

HOW INSTITUTIONS CAN USE THE OEB-API

As of 10 June 2026

Via the OEB API (Application Programming Interface), organisations can access data and functions of the Open Educational Badges platform **directly from their own systems**. The API is designed for integration, automation, and data exchange. Data visualisation takes place within the institution's own system, not through the API itself. However, **selected functions can also be embedded and displayed within the institution's system via iFrames**, using OEB's native visualisations. See section 3 for details.

1. Security and authentication

The OEB API uses secure **OAuth2 authentication** (with client ID and client secret, which can be generated directly within the OEB account). This enables platforms to communicate with OEB in a controlled and data-protection-compliant manner. Access to badge-, issuance-, and profile-data is clearly defined and technically secured.

2. General functionalities (data-based, without UI visualisation)

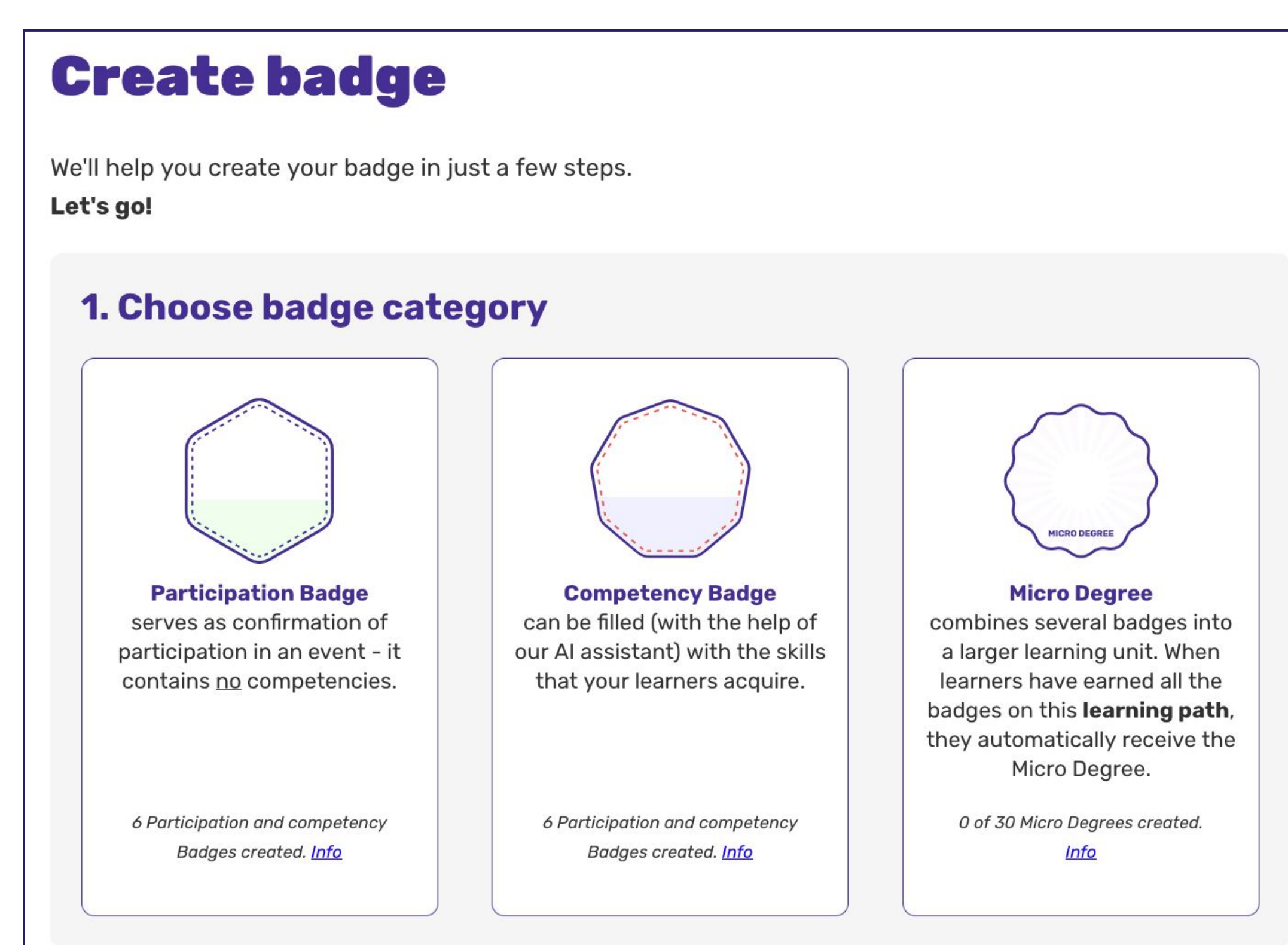
Create, edit, and delete badges

Institutions can create, edit, and delete badges directly from their own systems.

