# 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 |

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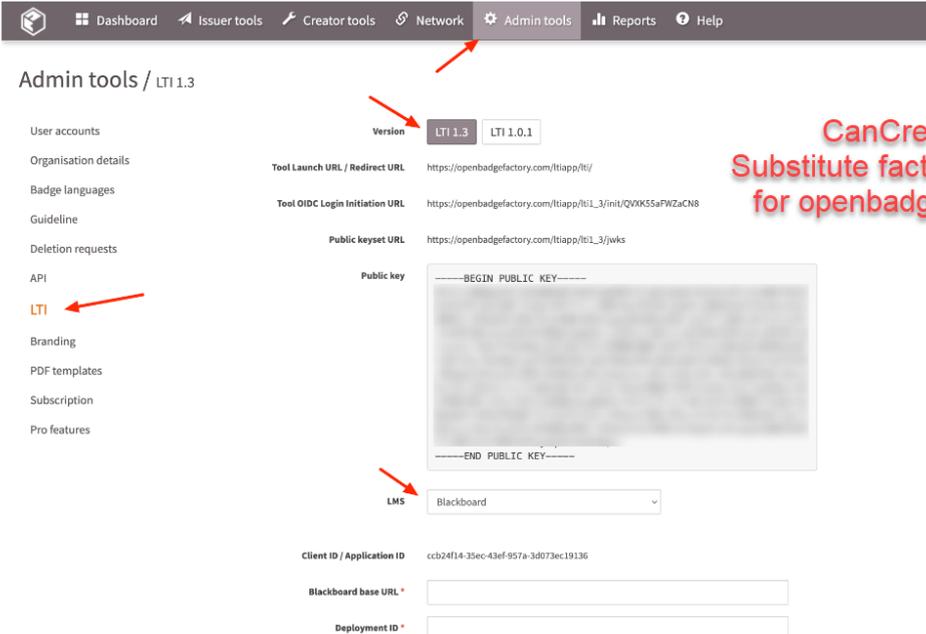
LTI Integration provides a link between an LTI supported LMS and your account in Factory[1]. Our customers can use LTI 1.3 integration with **Blackboard**. LTI integration requires a Pro subscription level. LTI 1.3 has a more straightforward upgrade path than other versions and the full support and endorsement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



---

[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                                              Browse...

★ End User Access          ⦿ Yes  ○ No

★ Authorized To Act As User   ○ Yes  ○ No  ⦿ Service Default (No)

