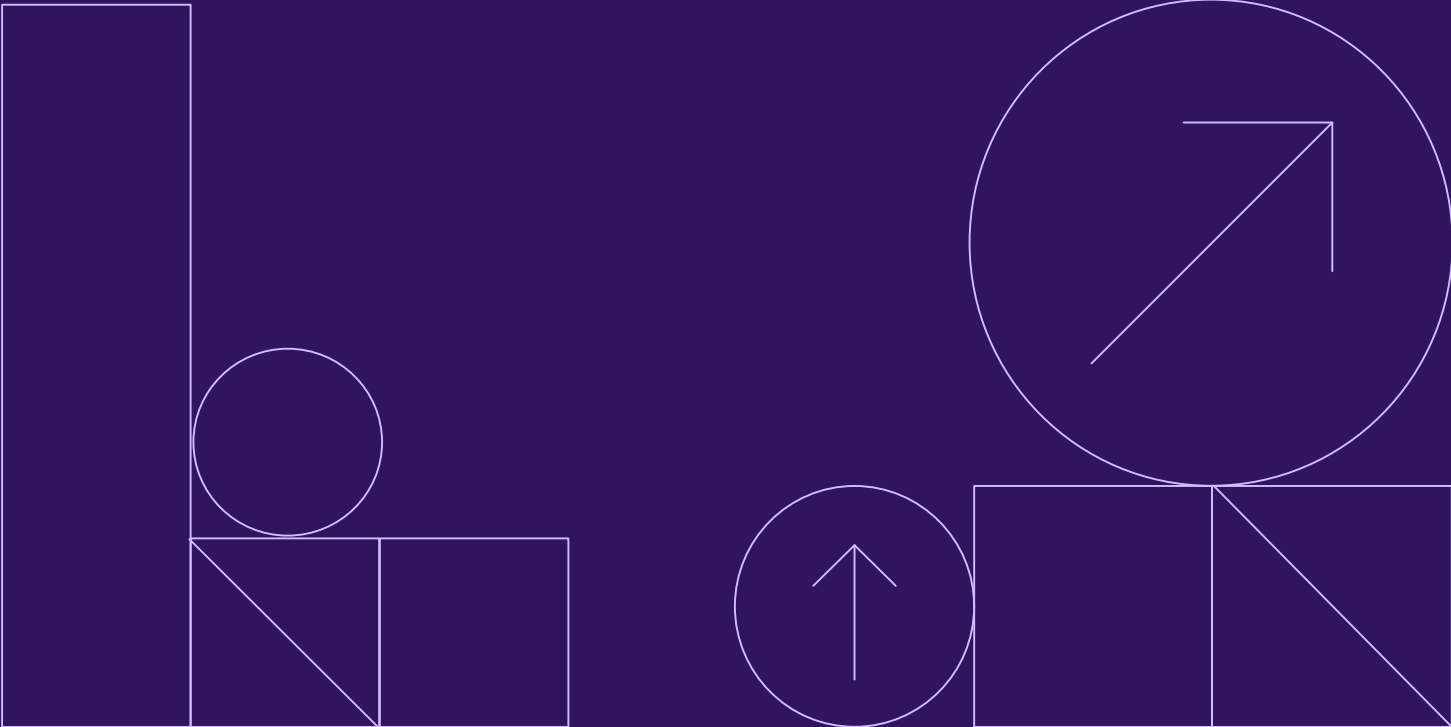


# Teacher Toolkit



# Table of contents

## **Registration**

Creating an Open P-TECH Account  
Registering Students

## **Navigating Open P-TECH**

Spotlight Section  
Recommended Tab  
Your Learning Tab

## **Teacher Resources**

Teacher Resource Links  
Diversity and Inclusion  
Teacher Resources: Distance Learning  
Support Learning Plan Builder  
Learning Activity Catalog  
Channels  
Learning Plans  
How to Assign Required Learning

## **Reports**

How to Track Student Progress

## **Badges**

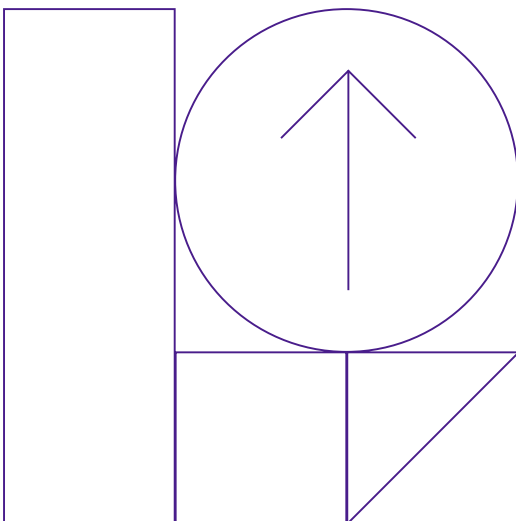
What is a badge?  
How to Find Badges  
How to Earn Badges  
How to Claim Badges

## **P-TECH Connect**

What is Tech Connect?  
How to Use It in Your Classroom

## **Feedback Section**

We would love to connect with you!



# Open P-TECH

## Onboard your school to Open P-TECH!

Free digital learning on industry leading technology, designed for teachers and students!

Are you ready to bring career-focused learning on the technical and professional skills of tomorrow to your school? Open P-TECH provides free online learning that exposes high school and college students to in-demand careers and skills. Help students at your school broaden their career exploration and get a leg-up on their post-graduate planning and marketability by joining Open P-TECH as an org user!

To get started? Simply visit:

<https://www.open.ptech.org> and click “Register or sign in”

Register or sign in →

### Step One: Register for an account

The easiest way to register is log-in with one of your existing accounts such as Google or LinkedIn. If you don't have one of those accounts, you can create an IBMid with any email you'd like.

### Step Two:

After you authenticate with an existing account or create your IBMid, you'll be directed to a quick registration form. Make sure you indicate you're a teacher on the registration form, as this will give you access to great teacher-facing resources to use with your students!

### Step Three: Fill out a school interest form

Once you have registered as a teacher and get to the confirmation page, click the link to the “Schools and Orgs” page on open.ptech.org. Register your organization using this simple form. An org account will be created by an Open P-TECH admin, and you will receive a follow-up email within 24 hours about student registration details.

To get started, please visit: [open.ptech.org](https://www.open.ptech.org)

## Step Four: Registering Teachers/Admins

Once an org has an account on Open P-TECH, as many admins as necessary can be added to the account. An Open P-TECH team member will reach out to the primary account holder and inquire if any additional teachers/admins should have administrative access to the system. This allows multiple teachers/faculty members to use Open P-TECH content with students and track student progress.

## Step Five: Registering Students

Students can be added to an admin account in two ways:

### Option 1: Individual Student Registration through Custom URL

Perfect for teachers/administrators who wish to register less than 50 students.