This applies to all badge types:

- participation badges
- competency badges
- micro-degrees (learning pathways)

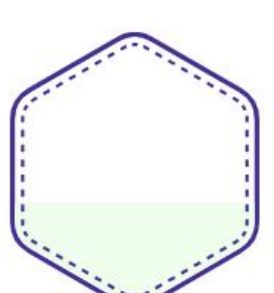
The API provides structured data models and endpoints.



Create badge

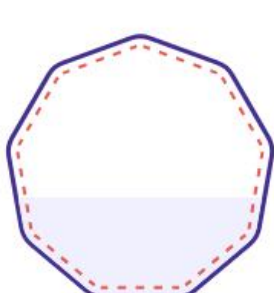
We'll help you create your badge in just a few steps.
Let's go!

1. Choose badge category



Participation Badge
serves as confirmation of participation in an event - it contains no competencies.

6 Participation and competency Badges created. [Info](#)



Competency Badge
can be filled (with the help of our AI assistant) with the skills that your learners acquire.

6 Participation and competency Badges created. [Info](#)



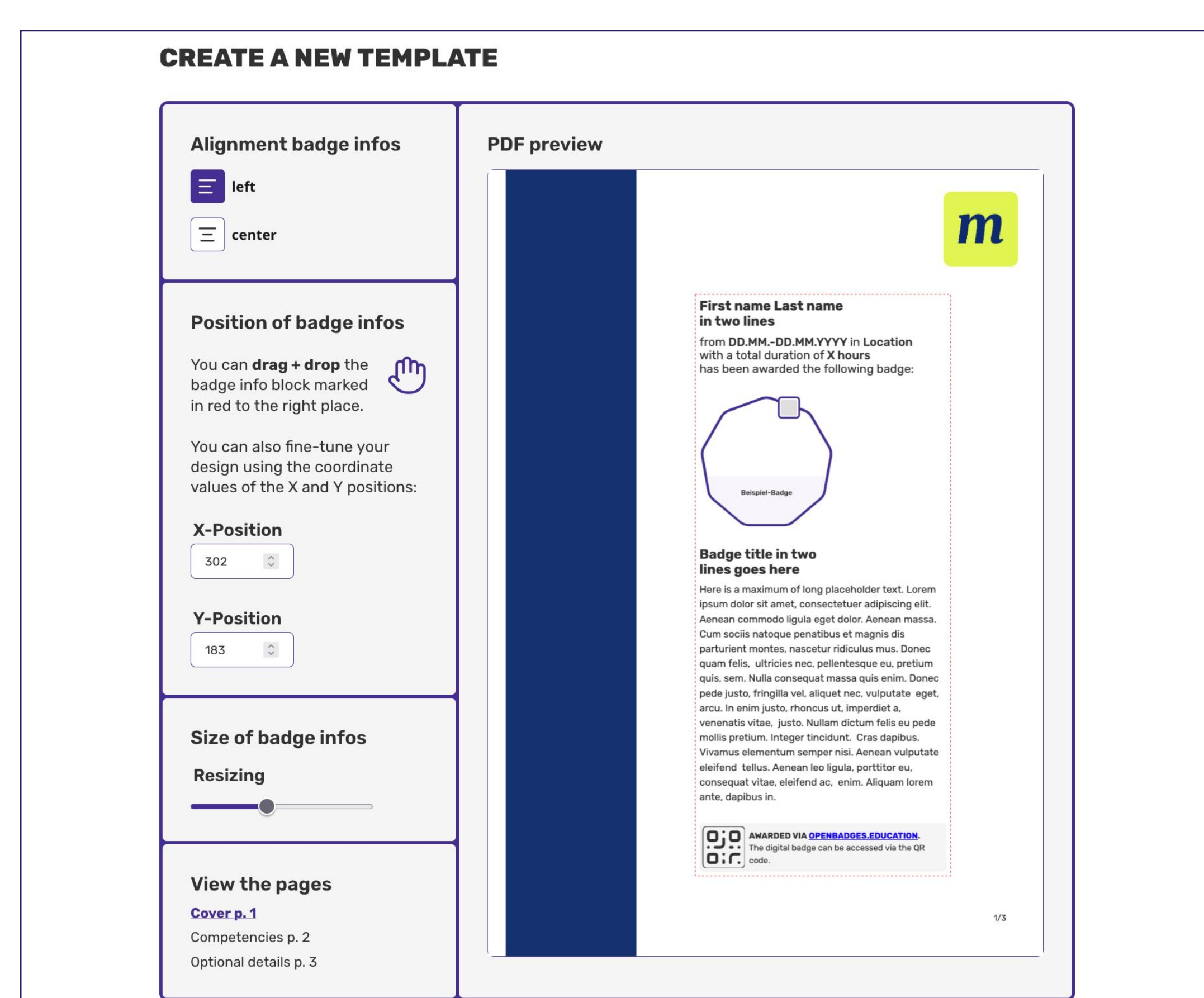
Micro Degree
combines several badges into a larger learning unit. When learners have earned all the badges on this **learning path**, they automatically receive the Micro Degree.