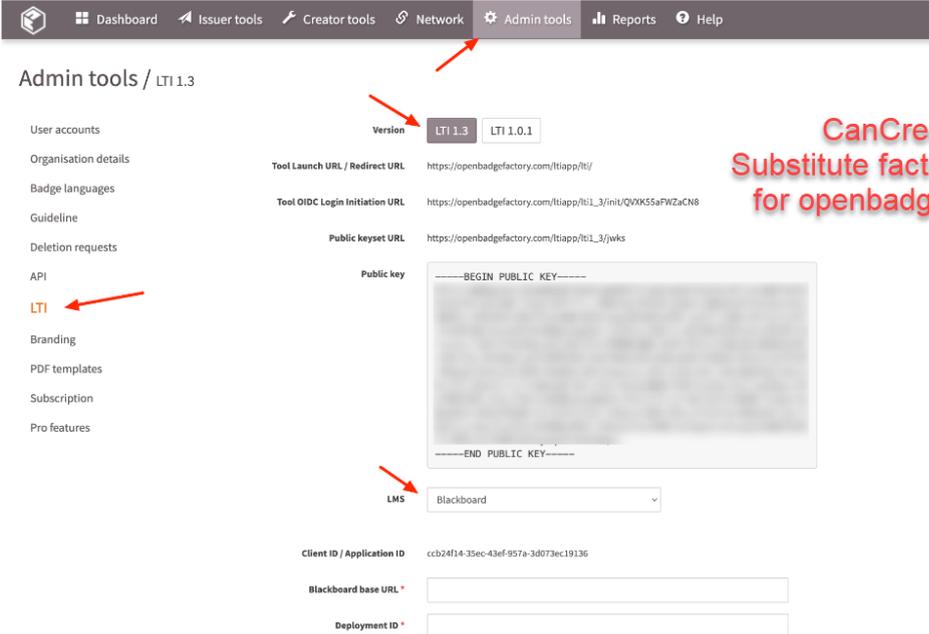*Click **Submit** to proceed.*

# 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
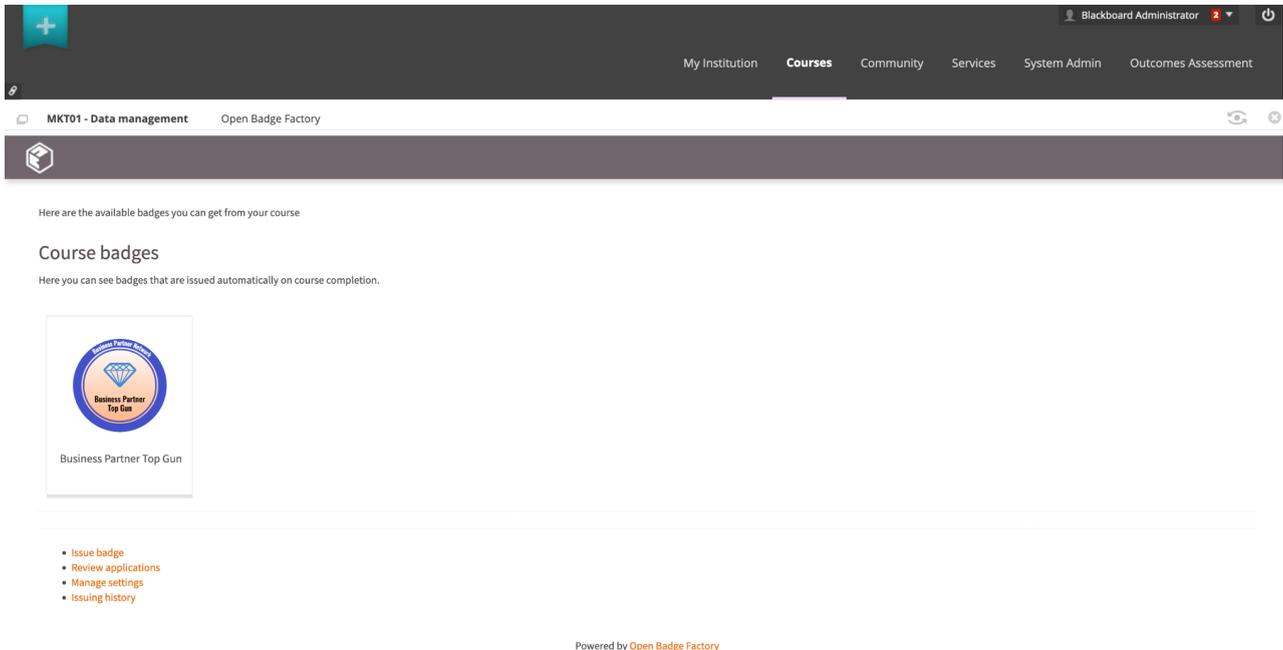
Click Add

# 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
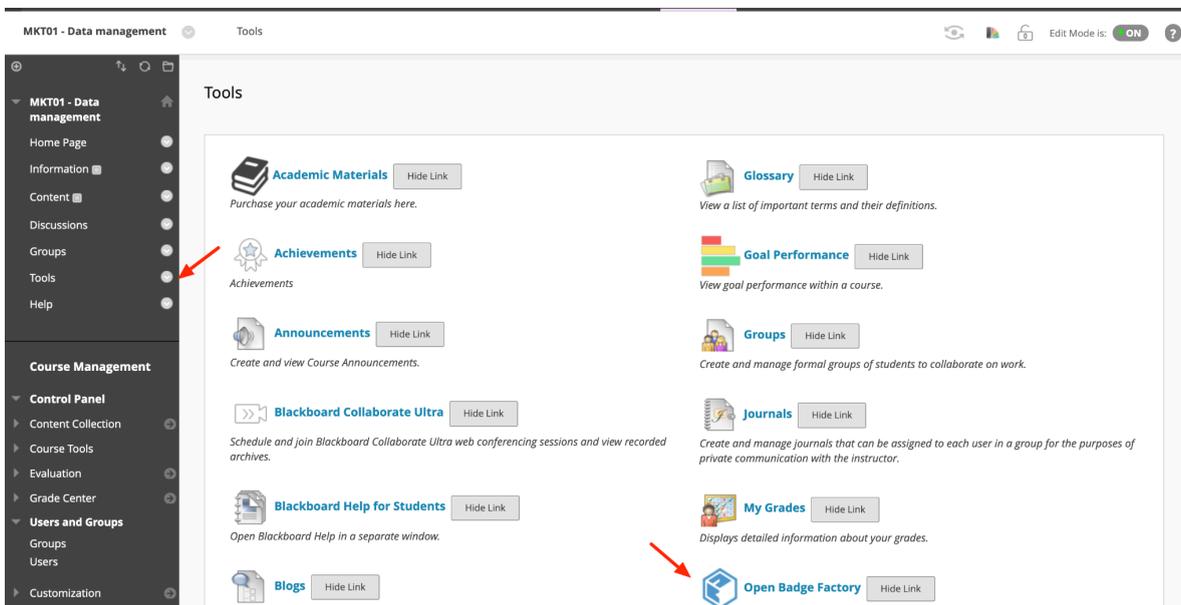
# Issuing a badge to course participants