When an Open P-TECH team member replies to your org account request, they will include a custom registration URL linked to your account that can be sent out to students to self-register. The URL is directly linked to your user ID and your organization ID so that when students are registered, they will populate in your school or organization. **The custom URL will look like this:**

**<https://ptech-reg.eu-de.mybluemix.net/?org=XXXX&mgr=XXXXXREG>**

### Option 2: Bulk Registration

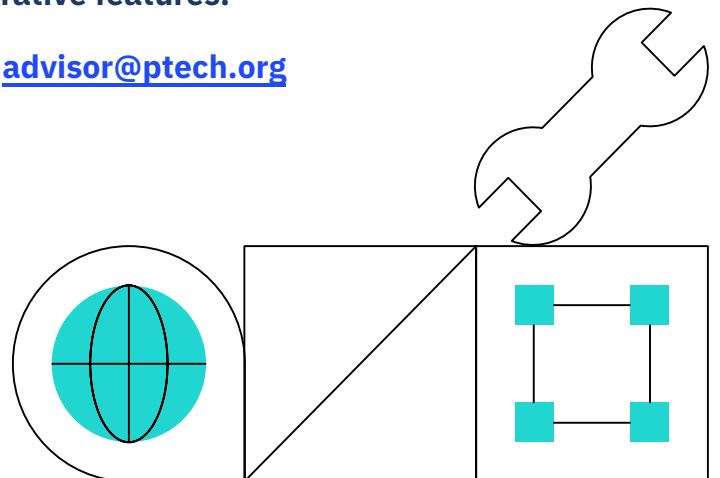
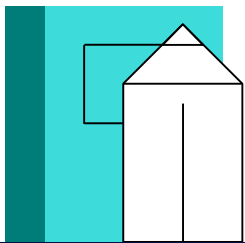
Perfect for teachers/administrators who wish to register more than 50 students all at one time and have more than one administrator to register.

When you fill out the org request form, one of the questions is how many students you expect to have accounts. If you answer more than 50, an Open P-TECH team member will follow-up with you and include a blank CSV file template for you to fill out with the appropriate student names and email addresses to be registered. Send it back to [ptechadv@us.ibm.com](mailto:ptechadv@us.ibm.com), and our team will input that information and automatically register all users at one time.

**Once you finish step five, your students are ready to learn about cutting-edge technologies and professional skills that will expose them to new career interests!**

Visit <https://www.ptech.org/open-p-tech/teachers-faculty/> for more information about our teacher resources and administrative features.

If you have any doubts, please contact us via email at [advisor@ptech.org](mailto:advisor@ptech.org)

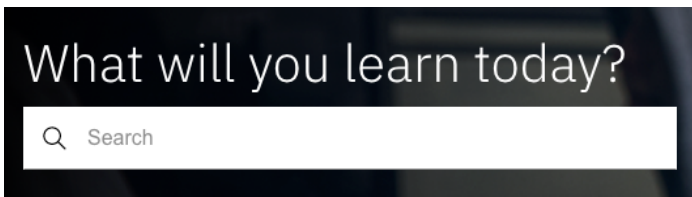


# Navigating open p-tech

## Homepage

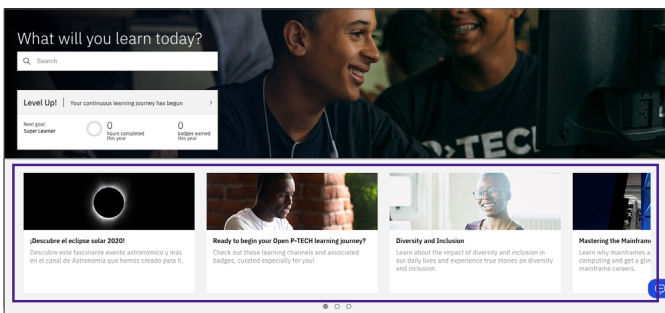
### Search Bar Option

Search key words that you're interested in to find related learning activities and badges.



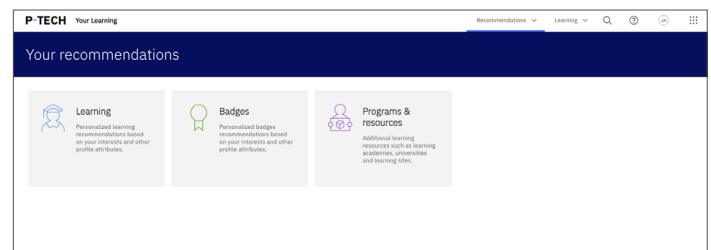
### Spotlights

The Spotlights section of your Open P-TECH home page features quick, direct access to parts of the platform that would interest you. You can scroll to the right to see everything in your spotlights banner.



### Recommended Tab

- Recommended Learning: will show up differently for every user. When you first log in to Open P-TECH you will get to choose some areas of interest. Based on what you choose here and future learning activities, this recommended tab will change.
- Recommended Badges: will show badges that may interest you based on your initial interests chosen.
- Programs and Resources: this page has additional learning resources such as learning academies, universities, and learning sites. This is a great place to find more resources to support your students in their learning.



### Your Learning Tab

- Your Queue: when browsing activities on Open P-TECH, you can add activities to your queue by clicking the **Add to queue** button on the right side.
- Required Learning: when you set required learning for students, this is where it will show up.
- Completions and Recent Activity: any activities recently completed, as well as the most recent activities, will show up here.

# Teacher resources

In the spotlights section of your Open P-TECH, you will find teacher resources for your class. This is a great asset to have to support your students as they work through their learning.

Anytime you would like to easily find teacher resources or activity kits you can simply click on the image in your Spotlights or you can click the search icon on the homepage and type in either of these two searches:

- [Teacher Resources](#)
- [Activity Kits](#)



## Teachers: Find resources for your class!

Open P-TECH offers you free teacher resources to extend the student-facing online learning into your classroom and extra-curricular activities. Engage in fun, project-based activities with your students!

## Teacher Resource Links

Each badge has corresponding teacher resources and lesson plans to support student learning. Below you will find a direct link to them. These can be found any time by clicking on the **Teacher Resources** spotlight on your main page as well.

[Teacher Resources: Artificial Intelligence \(AI\)](#)

[Teacher Resources: Big Data and Data Science](#)

[Teacher Resources: Cloud, the Internet of Things \(IoT\), and Blockchain](#)

[Teacher Resources: Cybersecurity](#)

[Teacher Resources: Distance Learning Support](#)

[Teacher Resources: Preparing for the World of Work](#)

[Teacher Resources: Professional Skills and Innovative Ways of Working Together](#)

[Teacher Resources: Sustainability](#)

[Teacher Resources: Workplace Learning](#)

## Diversity and Inclusion



### Diversity and Inclusion

Learn about the impact of diversity and inclusion in our daily lives and experience true stories on diversity and inclusion.



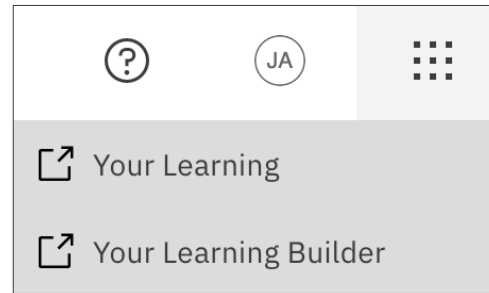
We live in a time when we all have a responsibility to act, be informed, and to understand what is happening and why. In this [channel](#), you will be introduced to the impact of diversity and inclusion in our daily lives and you'll experience true stories regarding diversity and inclusion and how we can all embrace our differences and come together in unity. This is a great opportunity for discussion with your students.

