality employment opportunities.

The Governor's Workforce Development Board's (GWDB's) Career and Technical Education (CTE) Committee and its partners at the Maryland State Department of Education (MSDE) are at the forefront of acknowledging the significance of industry-recognized credentials in modernizing education to meet the demands of our state's economy. With a myriad of these credentials offered across each program of study, discerning their value is a complex but crucial task. As Maryland is part of a national movement with 26 states<sup>1</sup> incorporating industry-recognized credentials into their high school accountability measures, and how these credentials are being counted as part of the Blueprint for Maryland's Future ("the Blueprint"), the decisions made now are critical. The credentials we prioritize will either pave the way to prosperous careers or, if not carefully considered, lead learners to credentials with limited market value.

This report intends to provide a framework for Maryland's educational and workforce development leaders to identify high-value non-degree credentials with clarity and conviction. It calls for a collaborative approach, breaking down silos to avoid sending mixed messages to students. While focusing on statewide initiatives, such as the Blueprint, the CTE Committee and MSDE acknowledge regional and local variations in high-value credentials, and proposals for processes and procedures to address these variations are forthcoming.

The criterion for high-value credentials is unequivocal: they must be a conduit to employment that ensures a living wage. Achieving this standard requires a unified effort from K-12, postsecondary, workforce development, and industry leaders to pinpoint and endorse the credentials that align with the needs of the labor market, particularly in high-skill, high-wage, and in-demand fields. Encouraging learners to attain these credentials, coupled with meticulous data collection and reporting, is imperative. Our leadership must guide more students, especially those from historically marginalized and underserved communities, towards these credentials as a stepping stone to work, postsecondary education, and beyond. The vitality of Maryland's economy hinges on our commitment to this endeavor.

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<sup>1</sup> <https://www2.ed.gov/datastory/cte/index.html>

## **THE MARYLAND STATE DEPARTMENT OF EDUCATION (MSDE)**

MSDE is the designated eligible agency responsible for the administration of Perkins V in the State of Maryland. This responsibility is articulated in the Maryland Career and Technical Education Four-Year State Plan. MSDE is accountable for the fiscal responsibility, coordination, evaluation, and continual improvement of the career and technical education (CTE) activities carried out with assistance under Perkins V, including the State Plan for Career and Technical Education and all related components. MSDE's administration of Perkins V involves a comprehensive approach to CTE. This includes the development and implementation of high-quality CTE programs that align with state and local economic needs, and that provide students with the academic, technical, and employability skills they need to pursue high-skill, high-wage, and/or in-demand careers. MSDE is responsible for the distribution of Perkins V funds to local education agencies (LEAs) and institutions, based on the criteria outlined in the State Plan. This includes ensuring that funds are used in accordance with the Act's requirements and that recipients are held accountable for their use of funds. MSDE also plays a key role in the evaluation of CTE programs. It is responsible for conducting regular evaluations to assess the effectiveness of these programs, the extent to which they are improving student outcomes, and how well they are meeting the needs of special populations.

## **THE CAREER AND TECHNICAL EDUCATION (CTE) COMMITTEE**

The CTE Committee, established under the Maryland Code, Education § 21-209, is a unit within the Governor's Workforce Development Board (GWBD) at the Maryland Department of Labor. The Committee's purpose is to build an integrated, globally competitive framework for providing CTE to Maryland students in public schools, postsecondary education, and the workforce. The CTE Committee's strategic approach to this mission is the integration of academic knowledge and occupational competencies that enable students to develop the skills required to meet Maryland's workforce and economic development needs of the future. Part of the Committee's statutory requirement is developing a statewide framework for CTE that prepares students for employment in a diverse and modern economy. An essential component of this framework is ensuring that the Perkins State Plan is developed in a manner that supports the goals of the Blueprint for Maryland's Future ("the Blueprint") and ensuring that CTE pathways are developed in close partnership with industry demands. The Committee is tasked with various additional duties, including working with the business community to develop CTE learning opportunities, developing a comprehensive and cohesive system of occupational skills standards to drive the State's CTE system, and monitoring the progress of CTE in the State in meeting the Blueprint's statewide goal that 45% of high school students complete the high school level of a registered apprenticeship or another industry-recognized occupational credential by the 2030-2031 school year. As part of this goal, the CTE Committee is required to define the criteria and process for industry-recognized credentials to determine which credentials will count towards the 45% goal.

