



## **Open Badge Class to CTDL Mapping Guide for the Credential Registry Badge Publisher**

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### **Introduction**

The Credential Registry badge publisher tool is designed to facilitate mapping of [Open Badge](#) metadata to [CTDL](#). However, it should be noted that the tool only maps descriptions of badges that are publicly available and does not map instances of awarded credentials. The mapping chart provided below displays how the badge publisher tool maps Open Badge Specification fields to CTDL terms, as of May 2023.

In the chart, the first column lists the Open Badge Specification fields. If a row in this column is blank, it indicates that there is no equivalent Open Badge Class field, and the Badge Publisher tool automatically creates the related CTDL field. The green highlighted rows indicate the data that is required to publish to the Credential Registry. For more information, please refer to the [Badge Benchmark Model](#).

**Related Resources:** Additional resources are available to support the use of the Credential Registry Badge Publisher, including written and recorded instructions, as well as a webpage with an informational video and a communications kit.

- [Credential Registry Badge Publisher Instructions](#)
- [Credential Registry Badge Publisher Video and Communications Kit](#)

**More Information:** Visit Credential Engine’s Credential Registry Badge Publisher Tool webpage for more information <https://credentialengine.org/badge-publisher-tool/>.

**Contact Us:** If you have any questions, please do not hesitate to contact us at [publishing@credentialengine.org](mailto:publishing@credentialengine.org). Our team monitors this email during normal U.S. business hours and typically responds within one business day.

## Badge Class to CTDL Mapping

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy	F Notes
Type / Badge Class		@type <a href="#">Open Badge</a>	Required	The badge publisher sets the credential type to CTDL Open Badge.
		<a href="#">Open Badge</a> / <a href="#">Credential Status Type</a>	Required	The badge publisher sets the Credential Status Type to “Active”. If it is no longer offered, it’s editable and can be changed to “Deprecated”. Required for publishing to the Credential Registry.
		<a href="#">Open Badge</a> / <a href="#">CTID</a>	Required	The badge publisher tool creates a CTID for each badge.
Description	String / Single	<a href="#">Open Badge</a> / <a href="#">Description</a>	Required	

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy	F Notes
		<a href="#">Open Badge / InLanguage</a>	Required	The badge publisher defaults language to U.S. English. It's editable so the user can change the language. Required for publishing to the Credential Registry.
Name	String / Single	<a href="#">Open Badge / Name</a>	Required	
Issuer		<a href="#">Open Badge / Owned By</a> or <a href="#">Offered By / Credential Organization</a>	Required	The badge publisher tool associates the owned and offered by properties to the Credential Organization associated with the Credential Registry Accounts System.
		<a href="#">Open Badge / Subject Webpage</a>	Required	The badge publisher uses the URL for the badging platform's public detail page about the badge.
id		<a href="#">Open Badge / Credential ID</a>	Required	
Image	URL/ Single	<a href="#">Open Badge / Image</a>	Recommended	
Tags	String / Multiple	<a href="#">Open Badge / Keywords</a>	Recommended	Credly uses OB Tags exclusively for skills. For Credly, OB Tags map to <a href="#">CTDL Competency</a> .
Criteria / Description	String / Single	<a href="#">Condition Profile / Description</a>	Recommended	
Criteria / URL	URL / Single	<a href="#">Condition Profile / Subject Webpage</a>	Recommended	
Alignment Object / Target Name	String / Multiple	<a href="#">Target Node Name</a>	Recommended	Badge alignments could be to any information. Users decide what information to include. This means that currently, you can publish alignments with mappings to the following CTDL terms:
Alignment Object	URL / Multiple	<a href="#">Target Node</a>		

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy	F Notes
/ Target URL				<ul style="list-style-type: none"> <li>• Assessment Profile</li> <li>• Competency</li> <li>• Course</li> <li>• Credential</li> <li>• Learning Opportunity</li> <li>• Learning Program</li> <li>• Occupation</li> <li>• Occupation Classification</li> <li>• QA Credential Organization</li> </ul>
Alignment Object / Target Description	String / Multiple	<a href="#">Target Node Description</a>		
Alignment Object / Target Framework	String / Multiple	<a href="#">Framework</a>		
Alignment Object / Target Code	String / Multiple	<a href="#">Coded Notation</a> or <a href="#">Identifier</a> / <a href="#">Identifier Value Code</a>		
Alignment Object / Target Type	String / Single	One of the following: <ul style="list-style-type: none"> <li>• <a href="#">Assessment Profile</a></li> <li>• <a href="#">Competency</a></li> <li>• <a href="#">Course</a></li> <li>• <a href="#">Credential</a></li> <li>• <a href="#">Learning Opportunity Profile</a></li> <li>• <a href="#">Learning Program</a></li> <li>• <a href="#">Occupation</a></li> <li>• <a href="#">Occupation Classification</a></li> <li>• <a href="#">QA Credential Organization</a></li> </ul>	Recommended	See the tables below for a breakdown by CTDL terms.