## Teacher Resources: Distance Learning Support



In our currently learning environment, many teachers and students find themselves virtual learning. This [channel](#) identifies references for support, tools, advice, skills, training, and resources for distance learning. This is a great resource to utilize if you are struggling to connect with your students virtually.

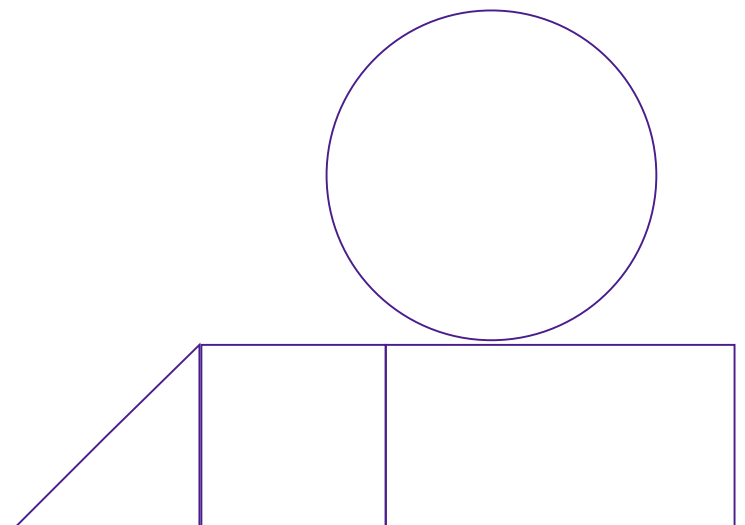
## Build a Learning Plan for Your Students



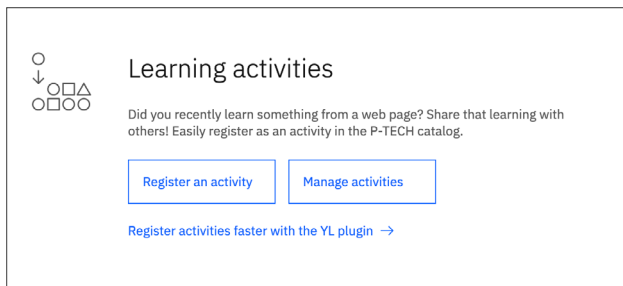
On the Open P-TECH home page, click the square made up of 9 dots in the upper right corner to display the **Your Learning Builder**.

This gives you the option to customize a learning plan for your students.

In the P-TECH Learning Builder you can add learning activities and create channels and learning plans for your learning audience.



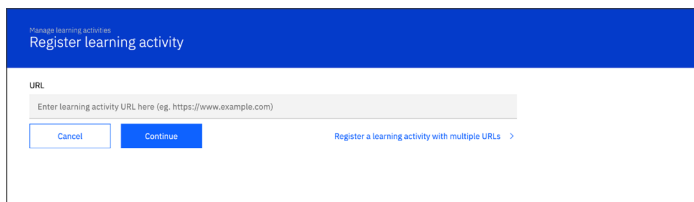
## Learning Activities



Learning activities are more one-off activities. These could be used as supplement components of a lesson or potentially just a piece of a lesson if you have a blended learning approach in your classroom.

### Register a Learning Activity

As a teacher, you are also able to register an activity from a different webpage to easily share with your students in the learning builder. For example, if you found a great resource that you'd like to incorporate into your students' learning, you can register that activity by simply adding the web page here.



First, you need to have a URL in mind. Paste in the link to the learning activity here and click Continue. Next you register the activity by including your own title, description, and keywords. You will also ensure it's in the right language and include an activity type, and a duration of the activity and an icon.

URL  
https://www.khanacademy.org/test-prep/mcat/processing-the-environment/cognition/v/problem-solving Edit URL

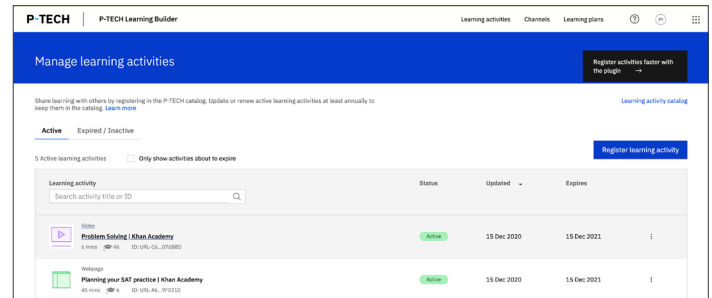
TITLE  
Problem Solving | Khan Academy

DESCRIPTION  
This video discusses different types of problems and common approaches to solving them.  
Langauage: English

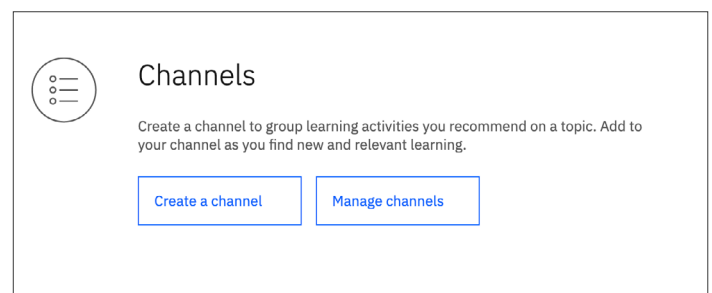
KEYWORDS (optional)  
PTECH, critical thinking, critical, thinking, problem solving, problem, solving

DEFAULT LANGUAGE  
English (en)

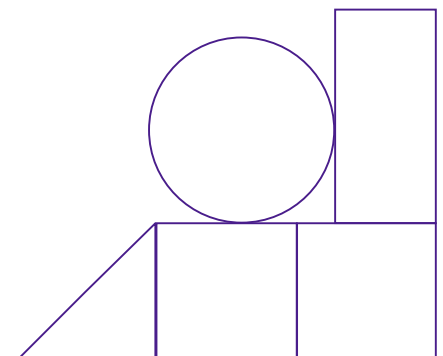
Finally, click **Save** and the learning activity will now show up for you to manage, as well as any other activities you have registered.



## Channels




Create a channel to group a series of learning activities you recommend on a topic. Add to your channel as you find new and relevant learning. A channel can also include multiple learning plans that you put together.





# Learning plans



## Learning plans

Create a guided roadmap for learners to complete, comprised of activities, tasks, and even badges.

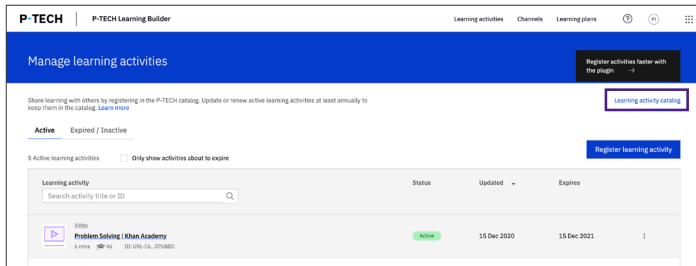
Learners can easily see their progress; owners have robust reporting available.

