

Integrating Open Badge Factory / CanCred Factory with Blackboard LMS using LTI 1.3

version	Date	Release note	version
1.0	2023-02-27	Document issued	1.0

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About LTI

Learning Tools Interoperability (LTI) is a standard developed by [1EdTech Consortium](#), which allows courseware and learning tools from different vendors to be launched within a learning platform, often an LMS.

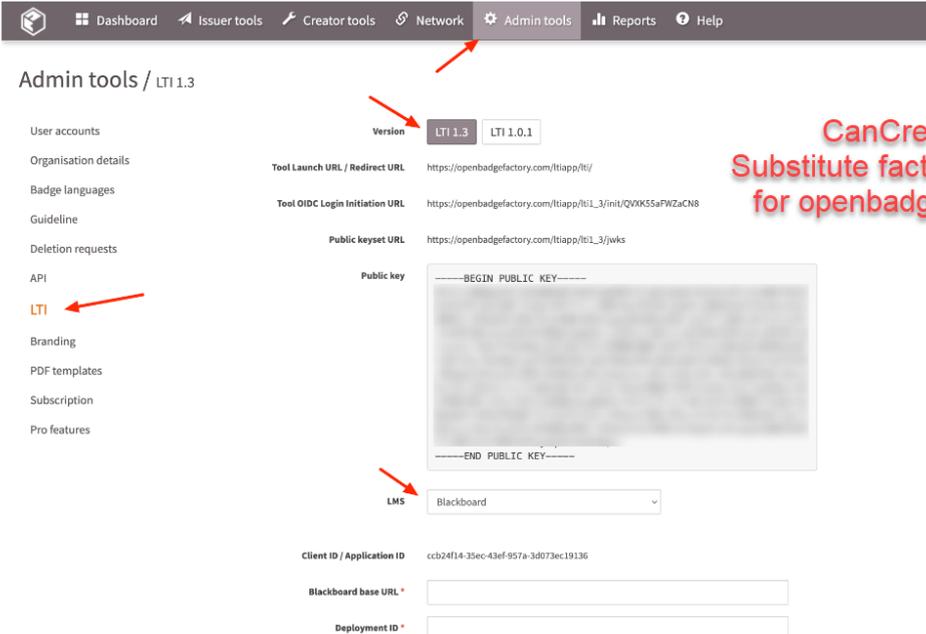
LTI Integration provides a link between an LTI supported LMS and your account in [Factory](#)¹. Our customers can use LTI 1.3 integration with Blackboard. LTI integration requires a Pro subscription level. LTI 1.3 has a more straightforward upgrade path than other versions and the full support and endorsement of major platform providers.

Connecting [Factory](#) to Blackboard

First, check in your Blackboard LMS that LTI tools are enabled. In order to do this, you can go to **System** > **Admin tools and Utilities: Tools**. In here, look for the tool labelled "LTI" and make sure the availability for this tool is set to on.

Step 1: Add LTI tool

Log in to [Factory](#) and go to **Admin Tools** -> **LTI**. Choose Version: 1.3 and LMS: Blackboard. In this page you can see configuration values you need to connect the tool to Blackboard.



The screenshot shows the 'Admin tools / LTI 1.3' configuration page. The navigation menu at the top includes Dashboard, Issuer tools, Creator tools, Network, Admin tools (highlighted with a red arrow), Reports, and Help. The left sidebar lists various admin tools, with 'LTI' highlighted by a red arrow. The main content area shows configuration options for LTI 1.3, including Version (LTI 1.3 selected), Tool Launch URL / Redirect URL, Tool OIDC Login Initiation URL, Public keyset URL, and Public key (with a red arrow pointing to the key area). The LMS dropdown menu is set to 'Blackboard' (with a red arrow). At the bottom, there are input fields for Client ID / Application ID, Blackboard base URL, and Deployment ID.

**CanCred users:
Substitute [factory.cancred.ca](#)
for [openbadgfactory.com](#)**

¹ Factory stands for Open Badge Factory or CanCred Factory

1. In Blackboard, go to **System Admin** -> **Integrations** -> **LTI Tool Providers**
2. Click **Register LTI 1.3/Advantage Tool**
3. Copy and paste the Client ID / Application ID value from OBF config form and click **Submit**
4. Set tool status as **Approved**
5. Select **User Fields to Send**:
 - Role in Course
 - Name
 - Email Address
6. Copy **Deployment ID** value from the form. You will need this in step 2.
7. Click **Submit**

Course tool placement is created by default. You can review placements by selecting the menu option **Manage Placements** that appears next to the domain in LTI tool providers list.

Step 2: Create REST API Integration

REST API integration is needed so that the tool can access course members and completion records for automatic badge issuing.

