

Credential Transparency and Digital Badges: Unlocking Meaning and Opportunity

OUI International Symposium
2025-December-3



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Credential Engine

Our Mission: Credential Engine is a non-profit whose mission is to map the credential landscape with clear and consistent information, fueling the creation of resources that empower people to find the pathways that are best for them.

Our Vision: We envision a future where millions of people worldwide have access to information about credentials that opens their eyes to the full range of opportunities for learning, advancement, and meaningful careers.

Learn more: <https://credentialengine.org>



Credential Engine's Open Technologies

Transforming credential information into CTDL linked open data means it can be shared, connected, and used across applications beneficial to everyone.



Credential Transparency Description Language (CTDL)

The only common language for descriptions of key features of credentials, credentialing organizations, competencies, quality, links to work, and more.

Credential Registry

Supports publishing and using credential data in multiple languages described with CTDL for tools, digital badges, research, and AI. Is not for issuing credentials to people or for personally identifiable information.

CTDL: Linked Open Data

When you search for travel options or map a route, you are using **linked open data** on the web.

Linked open data makes it possible to create online tools that help people find information and make better decisions.

Credential Engine is applying the same approach to credentials by providing technologies and tools that make credential information transparent, comparable, and connected.



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Inviting global participation



5

CTDL in Action Globally

2025-2026 Initiatives

[Partnership with Cogni.zone](#) to publish information in CTDL, European, and African Learning Models.

CTDL updated for [credentials](#) and [qualification frameworks](#) around the world.

CTDL expanded for [prior learning recognition](#).

Piloting the publishing [qualification frameworks with credential alignments](#) with as many countries as possible.

Examples of International Pilots:

- **Open University of Japan** - Publishing and consuming micro-credential information in localized Japanese.
- **South Africa Qualifications Authority** - Publishing National Qualifications Framework, credentials, competency frameworks, and their progression level alignments.
- **Bhutan and Jamaica** in partnership with American Association of Collegiate Registrars and Admissions Officers (AACRAO), publishing credentials.
- Quality assurance actions pilot included **European Quality Assurance Register for Higher Education (EQAR)**.

What CTDL Covers

Credentials & Qualifications – Degrees, diplomas,, micro-credentials, badges and more

Learning Opportunities & Assessments – Courses, programs, informal learning, exams

Competencies & Rubrics – Knowledge, skills, abilities, and benchmarks for evaluation

Transfer Value – Credit transfer agreements, policies, values, and support

Prior Learning Recognition - Prior learning applied to programs and credits

Work & Outcomes – Jobs, occupations, roles, tasks, and outcome metrics

Quality Assurance – Accreditation, regulation, approvals

Qualification Frameworks & Pathways – Systems to structure learning and career pathways

Learn more : <https://credreg.net/ctdl/handbook>

About CTDL

Follows the World Wide Web Consortium (W3C) specifications for Linked Open Data. The information is structured, machine-readable, and interoperable across the Web and between systems.

- Free, openly licensed for anyone to use.
- Supports global use including languages.
- Grows through open, community input.
- Credential Transparency Identifier (CTID) serves as globally unique identifier.
- Provides valuable information for a person's digital credentials.
- Does not directly cover personally identifiable information.



Learn more: <https://credreg.net/ctdl/handbook> and <https://credreg.net/ctdl/ctid>

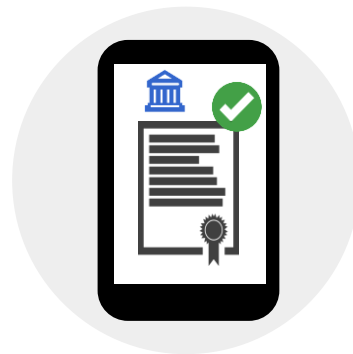
CTDL: Describes and Links Credentials

CTDL gives rich descriptions of all credentials offered by institutions and defined by governments. Example:

- Description
- Type of credential
- Cost and time
- Credit or non-credit
- Competencies
- Quality
- Outcome metrics
- Pathways
- Requirements
- Progression level

Learn more:

<https://credreg.net/ctdl/handbook#credential>



Digital badges following specifications such as the Open Badge (OB) 3.0 are issued to students and verifiable by employers.