[Create a plan](#) [Manage plans](#)

Create a guided roadmap for learners to complete, comprised of activities, tasks, and even badges. Learners can easily see their progress and owners have robust reporting available. Learning plans can be thought of as an entire learning unit.

# Learning Activity Catalog

Also on this tab you will find the **Learning activity catalog**. Once you click here you will be able search for learning activities and channels.



**P-TECH** | P-TECH Learning Builder

Learning activities Channels Learning plans

### Manage learning activities


Register activities faster with the page

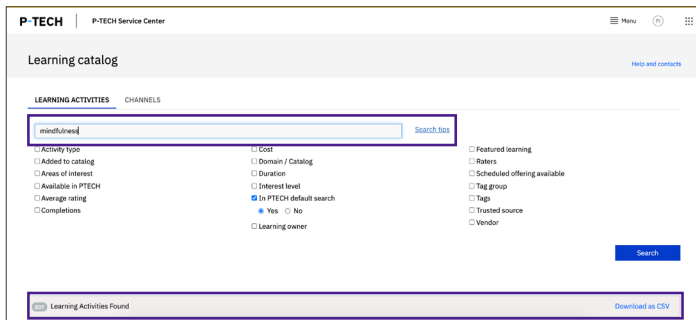
Share learning with others by registering in the P-TECH catalog. Update or renew active learning activities at least annually to keep them in the catalog. [Learn more](#)

**Learning activity catalog**

Active Expired / Inactive

5 Active learning activities Only show activities about to expire

Learning activity	Status	Updated	Expires
 Video Problem Solving   Khan Academy ID: U8-04-21000	Active	15 Dec 2020	15 Dec 2021



**P-TECH** | P-TECH Service Center

### Learning catalog

Help and contacts

LEARNING ACTIVITIES CHANNELS

mindfulness Search filter

- Activity type
- Added to catalog
- Areas of interest
- Available in PTECH
- Average rating
- Completions
- Cost
- Domain / Catalog
- Duration
- Interest level
- In PTECH default search
  - Yes
  - No
- Learning owner
- Featured learning
- Raters
- Scheduled offering available
- Tag group
- Tags
- Trusted source
- Vendor

Search

Learning Activities Found Download as CSV

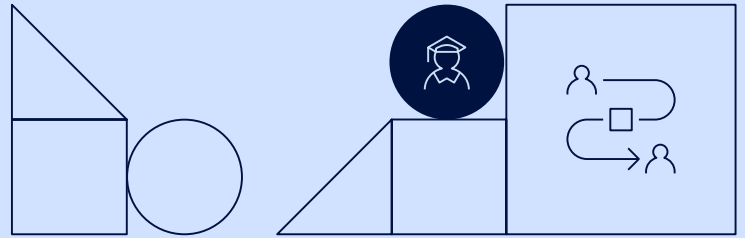
# Open P-TECH

Free digital learning on industry leading technology, designed for teachers and students.

## How to create a learning plan

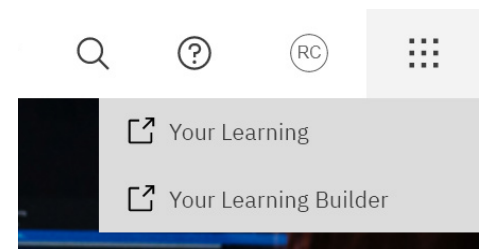
Now more than ever, students need tools and guidance that can help them prepare for the rapidly changing world of work.

With Open P-TECH, teachers have access to activities and lesson plans to extend the technical and professional learning for their students.



**1.** Once logged in to Open P-TECH, go to the top right corner next to your initials. You will see a square made of 9 blocks. Hover over this square and click on **Your Learning Builder**.

**2.** Scroll down to Learning Plans and select Create a plan. Once inside this section, click on the blue button that says **Create a plan**.



**3.** Under the **General tab**, give your plan a title and a brief description. Select the language and duration. Duration can be hours, days, weeks, or months.

**4.** Select an icon for your plan from those provided, use an icon url of your choosing, or upload an icon from your computer. Be sure to take note of copyright laws if you decide to provide an icon yourself.

General    Sections    Items

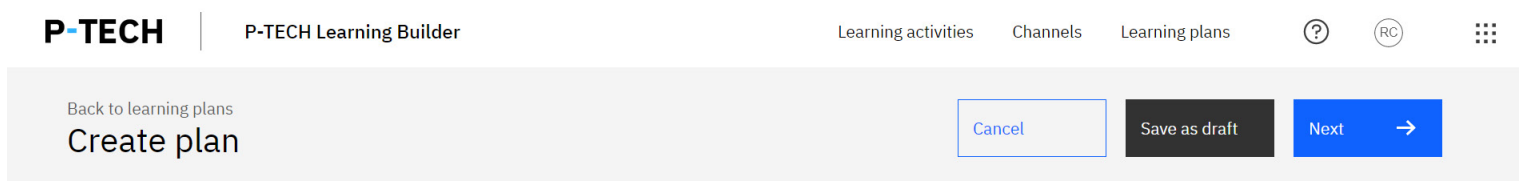
English [en] (default language)

Plan title 0/250  
Give your plan a short, memorable name (must be 2 or more words).

Plan description 0/2500  
A minimum of 50 characters is required.  
Briefly describe the plan.

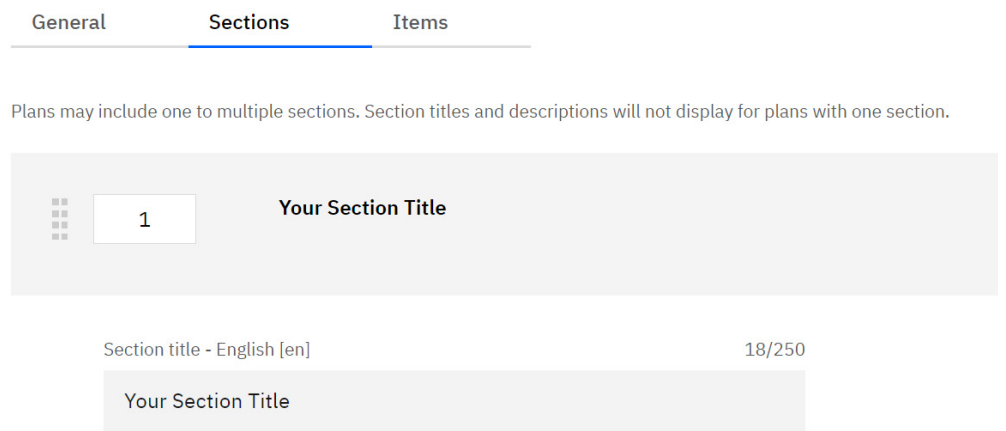
**5.** To allow learners to see how they are progressing through the plan, check the box to display a progress map. Other features include allowing you to add other editors and decide if you want the learning plan to be searchable to those outside of your organization.

**6.** Click **Save as draft** at the top right and move on to the next step.

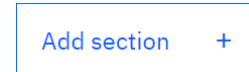


To get started, please visit: [open.ptech.org](https://open.ptech.org)

**7.** Click on the **Sections tab**. Give the section a title. As you do so, the words will populate in the box above. You may use the section description to provide more information.