1. In Blackboard, go to **System Admin** -> **Integrations** -> **REST API Integrations**
2. Click **Create Integration**
3. Copy and paste the Client ID / Application ID value from **Factory** config form
4. Pick the user that this integration should act as.
5. Click **Submit**

Administrator Panel REST API Integrations Create Integration

Create Integration

* Indicates a required field.

GENERAL INFORMATION

* Application ID

* Learn User

* End User Access Yes No

* Authorized To Act As User Yes No Service Default (No)

Click **Submit** to proceed.

Step 3: Add Tool Deployment to Factory

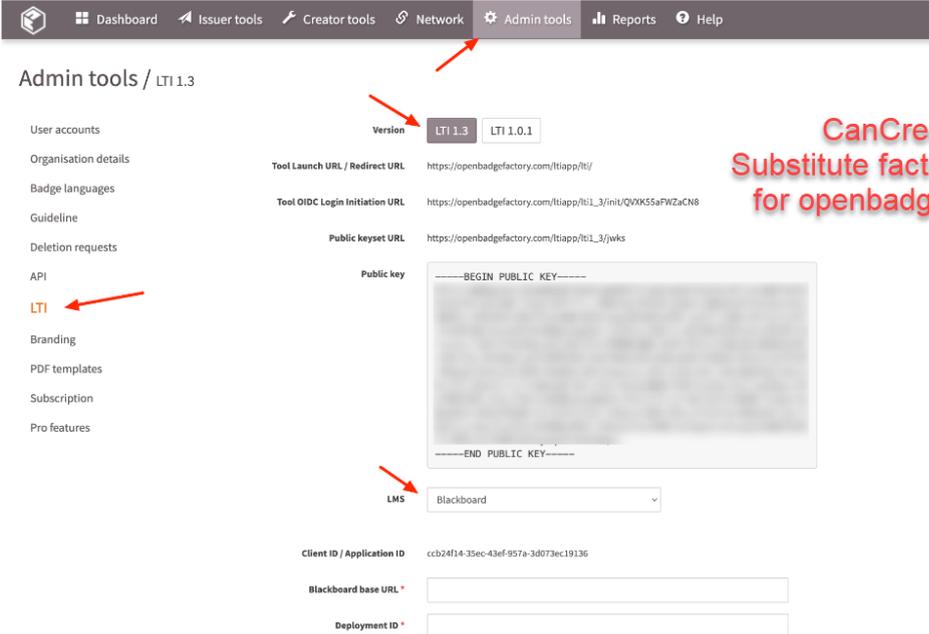
In **Factory**, input the following values to the LTI settings form:

Blackboard base URL => your Blackboard installation url

Deployment ID => Deployment ID created in step 1.

Optionally add Node ID if Institutional Hierarchy is in use for this tool deployment

Click Add



The screenshot shows the 'Admin tools / LTI 1.3' configuration page. The 'Admin tools' menu item is highlighted in the top navigation bar. The 'LTI' menu item in the left sidebar is also highlighted. The form contains the following fields:

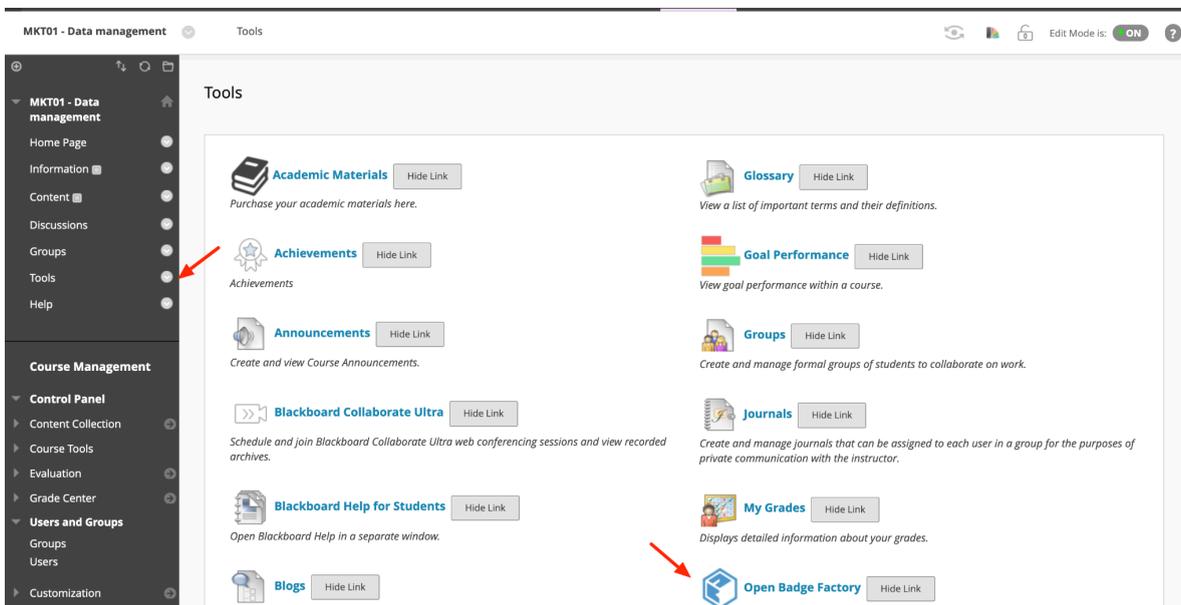
- Version:** Radio buttons for 'LTI 1.3' (selected) and 'LTI 1.0.1'.
- Tool Launch URL / Redirect URL:** `https://openbadgfactory.com/tiapp/ti/`
- Tool OIDC Login Initiation URL:** `https://openbadgfactory.com/tiapp/ti1_3/initi/QVXK55aFWZaCN8`
- Public keyset URL:** `https://openbadgfactory.com/tiapp/ti1_3/jwks`
- Public key:** A text area containing a blurred public key string, bounded by '-----BEGIN PUBLIC KEY-----' and '-----END PUBLIC KEY-----'.
- LMS:** A dropdown menu with 'Blackboard' selected.
- Client ID / Application ID:** `ccb24f14-35ec-43ef-957a-3d073ec19136`
- Blackboard base URL *:** An empty text input field.
- Deployment ID *:** An empty text input field.