## COLLABORATION

The Blueprint and the Accountability and Implementation Board (AIB) required MSDE and the CTE Committee to enter into an agreement to administer Perkins V funding collaboratively. MSDE and the CTE Committee executed this MOU<sup>2</sup> in November 2023, essentially outlining a commitment to work together to develop the Maryland Career and Technical Education Four-Year State Plan in a manner that supports the goals of the Blueprint, subject to any federal requirements articulated in Perkins V, and to reach consensus on state plan components which are directly aligned to the scope of the CTE Committee's obligations. The Blueprint for Maryland's future requires that the CTE Committee define which industry-recognized credentials (IRCs) count towards the 45% goal. As part of the collaborative process between the CTE Committee and MSDE, it became essential to collectively have one definition and list of approved IRCs that both MSDE and the CTE Committee recognize. As such, the CTE Committee and MSDE looked into national best practices while developing an aligned definition of IRCs.

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<sup>2</sup> <http://www.gwdb.maryland.gov/ctecomm/ctecomm-presentnov22023.pdf>

# Industry-Recognized Credentials | A National View

## OVERVIEW

In the rapidly evolving landscape of the American workforce, the significance of industry-recognized credentials (IRCs) has become increasingly prominent. These credentials serve as a vital bridge, connecting the skills and knowledge acquired through career and technical education (CTE) programs with the specific needs and standards of various industries. As the nation strives to align educational outcomes with the demands of a competitive global economy, states across the country are implementing strategic initiatives to define, approve, and integrate IRCs into their CTE programs.

This section presents a comprehensive overview of the approaches taken by a selection of states to cultivate a skilled workforce through the endorsement of IRCs. Each state's strategy reflects a commitment to enhancing the employability of students and the robustness of the state's economy. These efforts are not only indicative of a national trend towards workforce development but also highlight the unique regional demands and educational philosophies that shape state-specific programs.

MSDE and the CTE Committee examined the varied methodologies and criteria employed by states like Alabama, Delaware, Florida, Kansas, Louisiana, North Carolina, Ohio, Pennsylvania, Tennessee, and Texas. Through this process, it becomes clear that while the objectives may be similar, the pathways to achieving them are as diverse as the states themselves. This national landscape review offers insights into the collaborative efforts between educational institutions, industry leaders, and governmental agencies to ensure that the credentials provided are not only recognized and valued by employers but also tailored to the economic and labor market trends of each state. Through this examination, we aim to shed light on the innovative practices that are shaping the future of career and technical education and workforce readiness in the United States.

The following summarizes a deep dive into the state models of Delaware, Florida, and Texas, which aligned most closely with the intent and purpose of the Blueprint and the CTE Committee and MSDE's collaboration, respectively. The following three states were extensively consulted as a proposed definition, characteristics, and processes for IRCs were being considered. For additional information on the other state models reviewed, please reach out to the CTE Committee at [dlcte-labor@maryland.gov](mailto:dlcte-labor@maryland.gov).

# STATE-MODEL DEEP DIVE

## ***Delaware***

In Delaware, an industry-recognized credential (IRC) is a mark of professional and technical competence that is highly regarded in various industries. These credentials are conferred by certification bodies that are acknowledged by industry sectors as benchmarks of proficiency in specific occupational roles or skill areas. To earn such a credential, individuals must undergo a rigorous assessment process that may involve written, oral, or practical examinations, demonstrating their knowledge, skills, and abilities pertinent to a particular job. These certifications are often time-bound, requiring holders to periodically renew their credentials through a recertification process to maintain their status.

Local Education Agencies (LEAs) are encouraged to submit applications for new IRCs to the Delaware Department of Education (DDOE). The DDOE has established an internal program revision committee that opens the application process each fall or when it is time to revise the credentials associated with current CTE programs of study. LEAs interested in applying must furnish the DDOE with data that supports the quality of the IRC they propose. This data is scrutinized by the revision committee, which then makes a recommendation regarding the classification of the credential into one of three categories: foundational, essential, or preferred. These categories are determined based on how well the credential meets established quality criteria.

The CTE team at the DDOE reviews the committee's recommendation and the supporting data to make a final decision. They also document their rationale, providing transparency and setting a precedent for future evaluations. The Delaware review committee employs a specific rubric to assess the quality of an IRC. This rubric includes criteria such as alignment with DDOE career and technical education programs of study, relevance to in-demand occupations within the state or region, value to employers, and the credential's ability to lead to employment, higher wages, career advancement, and job security. Additionally, the rubric considers whether the credential is portable across industries, stackable towards further training, validated by a third party, and requires a minimum number of instructional hours for attainment. Finally, it assesses whether the credential is sufficient for employment and career progression.