0 of 30 Micro Degrees created. [Info](#)

The badge creation view on OEB.

Custom PDF certificate templates

With every badge issued, learners automatically receive a PDF certificate that documents their achievement as well. Institutions can upload their own certificate templates with custom branding, logos, colors, and design elements. These templates are assigned to badges during creation and automatically applied whenever the corresponding badge is issued.



CREATE A NEW TEMPLATE

Alignment badge infos

☒ left
☐ center

Position of badge infos

You can **drag + drop** the badge info block marked in red to the right place.

You can also fine-tune your design using the coordinate values of the X and Y positions:

X-Position
302

Y-Position
183

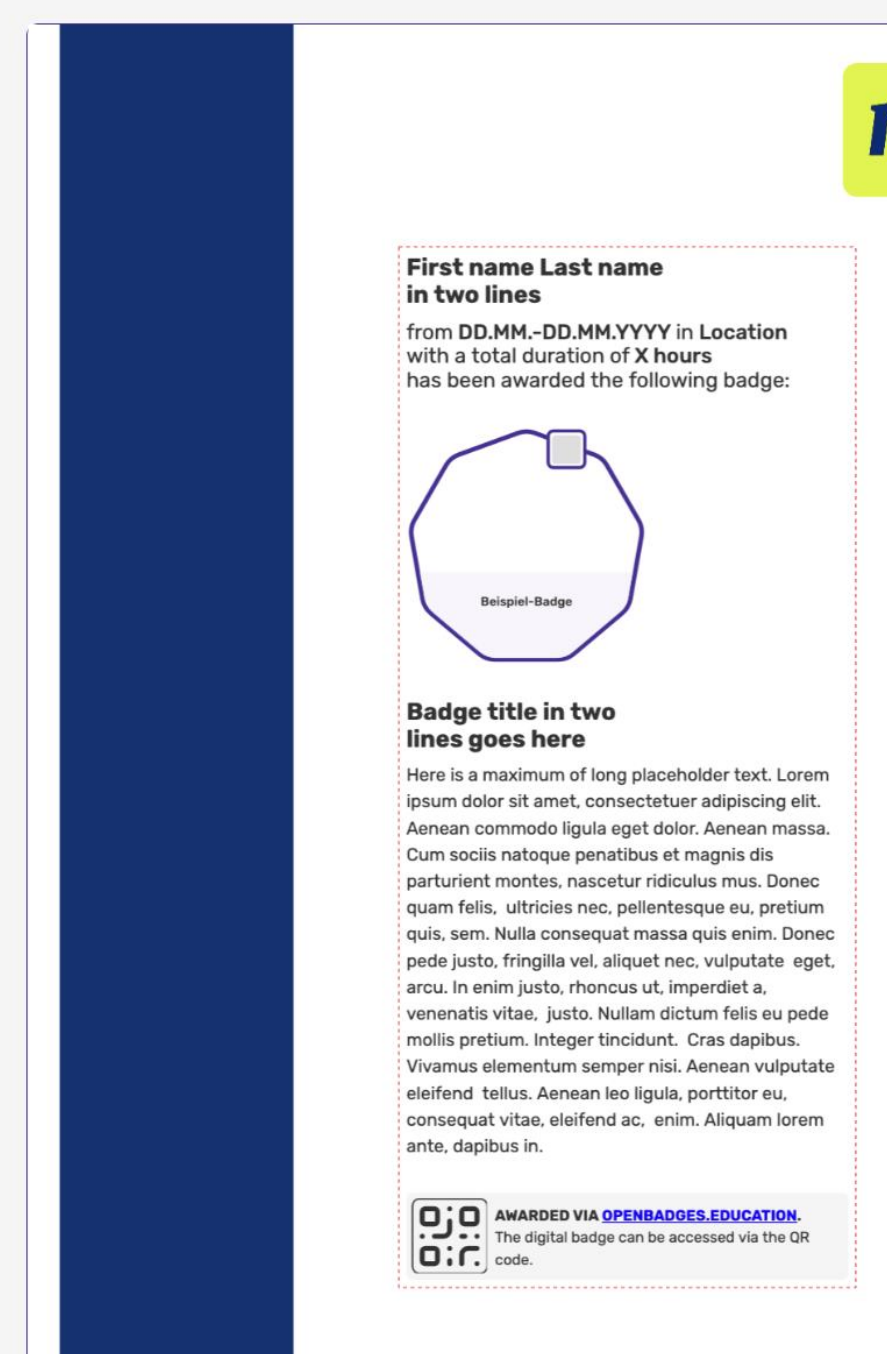
Size of badge infos

Resizing

View the pages

Cover p. 1
Competencies p. 2
Optional details p. 3

PDF preview



The PDF-Editor on OEB.

Trigger and manage badge issuing process

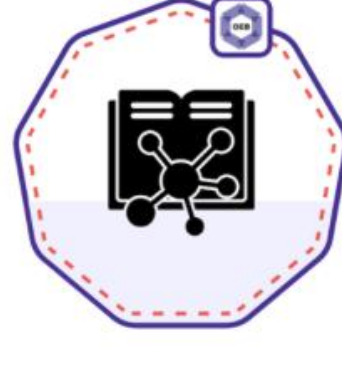
The API enables institutions to issue and manage badges directly from their own systems:

- manually issuing badges to specific email addresses
- automatically issuing badges to learners when predefined conditions in the institution's system are met (for example, passing an exam)

Learners receive the badge via email, including a PDF certificate.

Use case: After completing a learning unit in the institution's digital learning platform, the badge is automatically sent to the learner.

Congratulations
Madison Smith,
you've received a **BADGE** from Open Educational Badges!



You have successfully participated at the educational offering **AI Course**

By participating you have improved the following competencies:

work in teams [E]	1:00 h
deep learning [E]	1:00 h
machine learning [E]	1:00 h
research new ideas [E]	1:00 h
think innovatively [E]	1:00 h
principles of artificial intelligence [E]	1:00 h

Issued by: OEB

CERTIFICATE

Madison Smith
earned the following Badge
on **10.06.2026 online**