CanCred users:
Substitute factory.cancred.ca
for openbadgfactory.com

Usage

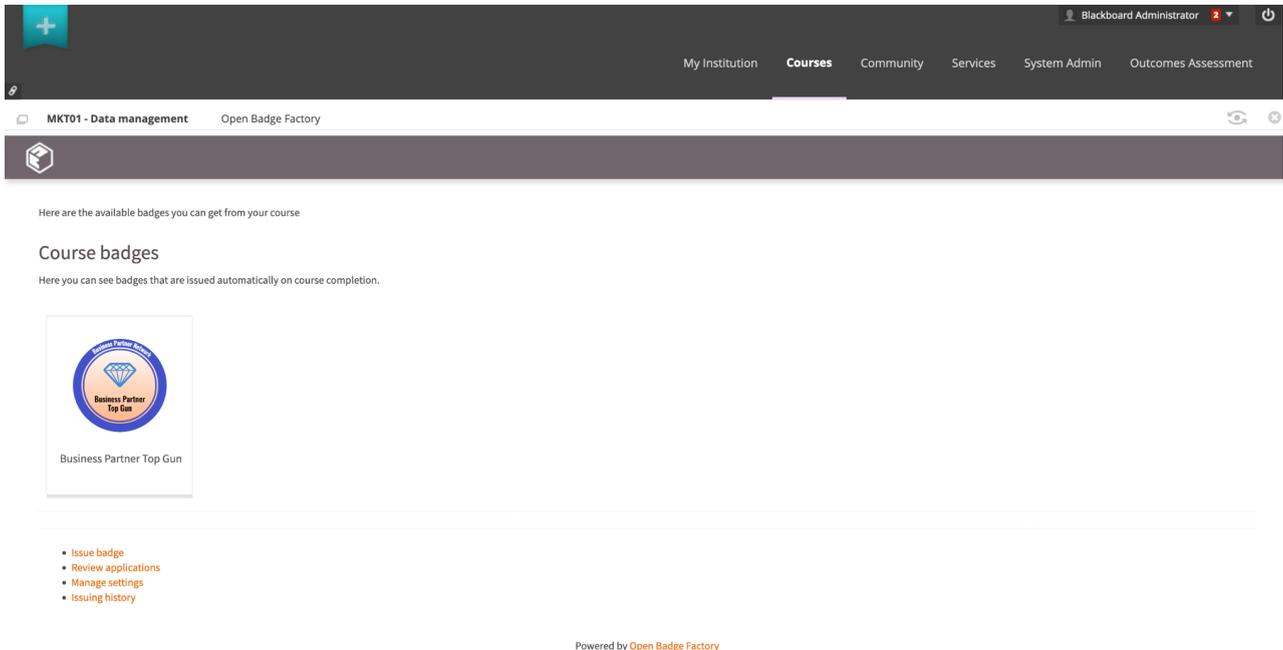
Add LTI Link to Courses

1. In Blackboard, go to a Course, turn edit mode on
2. Go to course content and select **Tools** -> More Tools -> **Open Badge Factory** or **CanCred Factory**
3. Optionally edit the link name and description
4. Click Submit
5. Turn edit mode off



Issuing a badge to course participants

1. In Blackboard, from your Course, go to **Tools** > **Open Badge Factory** or **CanCred Factory** > **Issue badge**



Blackboard Administrator 2

My Institution **Courses** Community Services System Admin Outcomes Assessment

MKT01 - Data management Open Badge Factory

Here are the available badges you can get from your course

Course badges

Here you can see badges that are issued automatically on course completion.