## ***Florida***

In Florida, non-degree credentials are subject to rigorous standards to ensure they serve the economic interests of both individuals and the broader labor market. The statute requires that such credentials must first and foremost demonstrate their relevance to labor market needs. This is determined either by the Labor Market Estimating Conference for statewide demand or by local demand as identified by the Credentials Review Committee. The credentials must also prove that the competencies they impart are in sync with what the market requires, ensuring that individuals are equipped with skills that are currently in demand by employers. Furthermore, there must be evidence that individuals who have earned these credentials find employment and earn wages that are at least at the middle- to high-level, with a preference for those credentials that lead to high-level wages.

An industry certification, which is a voluntary credential assessed by a third-party entity, falls under this statute if it does not have a statewide articulation agreement for college credit or if it has such an agreement for no more than 14 college credits in a related associate degree program. Entities such as the Florida College System, local workforce development boards, and Florida school districts can submit credentials for consideration. They must provide detailed information through an online application, including the type of credential, relevant codes, direct links to information about the credential, contact details for the certifying agency, program titles and numbers, industry sector focus, proof of demand, and more. A joint review team, established by the Credentials Review Committee and comprising representatives from the Florida Department of Education, the Florida Department of Economic Opportunity, and CareerSource Florida (the statewide workforce policy and investment board), conducts quarterly evaluations of submitted credentials. They assess these against the Framework of Quality, and those meeting the criteria are recommended for inclusion on the Master Credentials List. The Credentials Review Committee votes on these recommendations, and the approved list is then presented to the CareerSource Florida Board of Directors and subsequently to the State Board of Education. Once approved, the Master Credentials List is updated on the CareerSource Florida website.

Annually, the credentials on the Master Credentials List are reviewed against new labor market data, and those that no longer meet the Framework of Quality are phased out, following the same review steps as the quarterly updates. The Framework of Quality, which guides the evaluation of credentials, places a strong emphasis on demand and wage levels. By linking a credential to a Standard Occupational Classification (SOC) code, it can be associated with an occupation, its demand indicators can be assessed, and evidence of associated wage levels can be provided. This structured approach ensures that the credentials recognized in Florida are not only of high quality but also of high value to both the workforce and the economy.

## **Texas**

In Texas, the passage of House Bill 22 during the 85th Legislature in 2017 marked a significant shift in how high school student achievements are measured. The Texas Education Agency (TEA) was tasked with incorporating the attainment of industry-based certifications (IBCs) into the Student Achievement domain of the state's public-school accountability system. This move underscores the state's commitment to preparing students for in-demand careers, recognizing that success in the workforce or in postsecondary education is a key indicator of a school's effectiveness.

IBCs are not merely accolades; they signify that a student has acquired skills valued by industry, skills that not only enhance employability immediately after high school but also serve as a foundation for further achievement and independence in life. These certifications are tied to specific career clusters or occupations and are measured against recognized standards. An individual earns a certification by passing an assessment that validates their industry-specific skills. These certifications are granted by certifying entities such as trade associations or industry-approved testing organizations, rather than by secondary schools or institutions of higher education. They are typically time-limited, requiring ongoing professional development or retesting to maintain the certification.

Local Education Agencies (LEAs) in Texas must navigate a thorough application process to have an IBC approved for each Career and Technical Education (CTE) program of study. The TEA, which reviews

these applications, looks for certifications that are aligned with industry standards, portable across different job contexts, affordable, and accessible to all students. Once an application is submitted, TEA has a 30-day window to review it, with approved certifications remaining valid for three years.

The TEA's review process for IBCs is multi-faceted:

1. The TEA solicits nominations for IBCs.
2. The Ray Marshall Center at the University of Texas at Austin evaluates whether the certifications are recognized and valued by the industry.
3. Tri-agency<sup>3</sup> staff, including the TEA, review whether the certifications meet the definition of a true certification.
4. Tri-agency partners recruit panels for further evaluation.
5. The TEA develops a rubric and conducts reviewer training.
6. Panels, typically comprising two members (with a third if necessary), review the certifications for portability, the presence of a certifying entity, and coverage of the Texas Essential Knowledge and Skills (TEKS) content.
7. Tri-agency partners complete a quality assurance process.
8. The approved list of IBCs is then released.