CTDL provides the description and data structure so the value of a digital badge can be understood by everyone.

OB 3.0 and CTDL are interoperable.

Credential Finder: Robust Open Badge Example

CTDL terms used for this credential:

- Credential Name
- Credential Owner
- Address
- Description
- Subject Webpage
- Credential Type
- Credential Status
- Audience Level
- Requirements
- Cost
- Assessment Required
- Renewal Conditions
- Competencies Assessed
- Quality Assurance
- Occupations

Credential Finder - The Credential Finder is a tool for exploring all of the information published in the Credential Registry

Digital Badge
21st Century Skills for Workplace Success
 NCTI Business Solutions
 Last updated: Jul 11, 2025

About this Credential
 Basic information about the Credential
 The 21st Century Skills for Workplace Success industry-based credential is included in NCTI's Foundational assessment battery. The Foundational assessment measures the skills that represent critical knowledge needed for success in the workplace. Foundational assessments include a written component only. Foundational assessments can be delivered in an online or paper/pencil format. This assessment can be used at the secondary, post-secondary, and adult levels and is tied to the NCTI Workplace Competency Credential. Individuals meeting a minimum benchmark also have the opportunity to earn college credit. More specific information about the standards and competencies measured can be found in the Assessment Blueprint at: <https://www.ncti.org/credentials/blueprints/>.

Available Online [View this Credential](#)

Versions
 Superseded By: [Superseded By](#)

Credential Type
 ▼ Digital Badge [Q](#)

Credential Status
 ▼ Active [Q](#)

Audience Level
 ▼ Beginner Level [Q](#) ▼ Secondary School or Equivalent [Q](#)
 ▼ Postsecondary Level [Q](#) ▼ Associates Degree Level [Q](#)

Requirements, Costs, and Time
 How to earn the Credential
 Requirements and Recommendations
 Easy conditions or requirements, prerequisites or credit requirements related to the Credential
 Credential Requires

Related Organization(s)
 Owned and Offered By
[Ncti Business Solutions](#)

Copyright Holder
[Ncti Business Solutions](#)

Connections
 Related Resources
 Assesses 62 Competencies

Quality Assurance
 Quality Assurance for the Credential
 Quality Assurance Received
 Quality Assurance (2)

Occupations and Industries
 Career Field Information about the Credential
 Occupations
 O*NET Program
 Employability Skills (99-9999.00) [Q](#)

Locations
 Geographic Information about the Credential
 NCTI Business Solutions
 100 N. Riverside Ave. | Big Rapids, Michigan

Map Satellite

資格情報ファインダー - 資格情報ファインダーは、資格情報レジストリに公開されているすべての資格情報を探索するためのツールです。

デジタルバッジ
職場で成功するための21世紀のスキル
 ノタイビジネスソリューションズ
 最終更新日: 2025年7月11日

この資格について
 基礎的な情報
 21世紀の職場での成功のためのスキルに關する業界ベースの資格は、NCTIの基礎的評価バッテリーに含まれていて、この基礎的評価は、職場で成功するために必要な重要な知識とスキルを測定します。基礎的評価は、書面試験のみです。基礎的評価は、オンラインまたは紙と鉛筆の形式で実施できます。この評価は、中高生、成人レベルで使用できます。NCTI評価で最低基準を満たす人は、大学の単位も取得することもできます。関連する基準と能力に關する詳細は、評価ブループリント (<https://www.ncti.org/credentials/blueprints/>) でご覧いただけます。

オンラインで入手可能 [この資格情報を表示](#)

バージョン
 代替品: [表示](#)

資格情報の種類
 ▼ デジタルバッジ [Q](#)

資格ステータス
 ▼ アクティブ [Q](#)

担務者レベル
 ▼ 初心者レベル [Q](#) ▼ 中等教育または同等レベル [Q](#) ▼ 後進教育レベル [Q](#)
 ▼ 大学レベル [Q](#)