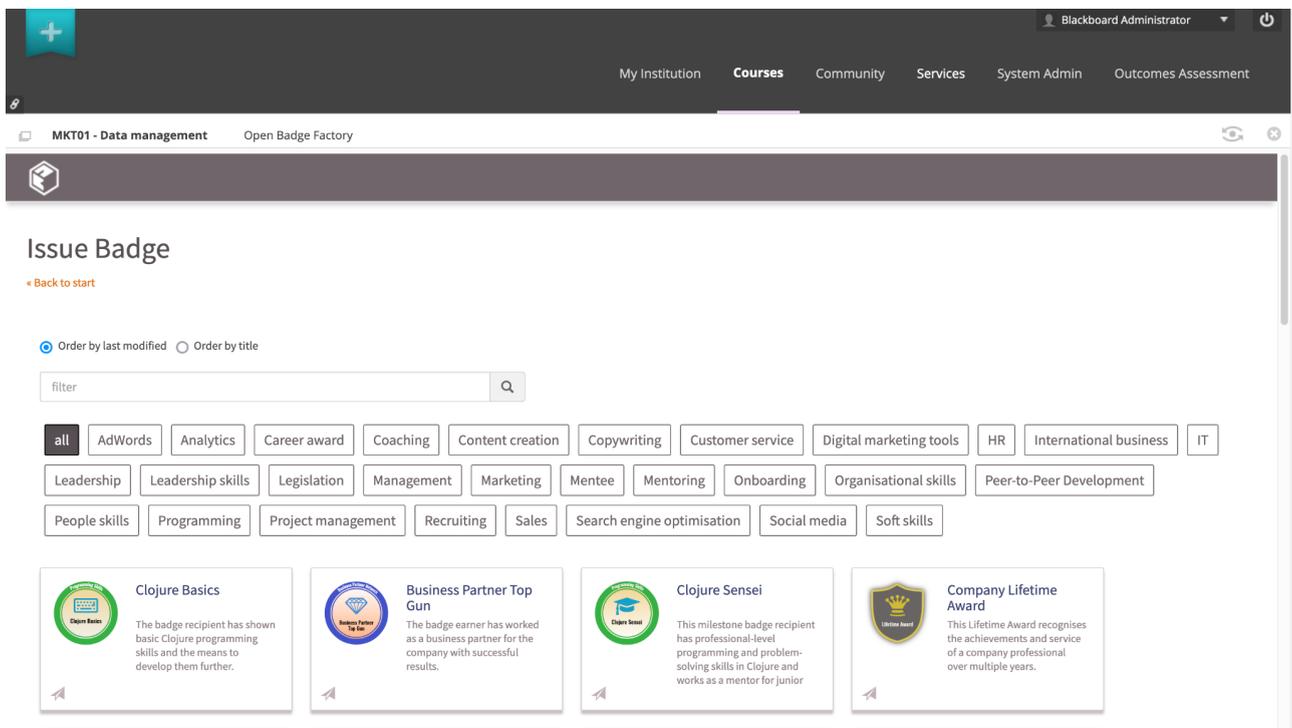


Business Partner Top Gun

- Issue badge
- Review applications
- Manage settings
- Issuing history

Powered by Open Badge Factory

2. Select the badge you want to issue:



Blackboard Administrator

My Institution **Courses** Community Services System Admin Outcomes Assessment

MKT01 - Data management Open Badge Factory

Issue Badge

• Back to start

Order by last modified Order by title

filter

all AdWords Analytics Career award Coaching Content creation Copywriting Customer service Digital marketing tools HR International business IT Leadership Leadership skills Legislation Management Marketing Mentee Mentoring Onboarding Organisational skills Peer-to-Peer Development People skills Programming Project management Recruiting Sales Search engine optimisation Social media Soft skills



Clojure Basics
The badge recipient has shown basic Clojure programming skills and the means to develop them further.



Business Partner Top Gun
The badge earner has worked as a business partner for the company with successful results.