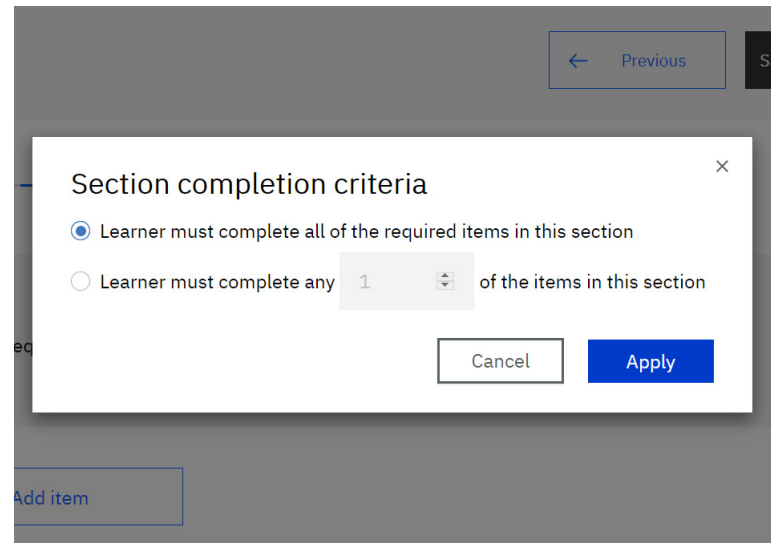
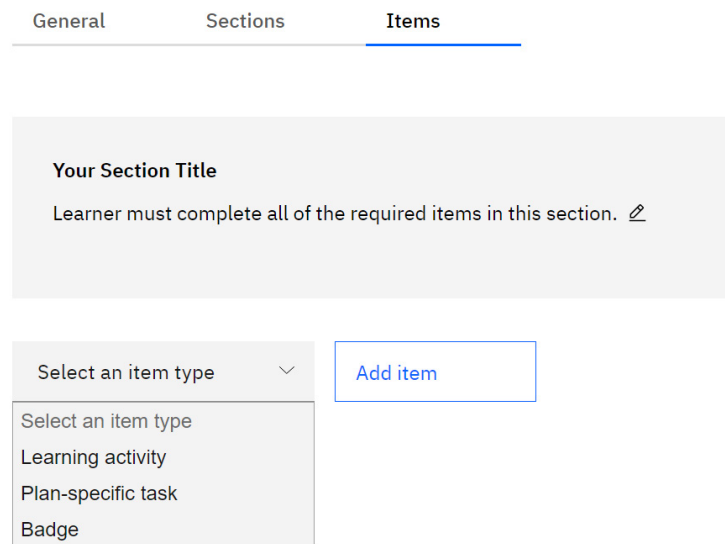


**8.** To add more sections, click the white button with blue print that says **Add section**. Repeat for however many sections you desire.



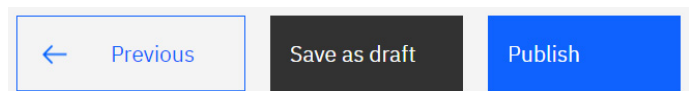
**9.** Scroll back to the top and either click on the **Next** button near “Save as draft” or select the **Items tab**. The items are the actual activities or tasks learners will have to complete.

**10.** Select an item type: learning activity, plan-specific task, or badge; then, click **Add item**. Once you do so, a search box will open where you can look for the specific item(s) you want to embed. You can also choose the tab marked your completions if you want learners to complete something you’ve already done. Click on the **Add item** button next to the activity and then click the **Done** button. Repeat this step for as many sections and items as you’d like.



**11.** It’s a good idea to click the **Save as draft** button as you’re working. Once you’re finished and you’ve saved your work, go back to the learning plan’s front page. Click on the three dots at the end of your learning plan, and press preview. This will show you what the plan looks like in case you want to edit it some more before publication.

**12.** Once satisfied, re-enter the learning plan by clicking on it, click on items, and then click the blue button at the top that says **Publish**.



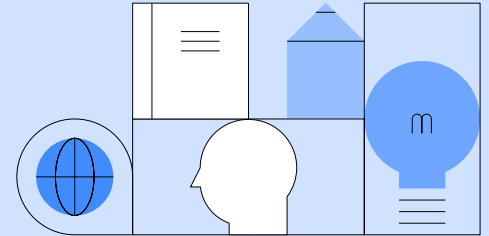
# Open P-TECH

Free digital learning on industry leading technology, designed for teachers and students.

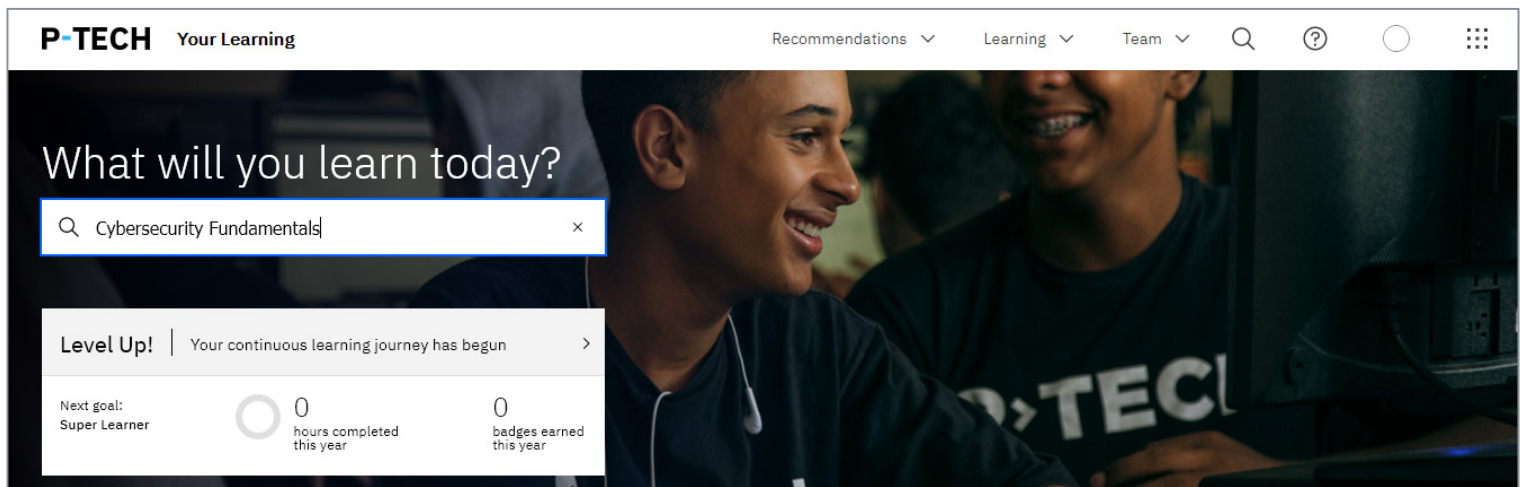
## How to assign required learning to students

On Open P-TECH, teachers can assign activities and establish due dates for their students to have those completed.