The rubric used by the TEA to validate and approve IBCs includes several criteria:

1. The certification must be a true reflection of skill attainment and valid for a specific period.
2. It must be recognized and valued by the industry, as evidenced by employer surveys that show the certification influences hiring and wage decisions.
3. The certification should be attainable by high school students, meaning a typical 17 or 18-year-old should be able to earn it by graduation.
4. It must be portable, meaning it is recognized regionally, by multiple employers, or as a stepping stone to more advanced postsecondary or apprenticeship opportunities.
5. The certifying entity must be independent of the educational program to ensure the skills are validated outside of course completion.
6. The certification should serve as a capstone or end-of-program achievement, taken after the completion of TEKS-based coursework within a program of study.

This structured approach ensures that the certifications deemed valuable by the TEA are not only indicative of a student's readiness for college and career but also reflective of the skills that are in demand within the Texas labor market.

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<sup>3</sup> In March 2016, Texas Governor Greg Abbott created the Tri-Agency Workforce Initiative. The governor tasked the Commissioners of the Texas Education Agency (TEA), the Texas Higher Education Coordinating Board (THECB) and the Texas Workforce Commission (TWC) to work together on developing strong links between education and industry, with the goal of helping Texas grow in economic prosperity.

## ***State-Model Summary***

In the United States, a mosaic of credentialing initiatives reflects a concerted effort to bridge education with the evolving demands of the workforce. These initiatives, while varied in their approach, collectively underscore a commitment to equipping students with industry-recognized credentials (IRCs) that signal competence and readiness for in-demand careers.

The strategic efforts range from Alabama's Success Plus initiative, which systematically aligns credentials with labor market needs and mandates annual reassessments, to Kansas' Excel in CTE legislation that incentivizes students' attainment of IRCs in high-demand sectors. Louisiana's Jump Start CTE program and North Carolina's Essential & Career Credentials list further exemplify the drive to connect educational pathways directly to employment opportunities, ensuring that credentials are not only recognized by employers but also lead to sustainable wage premiums. Ohio and Tennessee have developed robust systems to validate credentials against industry needs, with Ohio integrating labor market data and industry feedback into its review process, and Tennessee ensuring credentials align with secondary and postsecondary education programs. Pennsylvania's forthcoming credential registry, funded by the American Rescue Plan, promises a user-friendly platform to guide individuals toward valuable, stackable credentials. Delaware's approach involves a detailed rubric to categorize credentials into foundational, essential, or preferred, based on their alignment with career and technical education programs and market demands. Florida's rigorous standards for non-degree credentials emphasize labor market relevance and positive employment outcomes, with a quarterly review process to maintain a current and responsive Master Credentials List. Texas has taken legislative action to integrate the attainment of IRCs into the public-school accountability system, recognizing the importance of industry-valued skills for student success beyond high school. This integration is a testament to the state's forward-thinking approach to education and workforce development.

Despite the diversity of these programs, they share a common set of strengths, including a clear focus on aligning credentials with in-demand jobs and involving state workforce boards and employers in the credential review process. However, they also face similar challenges, such as the need for agility in adapting to rapidly changing industry landscapes and the complexity of the credentialing processes, which can be resource-intensive for both educational institutions and students. The future of these initiatives lies in their ability to remain dynamic and responsive. Streamlining application and review processes, ensuring regular updates to reflect the latest industry trends, and balancing the focus on wage outcomes with other employment benefits are all critical steps toward strengthening these credentialing systems. By doing so, they can better serve not only the students and workers who earn these credentials but also the broader economic interests of the states in which they operate.

# Defining Industry-Recognized Credentials

The Blueprint for Maryland's future requires that the CTE Committee define which industry-recognized credentials (IRCs) count towards the 45% goal (i.e. *that 45% of public high school students complete the high school level of a registered apprenticeship or an other industry-recognized occupational credential before they graduate*). As part of the collaborative process between the CTE Committee and MSDE, it became essential to collectively have one definition and list of approved IRCs that both MSDE and the CTE Committee recognized. As such, the following are proposed definitions and characteristics for approving IRCs, which are pending review and formal approval by the CTE Committee.

## PROPOSED DEFINITION

An industry-recognized credential (IRC) is a formal validation of an individual's skills and competencies that aligns with the state's in-demand occupations and is recognized by industry and employers. It includes a certification, license, or other credential, and is obtained through an assessment process, may be stackable and portable within the industry, and leads to documented positive employment and wage outcomes. The IRC ensures relevance to the labor market and supports career advancement and economic development.