Clojure Sensei
This milestone badge recipient has professional-level programming and problem-solving skills in Clojure and works as a mentor for junior



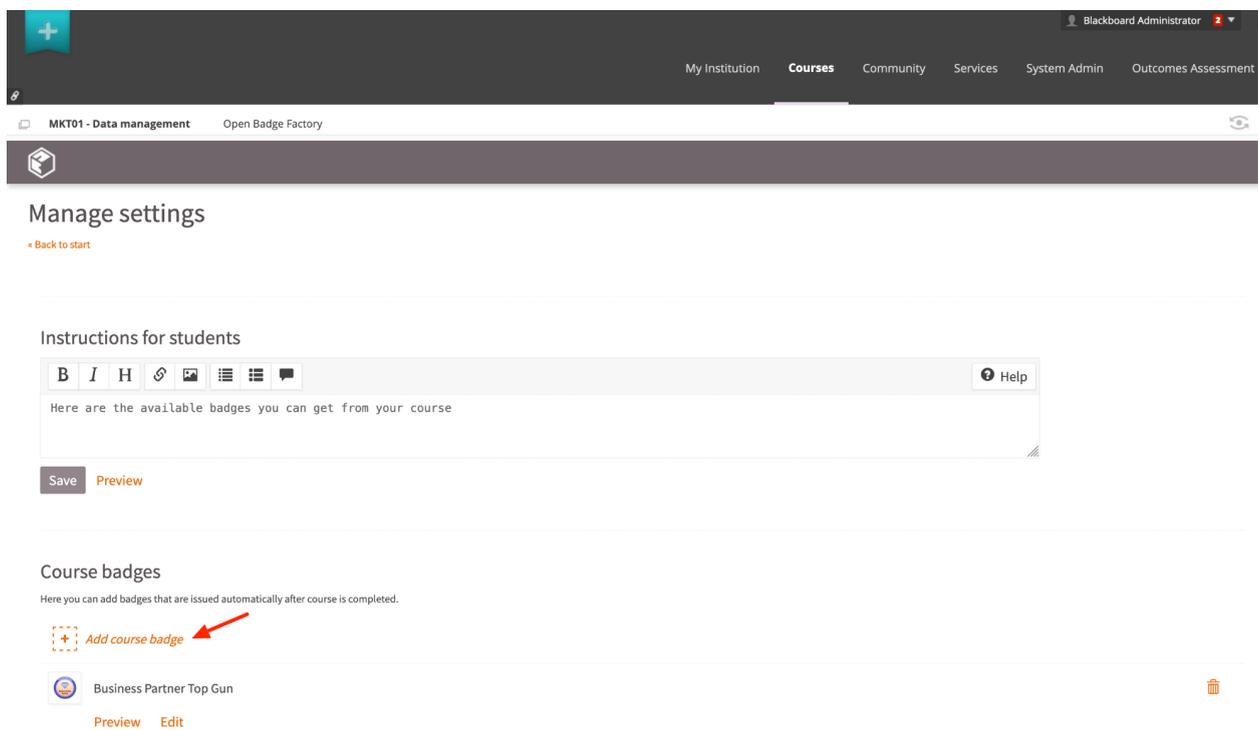
Company Lifetime Award
This Lifetime Award recognises the achievements and service of a company professional over multiple years.

6. Define all your badge details
7. Select your students

8. Edit your email message
9. Issue your badge

Issuing a badge automatically on course completion or score

1. In the LTI tool, click **Manage settings**
2. Click *Authorize button* (*button will be hidden if this tool has been already authorized*)
3. You can specify generic **Instructions for students** concerning your badges
4. Click **Add course badge** and pick the badge to issue



Blackboard Administrator

My Institution **Courses** Community Services System Admin Outcomes Assessment

MKT01 - Data management Open Badge Factory

Manage settings

[Back to start](#)

Instructions for students

B I H [Link] [Image] [List] [Table] [Quote] [Help]

Here are the available badges you can get from your course

Save [Preview](#)