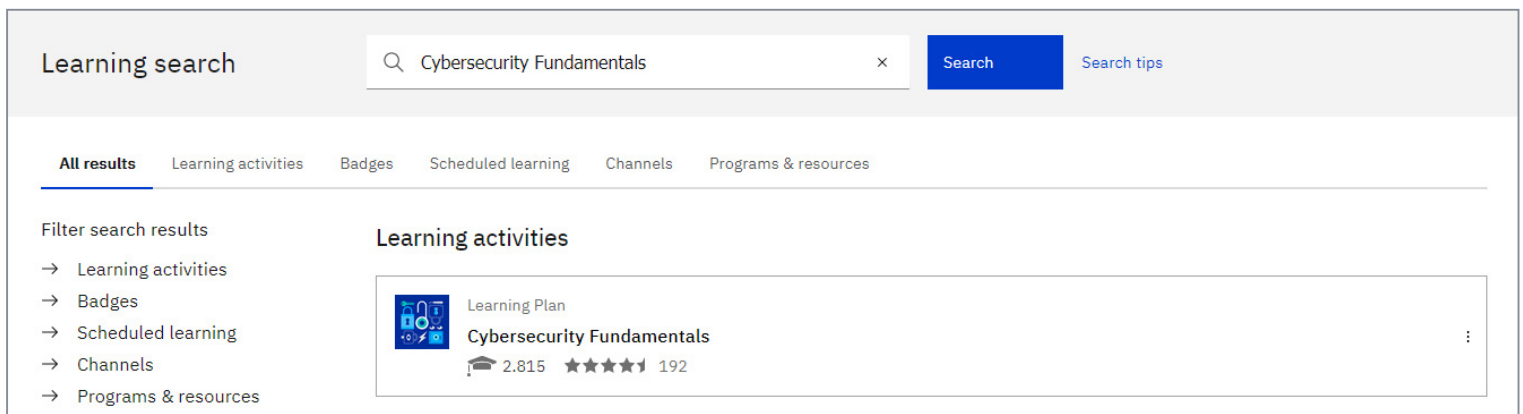
Learn below simple steps to assign required learning activities, so to keep track of your students' progress throughout the courses and their path to get badges.



**1.** When you log into your account, type in keywords of the coursework you're looking to assign to students. In this example, we are looking for the coursework associated to the *Cybersecurity Fundamentals* badge.



**2.** Once you've hit enter, search results will load. Choose the course you're looking to assign. In this instance, we are choosing the *Cybersecurity Fundamentals* course, which is the first option.



To get started, please visit: [open.ptech.org](https://open.ptech.org)

3. When you select the course, you'll be sent to its landing page. Hover over the light grey button named **Actions**, and scroll through the list. Then,

4. Scroll until you see the option to **Assign Required Learning**, as shown here.

Learning Plan  
**Cybersecurity Fundamentals**  
2.815 ★★★★★ 192 Share

**About this learning activity**

This course will provide you with an introduction to cybersecurity. From the offense perspective, you will learn about cyber attackers, their tactics, social engineering, and high profile case studies. From the defense perspective, you will learn about common approaches organizations take to prevent, detect, and respond to cyber attacks. You will also learn about career opportunities in this exciting, growing field.

Complete this course to earn the Cybersecurity Fundamentals badge!

**Expected duration:** This course will take you about 6 hours.

**Tags**

Areas of Interest Cybersecurity  
IBM Learning 0001 IBM Learning courses

**Ratings & comments**

★★★★★ Average rating by 192 learners

★★★★★ 145 Select a star to add a rating

**Actions**

- ★ Add rating
- 🗨️ Add comment
- + Add to channel >
- 🚩 Flag as inappropriate/outdated
- ♿ Request learning accommodations
- 🔗 Share
- Manager actions**
- 👤 View team completion report
- + Assign required learning

5. You'll then select each student you want to assign the course to, or you can click the top checkbox to select all of your students.

6. Hit **Next**, and then select a due date for the assignment, and provide the reason for the assignment and any additional information students will need. Once you hit **Submit**, you're done!

Assign required learning

Assign required learning Remove required learning

Set the following learning activity as required learning for one or more of your employees:

**Cybersecurity Fundamentals**

Select employees

Secondary team  Primary team

Employee	Currently assigned required learning	Past due
<input type="checkbox"/>		

Cancel Next

Assign required learning

Assign required learning for 1 of your employees.

Required by date

03 Feb 2222

Reason for assignment 0/500

In 1-2 short sentences, let the assignee(s) know why this learning is important. This message will be included in the email notification sent to assignees as well as in Open P-TECH.

Show example reason

Learn more link (optional)

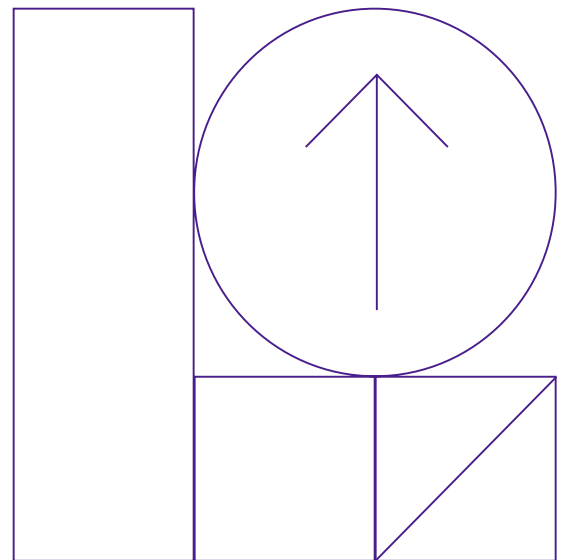
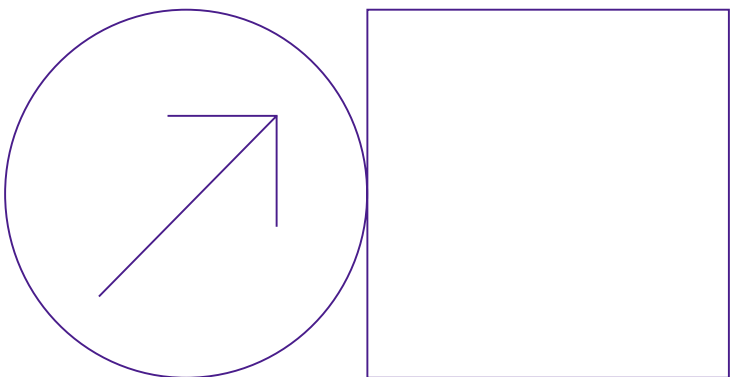
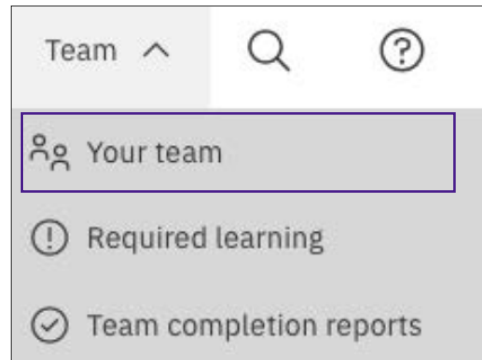
Enter link here

Back Submit

The required learning will now show up for students in their required learning tab, and they'll receive a notification. Additionally, you can now view the **Required Learning** for each students within your team reports.