要件、コスト、時間
 取得方法
 簡単な条件や要件、前置条件や単位要件に關する簡単な情報
 資格取得が必要

更新と取り直し
 更新条件 (1)

関連組織
 所有および提供
[ノタイビジネスソリューションズ](#)

著作権者
[ノタイビジネスソリューションズ](#)

接続
 関連リソース
 62の能力を評価

品質保証
 品質保証のための品質保証
 品質保証を取得
 品質保証 (2)

職業と産業
 職業に関するキャリアフィールド情報
 職業
 O*NETプログラム
 雇用スキル (99-9999.00) [Q](#)

場所
 地理的な情報
 ノタイビジネスソリューションズ
 100 N. ライブサイド アベニュー
 ビグ ラピッズ、ミシガン

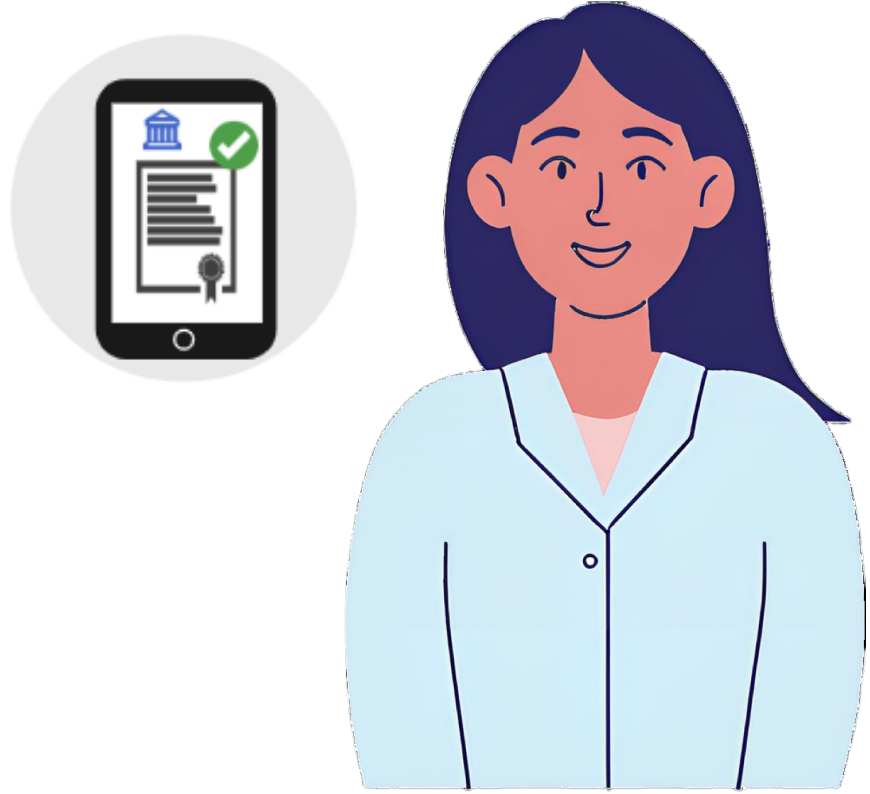
地図 衛星

Google Translate

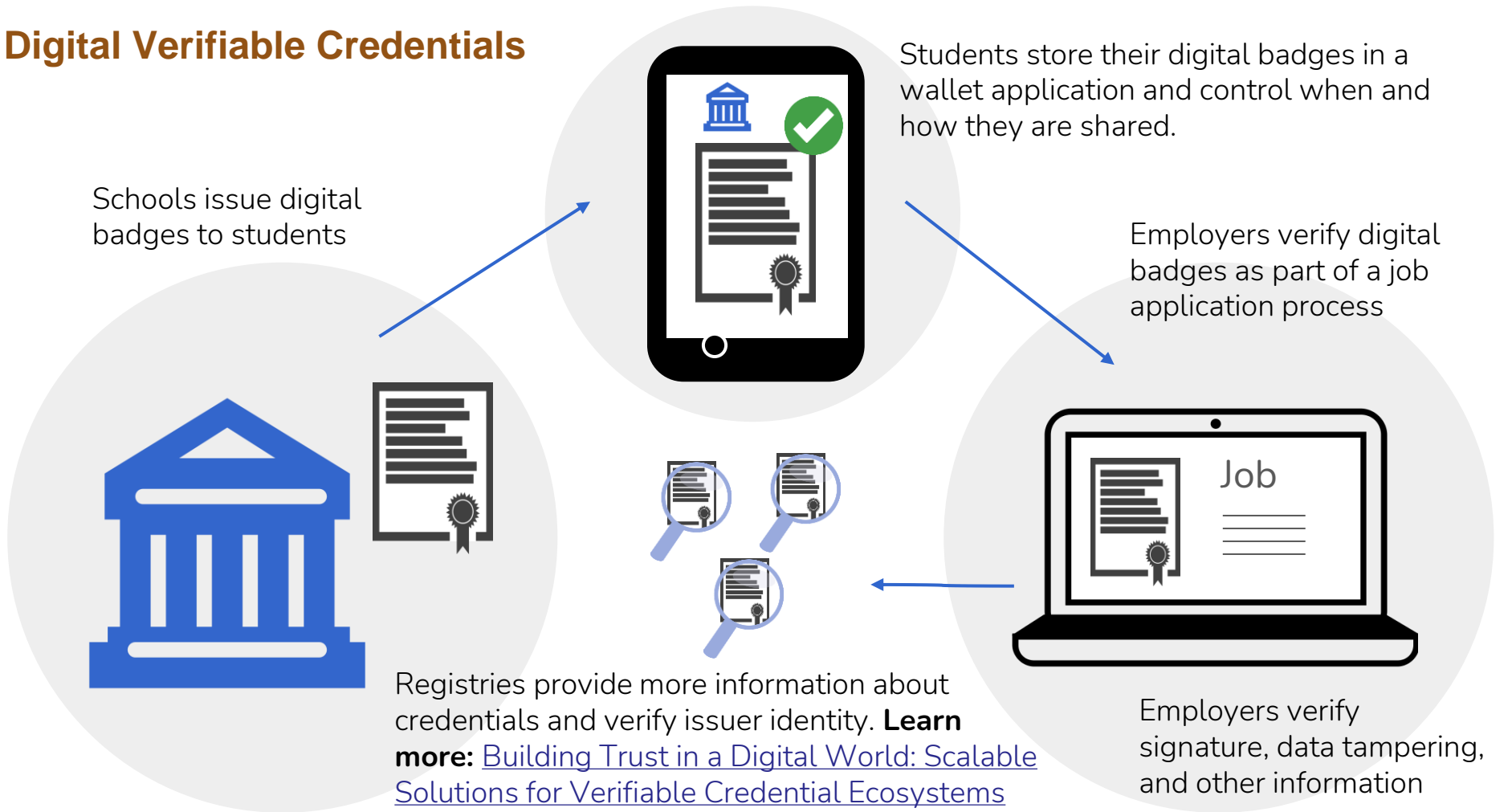
Digital Verifiable Credentials

Everyone benefits when students receive digital, verifiable credentials for the achievements they have earned, and when the meaning and value of those credentials are transparent.

Learn more: [Learning and Employment Records \(LERs\) | Credential Engine](#)



Digital Verifiable Credentials



Digital Badges: A Growing Market

In the United States, and in many other countries around the world, digital credentials are a rapidly growing part of the credential landscape. See the [2022 count of U.S. credentials report](#).

December 2025: Credential Engine will publish a new edition of the *Counting Credentials Report* to provide a comprehensive count of the credentials offered in the US.

Subscribe to our newsletter to receive the report: <https://credentialengine.org/subscribe/>

As opportunities to earn digital credentials continue to grow, credential transparency ensures that the meaning of any digital credential, whether a micro-credential or a degree, is clear, comparable, and connected to the opportunities they unlock.