Course badges

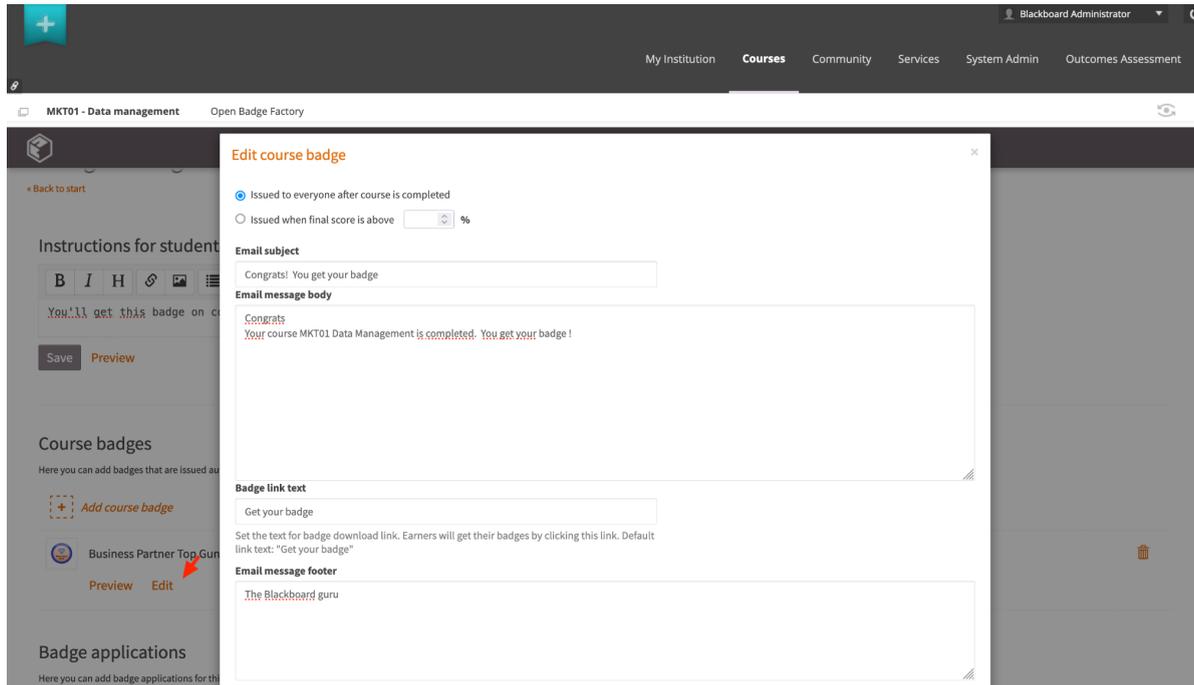
Here you can add badges that are issued automatically after course is completed.

[+ Add course badge](#) 

 Business Partner Top Gun 

[Preview](#) [Edit](#)

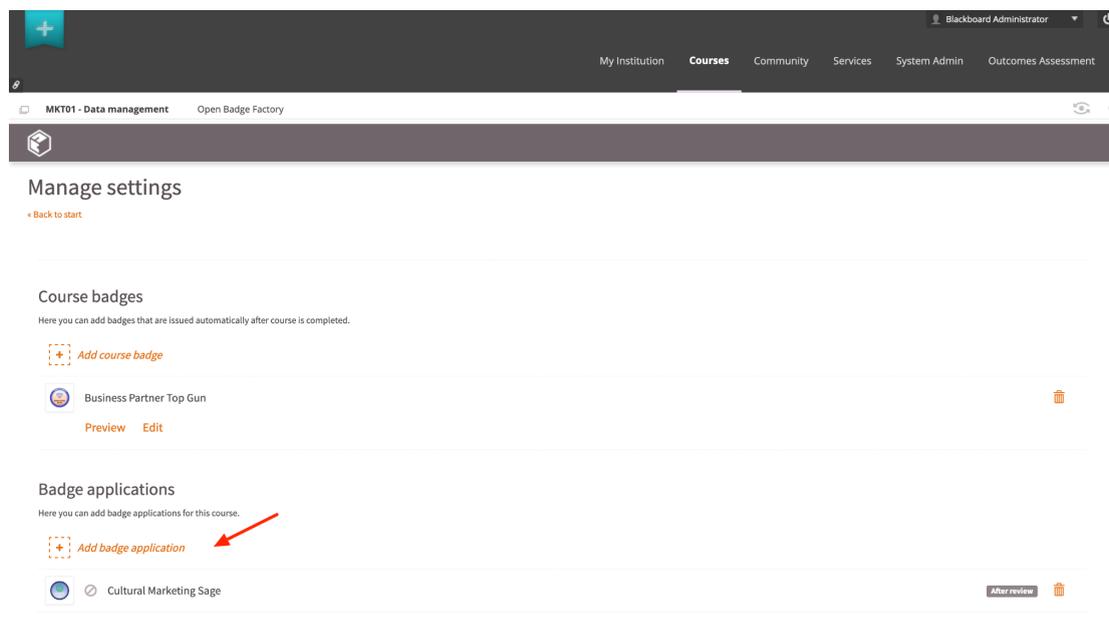
5. Click **Edit** on the badge
6. Choose if the badge is issued to all course members or based on final score
7. Input the email message that is sent when the badge is issued



Please note that course badges are issued periodically once a day after course completions are checked.