## PROPOSED CORE CHARACTERISTICS

The IRC ensures relevance to the labor market and includes these core characteristics:

- 1. Aligns with In-Demand Occupations:** The IRC is associated with occupations that are in high demand within Maryland, as defined by the Governor's Workforce Development Board (GWDB), state labor market data, and employer feedback.
- 2. Validated by Industry:** The credential is recognized across the state by multiple employers within an industry sector and is often developed or endorsed by industry associations, ensuring its relevance and value in the job market.
- 3. Assessment-Based:** The IRC is awarded upon successful completion of an assessment process that may include written, oral, or performance evaluations, demonstrating the individual's mastery of specific knowledge, skills, and abilities required for a particular occupation or skill area.
- 4. Standards-Driven:** The credential is based on industry-accepted standards and competencies, ensuring that it reflects the current needs and practices of the relevant industry.
- 5. Achievable and Accessible:** The credential is attainable by individuals through secondary, postsecondary, or other training programs and is accessible to a wide range of learners, including both traditional and non-traditional students.
- 6. Stackable:** The IRC contributes to an individual's career pathway by being stackable towards further education and training, leading to advanced credentials and employment opportunities.

7. **Portable:** The credential is recognized and valued across the state and, where applicable, nationally, allowing for mobility within or across industries.
8. **Quality Assured:** The IRC is subject to ongoing quality assurance measures, ensuring that it remains current with industry standards and practices and continues to be recognized by employers as a mark of excellence.
9. **Renewable:** Where applicable, the credential is renewable, requiring holders to engage in continuous learning or re-assessment to maintain the credential's status and relevance.
10. **Documented Outcomes:** There is evidence of positive employment and wage outcomes for individuals who have obtained the IRC, demonstrating its effectiveness in contributing to workforce readiness and economic advancement.

## NEXT STEPS

Updating the industry-recognized credential (IRC) system is a monumental process, impacting many stakeholders, especially local education agencies (LEAs) that have to incorporate these changes as they develop budgets and curriculum for future school years. This will require multiple phases and as such, will include multiple opportunities for feedback. The CTE Committee and MSDE recognize the need for a phased approach, starting with defining an IRC. Once this initial definition is approved by the CTE Committee, MSDE and the CTE Committee can outline the process for which IRCs are assessed, using the approved definition and core characteristics. Once the assessment and approval process is outlined, it will need to be tested to ensure fidelity and alignment with the goal of ensuring we are providing students with the skills and knowledge they need to succeed in the modern economy.

### *Proposed Timeline*

MSDE and the CTE Committee are outlining the following timeline for phasing in the next steps of the IRC development process. Throughout this process, opportunities for stakeholder feedback will be made available and communicated to the public and interested parties. As part of this process, MSDE and CTE Committee staff presented to Community College and Local Education Agencies (LEAs) CTE representatives on November 16, 2023, to solicit initial feedback on the definition and characteristics. Once the CTE Committee approves this initial definition and characteristics, MSDE and the CTE Committee will release the definitions for additional stakeholder feedback, which will inform the final definition and process to be ratified by the CTE Committee in 2024. As part of this phased approach, the following is a proposed timeline for next steps:

<i>Nov. 29, 2023</i>	Present Definition and Core Elements to CTE Committee for ratification and approval to proceed with stakeholder feedback collection process
<i>December 2023</i>	MSDE and CTE Committee develop interim process for approval and engage stakeholder feedback, including from CTE Directors and local workforce development boards
<i>Dec./Jan. 2024</i>	MSDE assesses current IRCs using interim process
<i>Jan./Feb. 2024</i>	CTE Committee reviews/ratifies MSDE recommendations for IRCs

*Feb. 2024*  
*April/May 2024*

2024-25 IRC Listing Published  
Final IRC Definitions and Approval Process for 2025-26 presented to CTE  
Committee for review and approval

## **Conclusion**

Throughout the development of this process, the CTE Committee and MSDE are committed to defining, assessing and prioritizing industry-recognized credentials (IRCs) that truly respond to employer needs and that equip students with the competencies and readiness required for in-demand careers. Achieving this standard requires a unified effort from K-12, postsecondary, workforce development, and industry leaders to ensure the endorsed IRCs align with the needs of the labor market, particularly in high-skill, high-wage, and in-demand fields. While this initial definition and core characteristics focus on a statewide model, MSDE and the CTE Committee acknowledge regional and local variations in high-value credentials. Proposed processes and procedures to address these variations are forthcoming, and the CTE Committee and MSDE are looking forward to engaging our valued stakeholders as part of this process.