# Reports

Another helpful asset to manage your student learning is found under the **Your Team** tab.



# Open P-TECH

## Admins: How to Track Progress


Free digital learning on industry leading technology, designed for teachers and students!


### How to Track Student's Progress


Open P-TECH allows educators to see the overall and individual progress of teams and students in the organization in which they have administrative access. Accessing your team can be found under the menu navigation. Your Team's Learning allows teachers/admins to track student learning and includes the following:


Track the progress of your team with intuitive progress reports


- Student's individual progress
- Progress on required learning
- Team Completion Reports


 **Teacher Profile**  
teacherprofile@ibm.com

 Profile

 Language: English >

 Overall progress report

 Open P-TECH advisor reports

 Log out

### See Your Team Summary

Here you will see three different reporting views. Your Team Summary provides an overview of each students' progress.





Click on students' name to see a detailed individual progress report by student.

**Your team** | Required learning | Team completion reports


#### Your team summary

View summary below. Select an employee to review their learning progress details. Use this to facilitate professional development discussion meetings with your employees.






**Current year** | Previous year |  Global team |  In-country team

Direct report (Regular, full-time)	Level Up! status 2020	Learning hours completed 2020	Badges earned 2020	Required learning	
				Assigned	Past due
 <b>Betty Boop</b> ptechbetty@gmail.com	-	0.0	0	5	-
 <b>Danny DeVito</b> ptechdanny@gmail.com	-	0.0	0	5	-
 <b>Greta Garbo</b> ptechgreta@gmail.com	-	0.0	0	5	-
 <b>Kevin Kline</b> ptechkevin@gmail.com	-	0.0	0	5	-

*Your team summary /*


 **Betty Boop**  
ptechbetty@gmail.com [Download report](#)


Required learning | 5 assigned

Due date	Learning activity	Assigned by	Actions
26 Nov 2020	Cybersecurity Fundamentals	Marilyn Monroe	
26 Nov 2020	Why you should learn to code   code.org	Marilyn Monroe	
26 Nov 2020	Khan Academy - Computer Programming - Meet the professionals	Marilyn Monroe	
26 Nov 2020	Sample Learning Plan - Khan Academy and Open P-TECH	Marilyn Monroe	
26 Nov 2020	AI Foundations - Powered by ISTE and IBM (Earn the badge!)	Marilyn Monroe	

**Current year** | Previous year

2020 Level Up! progress status [Level Up! progress status requirements](#)

2020 learning hours completed:  Completed 0 learning hours this year.




2020 badges earned:  0 badges earned this year.

**Queue**

**Badges**

There are currently no badges in employee's queue.

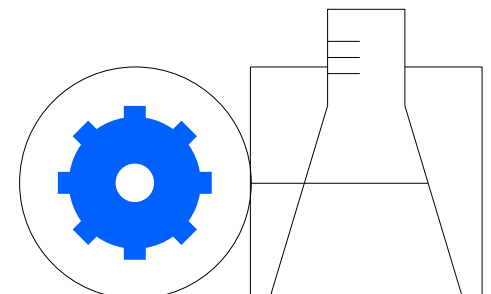
**Learning activities**

<a href="#">Sample Learning Plan - Khan Academy and Open P-TECH</a>	 In progress - 0% complete	Added 27 Oct 2020	
<a href="#">AI Foundations - Powered by ISTE and IBM (Earn the badge!)</a>	 In progress - 0% complete	Added 27 Oct 2020	

### See Individual Student Summary

Once you click the student's name, the student's progress report provides updates on:

- Required Learning with associated due date
- Level Up! progress status including hours and badges completed
- Badges in the student's queue
- Learning activities with completion status



For questions about your admin account, please contact [ptechadv@us.ibm.com](mailto:ptechadv@us.ibm.com)

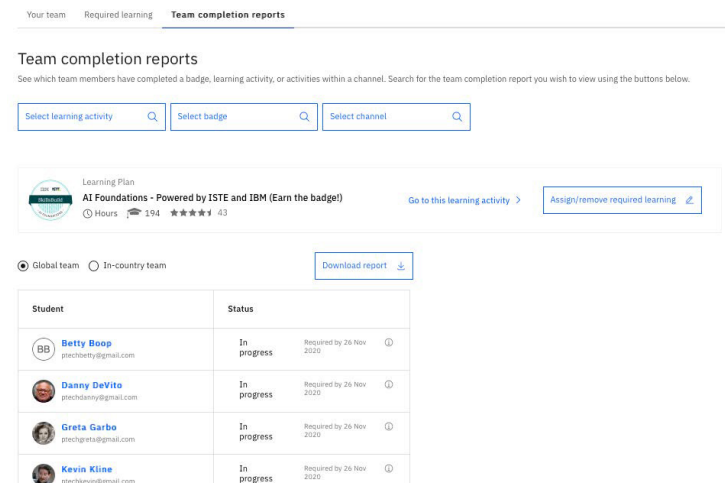
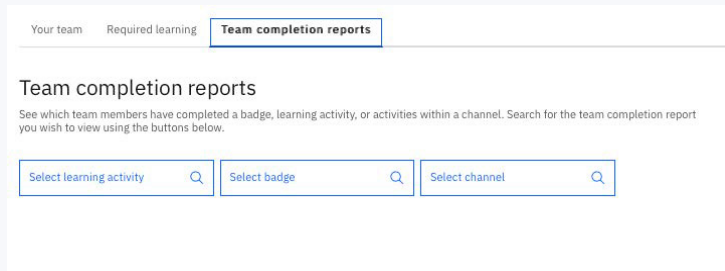


## View Your Required Learning

If you want to see all of the courses, activities, and learning plans your students have been assigned, Required Learning provides a complete list for all your students and along with associated due dates.

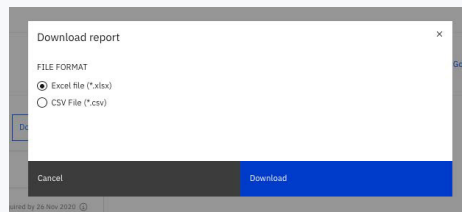
## Team Completion Reports

If you want to see how your students are doing on one activity, there are two ways to access the activity. Simply click on the activity next to a student's name or use the Team completion reports tab to search for a specific activity.



Plus this view gives you the ability to:

- Assign or remove students
- Download reports
- Go to the learning activity



## Required learning

Review your team's currently assigned and past due required learning. Use the actions menu to update assignment.