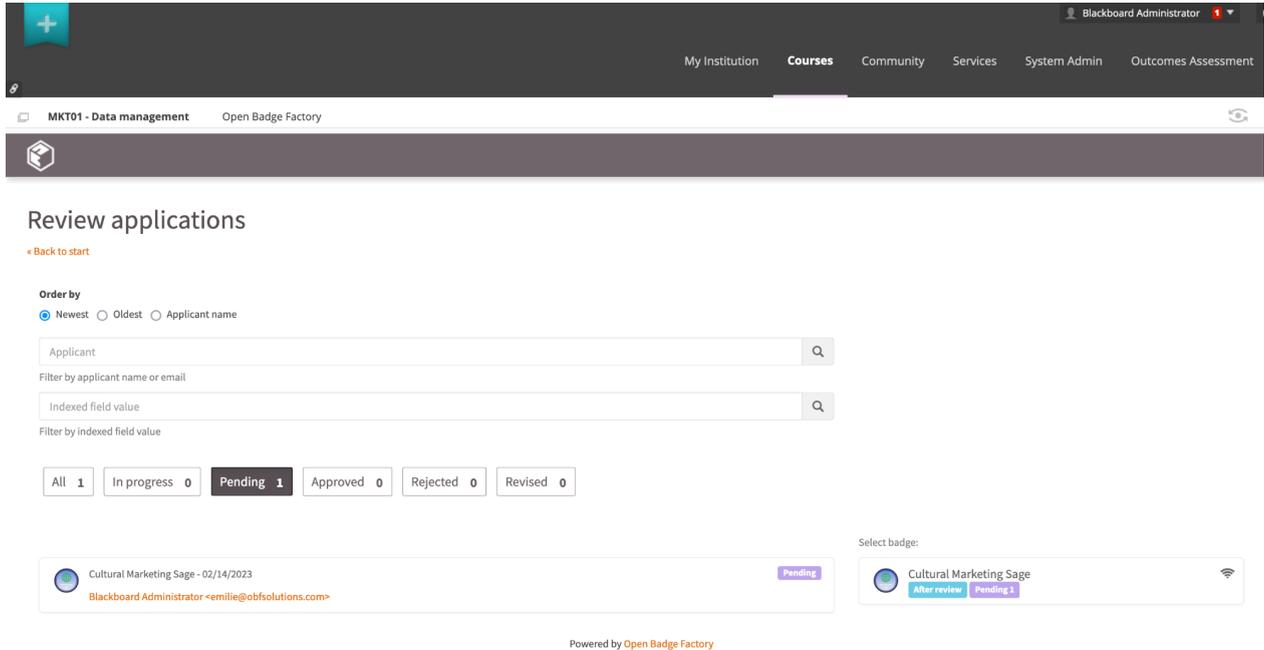
Adding badge applications for a course

1. In the LTI tool, click **Manage settings**
2. Click **Add badge application**
3. Select the badge application you want to add to the course



Reviewing badge applications

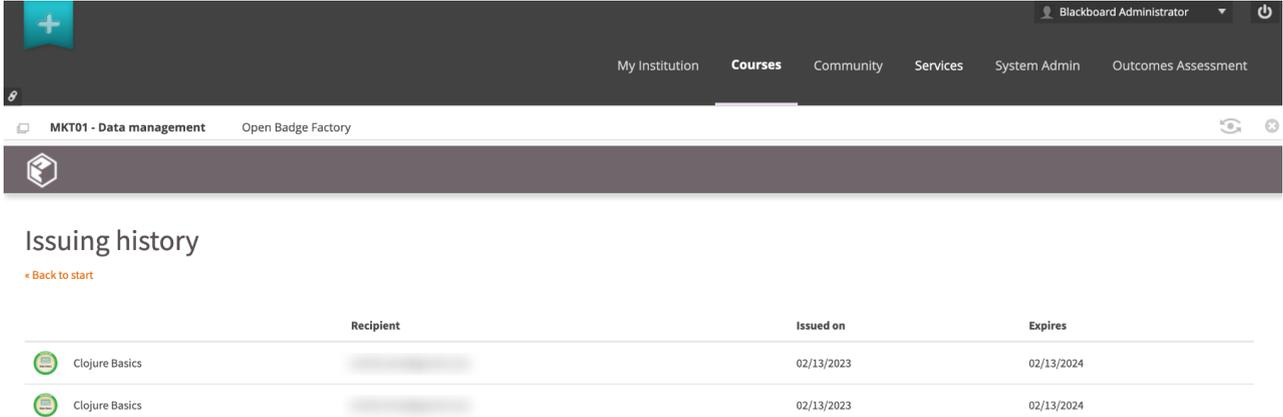
1. In the LTI tool, click **Manage settings**
2. Click **Review applications**



The screenshot shows the Blackboard LTI tool interface for reviewing badge applications. The top navigation bar includes "My Institution", "Courses", "Community", "Services", "System Admin", and "Outcomes Assessment". The current page is titled "Review applications" and includes a "Back to start" link. The interface features a search bar for "Applicant" and a filter for "Indexed field value". A summary bar shows the status of applications: All 1, In progress 0, Pending 1, Approved 0, Rejected 0, and Revised 0. A list of applications is displayed, with one application for "Cultural Marketing Sage - 02/14/2023" by "Blackboard Administrator <emilie@obfsolutions.com>" in a "Pending" state. A "Select badge:" dropdown menu is also visible, showing the selected badge "Cultural Marketing Sage" with "After review" and "Pending 1" indicators. The footer indicates the tool is "Powered by Open Badge Factory".