## Open Badge Alignments to CTDL Mapping Supported by the Badge Publisher

### Assessment Profile

Where applicable, this is to identify the assessment(s) related to the badge. An [Assessment Profile](#) is an entity that describes the key characteristics of an assessment for a credential.

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Assessment</a> / <a href="#">Name</a>	Required
Target URL	URL / Multiple	<a href="#">Target Assessment</a> / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">Target Assessment</a> / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">Target Assessment</a> / <a href="#">Identifier</a> / <a href="#">Identifier Value Code</a>	Optional
Target Type	Single	<a href="#">Assessment Profile</a>	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Advanced Standing From</a></li> <li>• <a href="#">CoPrerequisite</a></li> <li>• <a href="#">Corequisite</a></li> <li>• <a href="#">Entry Condition</a></li> <li>• <a href="#">Is Advanced Standing For</a></li> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> <li>• <a href="#">Preparation From</a></li> </ul>	

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
		<ul style="list-style-type: none"> <li>• <a href="#">Recommends</a></li> <li>• <a href="#">Requires</a></li> </ul>	

## Competency

Where applicable, this is for competencies required for the badge. A [Competency](#) is a measurable or observable knowledge, skill, or ability necessary to successful performance of a person. Competency is broadly defined to include assertions of academic, professional, occupational, vocational and life goals, outcomes, and standards, however labeled.

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Competency</a> / <a href="#">Competency Label</a>	Required
Target URL	URL / Multiple	<a href="#">Target Competency</a> / <a href="#">Source Documentation</a>	Required
Target Description	String / Multiple	<a href="#">Target Competency</a> / <a href="#">Competency Text</a>	Required
Target Framework	String / Multiple	<a href="#">Target Competency</a> / <a href="#">Target Competency Framework</a>	Optional
Target Code	String / Multiple	<a href="#">Target Competency</a> / <a href="#">Coded Notation</a>	Optional
Target Type	Single	<a href="#">Competency</a>	Required
		<a href="#">Requires</a>	Required

## Course

Where applicable, this is for Courses related to the badge. A [Course](#) is a Single structured sequence of one or more educational activities that aims to develop a prescribed set of competencies of learners. Course is distinct from Program, which aggregates several courses.

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Name</a>	Required
Target URL	URL / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Coded Notation</a>	Optional
Target Type	Single	<a href="#">Course</a>	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Advanced Standing From</a></li> <li>• <a href="#">CoPrerequisite</a></li> <li>• <a href="#">Corequisite</a></li> <li>• <a href="#">Entry Condition</a></li> <li>• <a href="#">Is Advanced Standing For</a></li> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> <li>• <a href="#">Preparation From</a></li> <li>• <a href="#">Recommends</a></li> <li>• <a href="#">Requires</a></li> </ul>	Required

## Credential

Where applicable, this is to identify relationships between the badge being imported and other credentials. A [Credential](#) is a qualification, achievement, personal or organizational quality, or aspect of an identity typically used to indicate suitability. Select the [appropriate type of Credential](#).

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Credential</a> / <a href="#">Name</a>	Required
Target URL	URL / Multiple	<a href="#">Target Credential</a> / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">Target Credential</a> / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">Target Credential</a> / <a href="#">Identifier</a> / <a href="#">Identifier Value Code</a>	Optional
Target Type	Single	<a href="#">Credential</a> / <a href="#">Select from one of the types of Credentials</a> .	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Advanced Standing From</a></li> <li>• <a href="#">CoPrerequisite</a></li> <li>• <a href="#">Corequisite</a></li> <li>• <a href="#">Entry Condition</a></li> <li>• <a href="#">Is Advanced Standing For</a></li> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> <li>• <a href="#">Preparation From</a></li> <li>• <a href="#">Recommends</a></li> <li>• <a href="#">Requires</a></li> </ul>	Required



## Learning Opportunity Profile

Where applicable, this is to identify the [Learning Opportunity Profile](#), an entity describing an educational or training opportunity. Examples of learning opportunities include apprenticeship, work experience programs, or other structured experiences intended to serve as educational or training events.