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



2. Select the badge you want to issue:



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



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
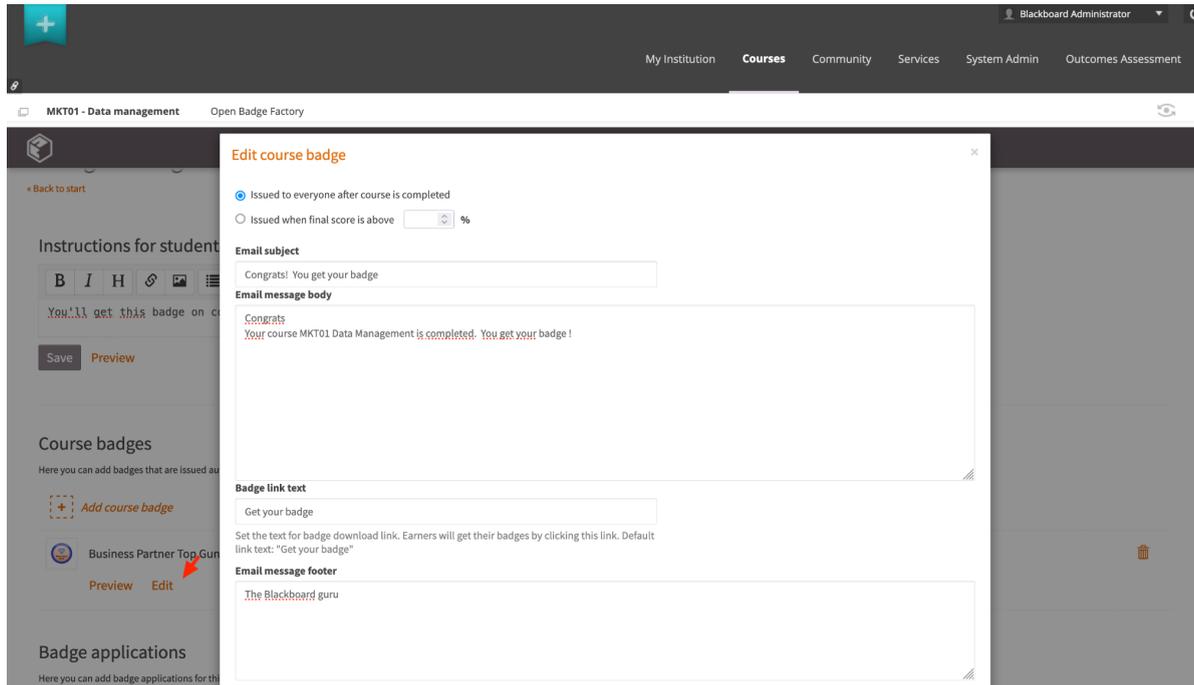
Please note that course badges are issued periodically once a day after course completions are checked.
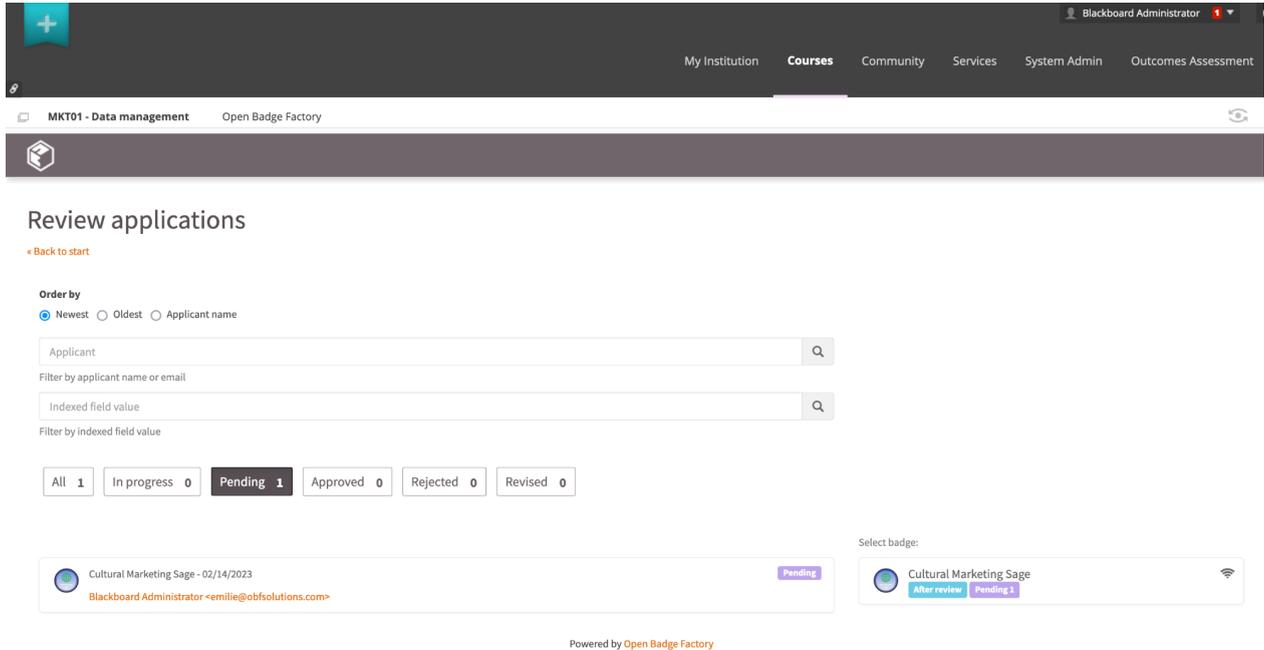
## Adding badge applications for a course