Issuing history

You can get your issuing history. From your Course, go to **Tools** > **Open Badge Factory** or **CanCred Factory** > **Issuing history**:

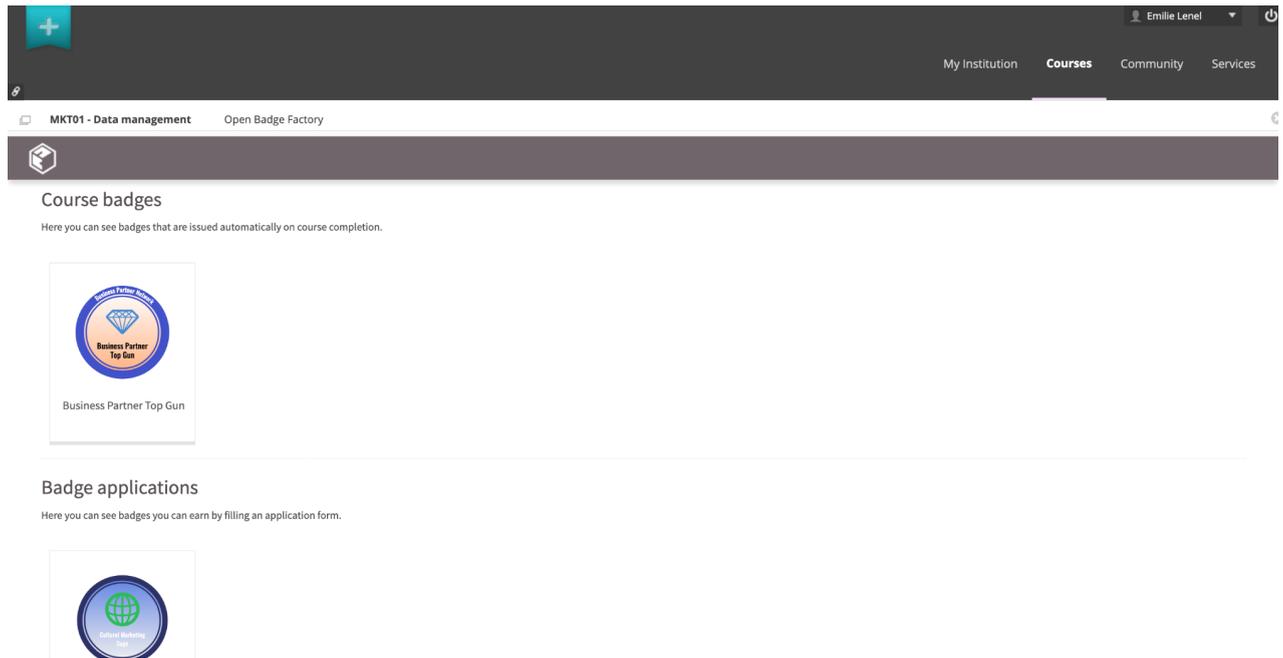


The screenshot shows the Blackboard interface for an administrator. The top navigation bar includes 'My Institution', 'Courses', 'Community', 'Services', 'System Admin', and 'Outcomes Assessment'. The user is logged in as 'Blackboard Administrator'. The page title is 'MKT01 - Data management' and 'Open Badge Factory'. Below the title is a table with the following data:

	Recipient	Issued on	Expires
	Clojure Basics	02/13/2023	02/13/2024
	Clojure Basics	02/13/2023	02/13/2024

Student view

Your students can view course badges and badge applications from the course > **Tools** > **Open Badge Factory** or **CanCred Factory**:



The screenshot shows the Blackboard interface for a student. The top navigation bar includes 'My Institution', 'Courses', 'Community', and 'Services'. The user is logged in as 'Emilie Lenel'. The page title is 'MKT01 - Data management' and 'Open Badge Factory'. Below the title, there are two sections:

Course badges
Here you can see badges that are issued automatically on course completion.


Business Partner Top Gun

Badge applications
Here you can see badges you can earn by filling an application form.