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Learning Opportunity / Name</a>	Required
Target URL	URL / Multiple	<a href="#">Target Learning Opportunity / Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">Target Learning Opportunity / Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">Target Learning Opportunity / Identifier / Identifier Value Code</a>	Optional
Target Type	Single	<a href="#">Learning Opportunity Profile</a>	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Advanced Standing From</a></li> <li>• <a href="#">CoPrerequisite</a></li> <li>• <a href="#">Corequisite</a></li> <li>• <a href="#">Entry Condition</a></li> <li>• <a href="#">Is Advanced Standing For</a></li> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> <li>• <a href="#">Preparation From</a></li> <li>• <a href="#">Recommends</a></li> <li>• <a href="#">Requires</a></li> </ul>	Required

## Learning Program

Where applicable, this is to identify the [Learning Program](#), defined as a set of learning opportunities that leads to an outcome, usually a credential like a degree or certificate.

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Name</a>	Required
Target URL	URL / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">Target Learning Opportunity</a> / <a href="#">Coded Notation</a>	Optional
Target Type	Single	<a href="#">Learning Program</a>	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Advanced Standing From</a></li> <li>• <a href="#">CoPrerequisite</a></li> <li>• <a href="#">Corequisite</a></li> <li>• <a href="#">Entry Condition</a></li> <li>• <a href="#">Is Advanced Standing For</a></li> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> <li>• <a href="#">Preparation From</a></li> <li>• <a href="#">Recommends</a></li> <li>• <a href="#">Requires</a></li> </ul>	Required

## Occupation

Where applicable, this is to identify the occupation(s) the credential is either preparation for, recommended for, or required for. An [Occupation](#) is a profession, trade, or career field that may involve training and/or a formal qualification.

<b>A</b> <b>Open Badge</b> <b>Specification Field</b>	<b>B</b> <b>Data Format / Multiple or Single</b>	<b>C</b> <b>CTDL Alignment</b>	<b>E</b> <b>Credential Registry</b> <b>Policy</b>
Target Name	String / Multiple	Target Occupation / <a href="#">Name</a>	Required
Target URL	URL / Multiple	Target Occupation / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	Target Occupation / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	Target Occupation/ <a href="#">Identifier</a> / <a href="#">Identifier Value Code</a>	Optional
Target Type	Single	<a href="#">Occupation</a>	Required
		Select From: <ul style="list-style-type: none"> <li>• <a href="#">Is Preparation For</a></li> <li>• <a href="#">Is Recommended For</a></li> <li>• <a href="#">Is Required For</a></li> </ul>	Required

## Occupation Classification

Where applicable, in the United States, this is often the O\*NET Standard Occupation Codes (SOC), but other occupational frameworks from other countries or states/provinces can be published. [Occupation Classification](#) is a class of concept schemes identifying occupations such as the Standard Occupational Classification (SOC) system in the U.S. and the European Skills/Competences, Qualifications and Occupations (ESCO).

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">Occupation Type</a> / Target Node Name	Required
Target URL	URL / Multiple	<a href="#">Occupation Type</a> / Target Node	Required
Target Description	String / Multiple	<a href="#">Occupation Type</a> / Target Node Description	Required
Target Framework	String / Multiple	<a href="#">Occupation Type</a> / Framework	
Target Code	String / Multiple	<a href="#">Occupation Type</a> /	Optional
Target Type	Single	<a href="#">Occupation Classification</a>	Required

## QA Credential Organization

Where applicable, this is quality assurance identified as issued by a third party. This information is to identify the [Quality Assurance \(QA\) Credential Organization](#).

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target Name	String / Multiple	<a href="#">QA Credential Organization</a> / <a href="#">Name</a>	Required

A Open Badge Specification Field	B Data Format / Multiple or Single	C CTDL Alignment	E Credential Registry Policy
Target URL	URL / Multiple	<a href="#">QA Credential Organization</a> / <a href="#">Subject Webpage</a>	Required
Target Description	String / Multiple	<a href="#">QA Credential Organization</a> / <a href="#">Description</a>	Required
Target Framework	String / Multiple	Not Applicable	
Target Code	String / Multiple	<a href="#">QA Credential Organization</a> / <a href="#">Identifier</a> / <a href="#">Identifier Value Code</a>	Optional
Target Type	Single	<a href="#">QA Credential Organization</a>	Required
		Select from: <a href="#">AccreditedBy</a> <a href="#">ApprovedBy</a> <a href="#">RecognizedBy</a> <a href="#">RegulatedBy</a>	Required



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