within **4 hours**:



AI Course

Artificial intelligence is on everyone's lips – but how can you use artificial intelligence to support your own work and improve its quality? In this course, participants will learn the basics of artificial intelligence and write their own prompts to achieve the best results. Strategies for optimising research and writing style will be taught. Ethical considerations and data sovereignty will also be covered. The aim is to use AI with confidence.

CREATED VIA **OPENBADGES.EDUCATION**
Use the QR code to retrieve the digital badge.

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COMPETENCIES
that **Madison Smith** has acquired with the Badge **AI Course**:

work in teams [E]	1:00 h
deep learning [E]	1:00 h
machine learning [E]	1:00 h
research new ideas [E]	1:00 h
think innovatively [E]	1:00 h
principles of artificial intelligence [E]	1:00 h

AWARD CRITERIA

- Active Participation

[E] = Competency according to ESCO (European Skills, Competences, Qualifications and Occupations).
The competence descriptions according to ESCO are available at <https://esco.ec.europa.eu/>.

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Badge email.

PDF certificate for the badge, pages 1 and 2.

Wallet and competency profile for learners

OEB provides structured data for the following elements:

- a wallet for collecting earned badges
- a consolidated view of the competencies strengthened through these badges
- visualisation of the individual competency profile

This data can be retrieved via the API and processed within the institution's own interface.

Use case: An app can display a person's competency profile derived from collected badges as part of their individual learning progress.

Hallo Annika, willkommen in deinem Rucksack!

Profil | Badges | Kompetenzen | Lernpfade | Sammlungen

In diesen Bereichen hast du am meisten Kompetenzen gestärkt:

Beweise den Messungen über die Erlese, um alle zugehörigen Kompetenzen zu sehen.



Hallo Annika, willkommen in deinem Rucksack!