OECD Report: [Micro-credentials for Lifelong Learning and Employability: Uses and Possibilities](#)

How Credential Engine Can Support Credential Transparency in Japan

Our team has expertise in:

- **Open Data & Standards** – stewarding CTDL as a global, community-driven standard
- **Mapping & Alignment** – connecting data across frameworks, sectors, and systems
- **Data Transformation** – extracting and structuring information into CTDL
- **Applications & Impact** – powering tools that serve students, workers, employers, educators, policymakers, and the public

How we can work together:

We're a nonprofit, but our impact depends on partnerships, collaborations, and funded projects with organizations, governments, and systems worldwide. Our team is ready to engage, answer questions, and explore how we can work together to make credentials, learning, work, and skills information transparent and connected.

Unlocking Meaning and Opportunity

Credential transparency ensures that every credential, whether a digital badge, a micro-credential, or a degree, can be clearly understood

With CTDL, Japan can describe locally meaningful credentials while connecting to global learning and work ecosystems.

We invite you to join us in advancing transparent, trusted, and connected credentials for learners everywhere.



Contact information



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Website: credentialengine.org

Email us: info@credentialengine.org

Technical Information: credreg.net

Credential Finder: credentialfinder.org



Find @CredEngine on Social Media



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Resource Links 1 of 3

Main website: <https://credentialengine.org>

CTDL Overview: <https://credentialengine.org/credential-transparency/ctdl/>

Credential Registry Overview: <https://credentialengine.org/credential-transparency/credential-registry/>

State Partnerships: <https://credentialengine.org/credential-engine-partners/federal-state-and-regional/>

Credential Engine and Cognizone Announcement: <https://credentialengine.org/2025/10/28/credential-engine-and-cognizone-announce-strategic-partnership-to-advance-global-credential-transparency-and-interoperability-through-open-data/>

CTDL Credential Types Expansion <https://credentialengine.org/resources/whats-next-for-ctdl-a-global-push-toward-connected-credentials/>

CTDL Qualifications Frameworks Expansion: <https://credentialengine.org/2025/10/28/credential-engine-and-cognizone-announce-strategic-partnership-to-advance-global-credential-transparency-and-interoperability-through-open-data/>

Resource Links 2 of 3

CTDL Prior Learning Recognition Expansion: <https://credentialengine.org/plrproposal/>

CTDL Qualifications: Frameworks Pilot <https://credentialengine.org/2025/06/25/the-groningen-declaration-network-and-credential-engine-collaborate-to-foster-global-credential-and-skill-transparency/>

CTDL Handbook: <https://credreg.net/ctdl/handbook>

Credential Transparency Identifier (CTID): <https://credreg.net/ctdl/ctid>

Credential Section in the CTDL Handbook: <http://credreg.net/ctdl/handbook#credential>

Credential Finder Open Badge Example: <http://credentialfinder.org/resources/ce-140f6f25-80a1-4fd3-a7a9-a85f0903ed0c>

Learner and Employment Record (Digital Credential) Toolkit: <https://credentialengine.org/toolkit/learning-and-employment-records-lers/>

Resource Links 3 of 3

Building Trust in a Digital World: Scalable Solutions for Verifiable Credential Ecosystems:

<https://credentialengine.org/2025/06/09/building-trust-in-a-digital-world-scalable-solutions-for-verifiable-credential-ecosystems/>

2022 Counting Credentials Report: <https://credentialengine.org/resources/counting-u-s-secondary-and-postsecondary-credentials-report/>

OECD Report: https://www.oecd.org/content/dam/oecd/en/publications/reports/2023/03/micro-credentials-for-lifelong-learning-and-employability_13dd81a9/9c4b7b68-en.pdf

Subscribe to our newsletter to receive a new edition of the U.S. Counting Credentials Report:

<https://credentialengine.org/subscribe/>

Link to this presentation in Google Drive folder:

https://docs.google.com/presentation/d/1LMVmzMgQjWfFVsNsJLz4rQMBuJ5ovoq_OT8_AicsFag/edit?slide=id.g3a38e84d60c_0_0#slide=id.g3a38e84d60c_0_0