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
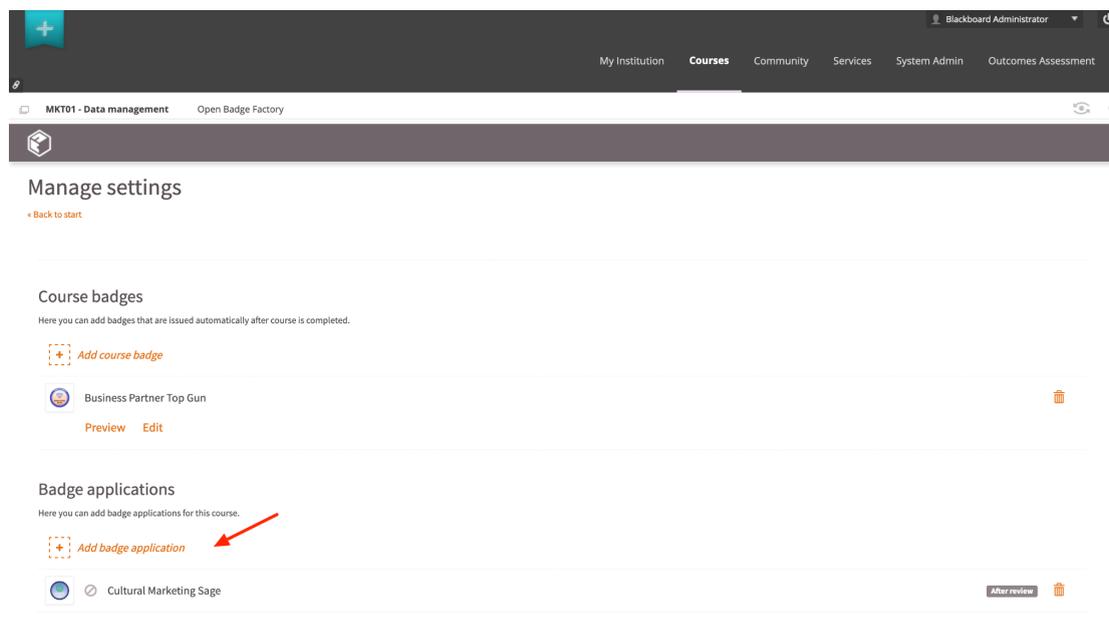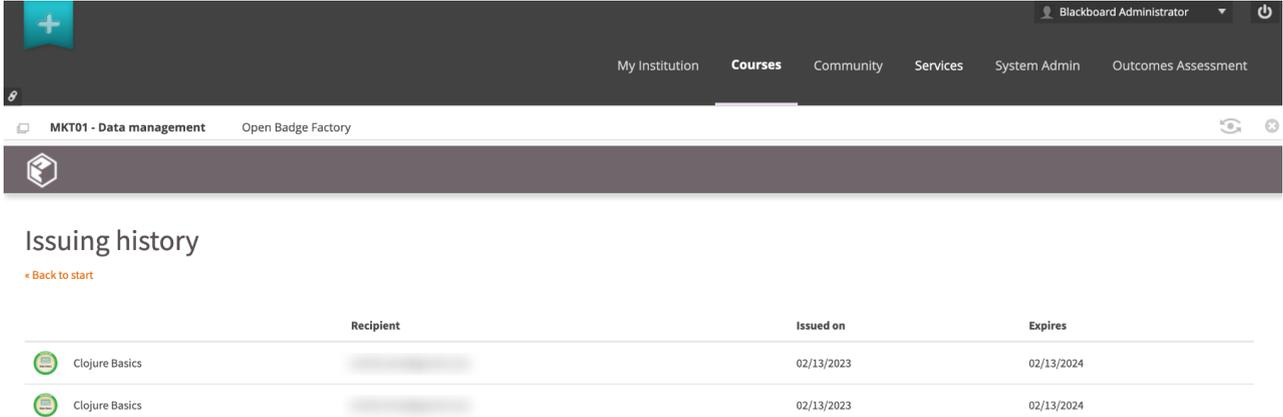
# Reviewing badge applications