Profil | Badges | Kompetenzen | Lernpfade | Sammlungen

Badges: 28

Badges durchsuchen

Sortieren nach: Neueste zuerst

Nach Institutionen gruppieren

3D-Druckvorlesung	3D-Druckvorlesung	Smart Future: Blockchain's
Open Educational Badges	Open Educational Badges	Open Educational Badges
10.12.2025	10.12.2025	01.10.2025
ÖBB/NETZCamp	Fischerei und Meereskunde	Klimawandel
Open Educational Badges	Open Educational Badges	Open Educational Badges
01.10.2025	22.09.2025	12.09.2025
Clean Up Day	Clean Up Day	Clean Up Day
Open Educational Badges	Open Educational Badges	Open Educational Badges
01.09.2025	01.09.2025	01.09.2025
Badges als Schlüssel für	Kompetenz-Badge	Informations- und
Open Educational Badges	Open Educational Badges	Open Educational Badges
01.09.2025	01.09.2025	14.07.2025
Clean Up Day	Creators Coding Camp 1	STAR-App Mitgestalterin
Open Educational Badges	Open Educational Badges	Open Educational Badges
26.06.2025	04.06.2025	15.05.2025

Hallo Annika, willkommen in deinem Rucksack!

Profil | Badges | Kompetenzen | Lernpfade | Sammlungen

Kompetenzen: 59

Lernzeit: 404 Stunden

Neue Kompetenzen

3D-Modellierung [E]	NEU	2:00 h
3D-Druckvorgang [E]	NEU	2:00 h
CAD-Software nutzen [E]	NEU	2:00 h
Kreativ denken [E]	NEU	2:00 h
mit Kollegen und Kolleginnen zusammenarbeiten [E]	NEU	2:00 h
Modelle erstellen [E]	NEU	4:00 h
Im Team arbeiten [E]	NEU	2:00 h
andere zu umweltfreundlichem Verhalten anregen [E]	NEU	2:00 h
Umweltbewusstsein fördern [E]	NEU	2:00 h
Für Nachhaltigkeit werben [E]	NEU	2:00 h

Fähigkeiten

CAD-Software nutzen [E]	2:00 h
Kreativ denken [E]	2:00 h
mit Kollegen und Kolleginnen zusammenarbeiten [E]	2:00 h
Modelle erstellen [E]	4:00 h

Competency profile on OEB.

Collected badges.

Aggregated competencies.

3. iFrames (embedding as OEB views)

In addition to pure API usage, OEB offers the option to **embed selected functions as ready-made visualisations**. The following functions can be integrated into an institution's own platform via iFrames:

- creating and editing badges (excluding badge deletion)
- displaying the learner view (collected badges, competency view, profile visualisation)
- PDF-Editor: Upload and use customized pdf certificate templates.

4. LTI capability (Learning Tools Interoperability)

The features described in section 3 are LTI-enabled and can therefore be **provided securely as seamlessly integrated views directly within existing learning platforms**, without users having to leave the platform or log in again.

Establishing the LTI connection requires coordination with the operators of the OEB platform for the exchange of LTI configuration data.

BENEFITS OF USING THE API

Seamless system integration

Badges are created, issued, and displayed directly within the systems that staff and learners already use, without media breaks or additional logins.

Automation instead of manual processes

Badge issuance and profile updates can run fully automated in the background as soon as predefined trigger conditions are met.

Scalability

The API integration is particularly suitable for organisations that:

- issue large volumes of badges
- want to display learners' competency profiles within their own systems
- aim to integrate badges into their digital workflows

Alignment with standards

OEB badges are based on:

- the technical Open Badges Standard 3.0
- the content standard of the ESCO* framework for saving competencies

This makes them interoperable, understandable across Europe, and usable in the long term.



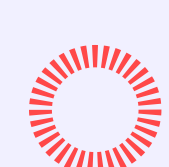
TECHNICAL DOCUMENTATION

- Introduction: <https://docs.openbadges.education>
- Detailed endpoint documentation: <https://api.openbadges.education/docs/v2/>



Interested?
Here's the link to the
OEB Platform

www.openbadges.education



CONTACT

hallo@openbadges.education

* ESCO is the EU's competency taxonomy and includes around 14,000 skills in 28 languages (https://esco.ec.europa.eu/de/classification/skill_main). When creating badges, (educational) institutions can use our AI assistant to select the appropriate competencies for their learning units from this set of 14,000 skills. As a result, all badges use a shared competency language, are comparable, and remain interoperable regardless of where they were earned.