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

## Issuing history

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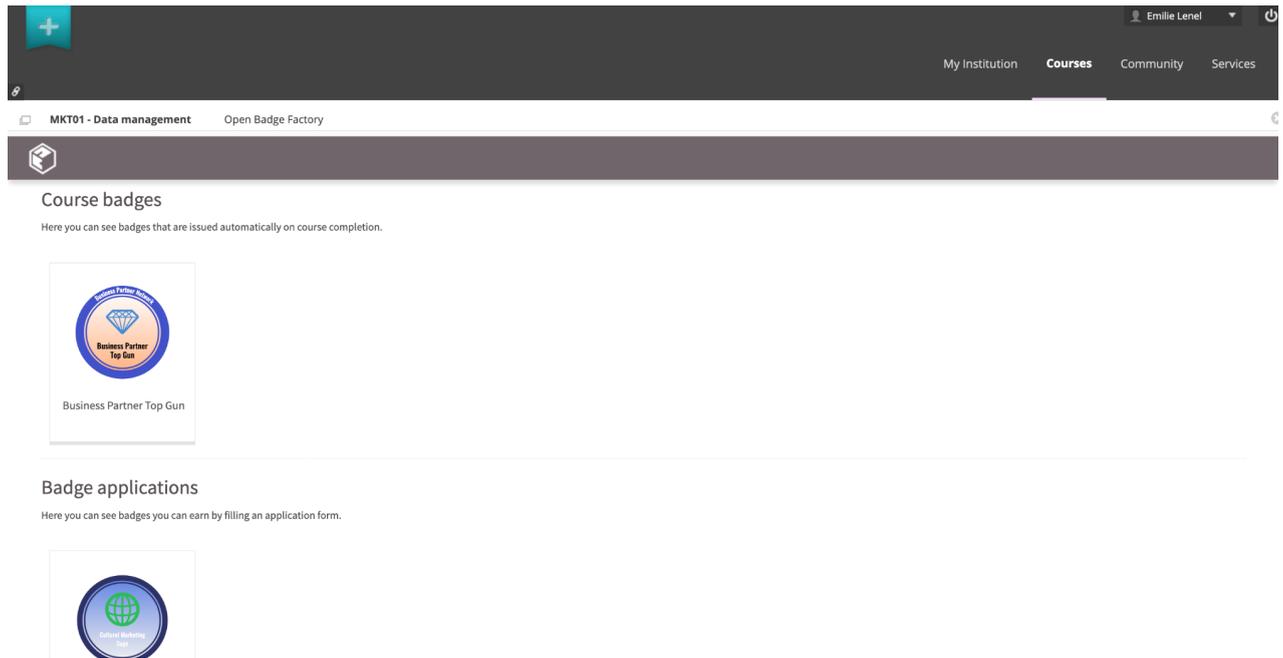


## Student view

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