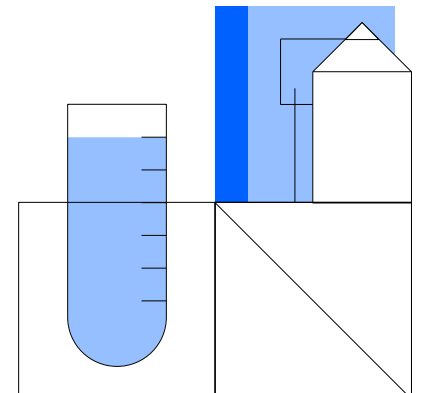
Global team  In-country team

Due date	Direct report	Learning activity
26 Nov 2020	<b>DeVito, Danny</b> ptechdanny@gmail.com	AI Foundations - Powered by ISTE IBM (Earn the badge!)
26 Nov 2020	<b>Garbo, Greta</b> ptechgreta@gmail.com	AI Foundations - Powered by ISTE IBM (Earn the badge!)
26 Nov 2020	<b>Kline, Kevin</b> ptechkevin@gmail.com	AI Foundations - Powered by ISTE IBM (Earn the badge!)
26 Nov 2020	<b>Boop, Betty</b> ptechbetty@gmail.com	AI Foundations - Powered by ISTE IBM (Earn the badge!)
<b>Reason for assignment</b> Part 2 of Fall Make-A-Thon <a href="#">View activity team completion report</a>		
26 Nov 2020	<b>Garbo, Greta</b> ptechgreta@gmail.com	Cybersecurity Fundamentals
26 Nov 2020	<b>Kline, Kevin</b> ptechkevin@gmail.com	Cybersecurity Fundamentals
26 Nov 2020	<b>Boop, Betty</b> ptechbetty@gmail.com	Cybersecurity Fundamentals

## Activity Completion Reports

In Team completion reports, you can see individual activities and how your students are progressing. This view shows

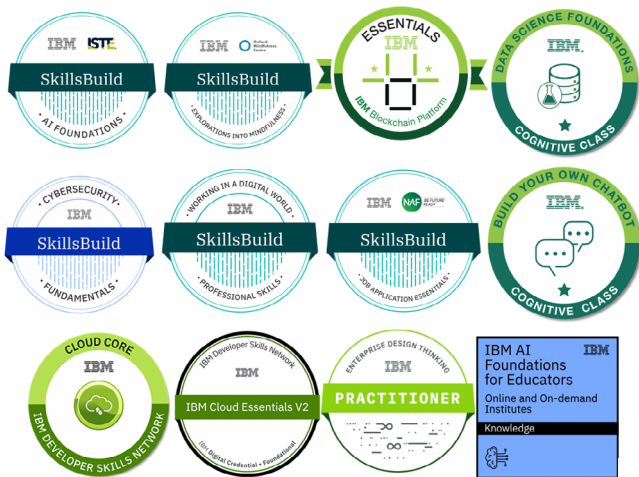
- List all of students assigned
- Students current progress
- Due dates





# Badges

## How to Find, Earn, and Claim Badges on Open P-TECH



## What is a badge?

A badge issued through Acclaim is a digital representation of a learning outcome, experience or competency. Based on the Open Badges Standard, Acclaim badges can be shared and verified online in a way that is easy and secure. Acclaim badges link to metadata that provides context and verification. They can be shared across the Internet for maximum visibility and recognition.

You can earn a badge for lots of different things, from many different organizations. What makes the badges issued to you from Acclaim unique is that they represent achievements valued by employers. Badges managed through Acclaim will help you tell your professional story in a way that is complete and validated.

You can share your badges with anyone you'd like, wherever you'd like:

- LinkedIn
- Facebook
- Twitter
- By email
- Embedded in a website

A viewer can click on your badge and will be taken back to Acclaim to view all the details of your achievement.

You can also share your complete Acclaim profile to provide an employer with the full context of your abilities, represented by the various badges you've earned and manage through the Acclaim platform.

Want to dig deeper so you can help your students explore new technologies and more? You will, of course, have access to your students' P-TECH learning and the tools that track their progress, but you'll also find opportunities to earn for yourself the same digital badge credentials offered to IBM professionals!

Claiming your hard-earned badge and showing off your accomplishments to the world is easy! After completing the required learning activities for a specific badge, you are ready to claim it.

## Step 1: How to Find Badges Offered on Open P-TECH

Open P-TECH currently offers the following badges:

### Technical Skills

- AI Foundations
- IBM AI Foundations for Educators
- Build Your Own Chatbot
- IBM Blockchain Essentials
- IBM Cloud Essentials
- Cloud Core
- Cybersecurity Fundamentals
- Data Science Foundations Level 1
- Data Science Methodology
- Data Science Methodologies
- Big Data Foundations Level 1
- Big Data Foundations Level 2
- Data Science Foundations Level 1
- Data Science Foundations Level 2 (V2)
- Applied Data Science with Python – Level 2
- Hadoop Foundations – Level 1

### Workplace Skills

- Working in a Digital World: Professional Skills
- Explorations into Mindfulness
- Enterprise Design Thinking Practitioner
- Enterprise Design Thinking Co-Creator
- Job Application Essentials

To find the badges and locate the activities, first login to Open P-TECH. Next, navigate to the **Recommended** tab and scroll down to **Badges**. Here you will see badges. You can click on each to see the earning criteria for that particular badge and also click the **Add to Badge Queue** option.

Each badge in the P-TECH program has a channel of learning activities, designed to introduce you to a topic area: learn the **what** and **why** behind emerging technologies and professional skills, and get information about careers.

### AI Foundations

This badge earner has the key knowledge, skills, and values necessary to understand and work with artificial intelligence (AI), and is aware of the implications of AI for the future of work and society in general. Earners have applied their knowledge through an AI Design Challenge, using design thinking to create a prototype for an AI-powered solution that helps people improve their skills. [Learn more](#)

### Build Your Own Chatbot

The badge earner has demonstrated an understanding of the creation of Chatbots by leveraging Watson Conversation and their deployment on WordPress. Learn how to build chatbots without having to write any code by leveraging Watson Assistant. Then deploy your chatbot to a real site in less than five minutes. [Learn more](#)

### IBM AI Foundations for Educators

This badge earner is an educator who has participated in a series of online institutes to become fluent and knowledgeable in Artificial Intelligence (AI). They have an understanding of AI applications such as machine learning and natural language processing, along with how it is used to solve problems, collect data and identify bias. They have become equipped to share the foundational knowledge of artificial intelligence with their colleagues and students in their classrooms. [Learn more](#)

### IBM Cloud Essentials

This badge earner is able to relate how the IBM Cloud enables the different service (IaaS, PaaS, SaaS) models and different deployment (Public, Hybrid, Private) models of cloud computing. They know how to: access the IBM Cloud using various tools and interfaces; discover appropriate IBM Cloud products or services available for specific functionality; articulate the different ways IBM Cloud delivers services to developers and operational teams; and summarize core groups of available services. [Learn more](#)

### Cloud Core

This badge holder understands the basics of cloud technology and is able to describe cloud platforms and models including IaaS, PaaS, SaaS, Public, Private and Hybrid Multi clouds. The badge earner is familiar with essentials of cloud applications and terms like Virtualization, VMs, Containers, Object Storage, Microservices, Serverless, Cloud Native, and DevOps. The individual has also gained hands-on experience at creating a Cloud account and provisioning services on IBM Cloud. [Learn more](#)

### Enterprise Design Thinking Practitioner

The earner has acquired knowledge of applying Enterprise Design Thinking and its value. As a Practitioner, the badge earner finds opportunities to try it out in their every day work. [Learn more](#)

## **Enterprise Design Thinking Co-Creator**

As a Co-Creator, the badge earner is an active contributor on Enterprise Design Thinking engagements. They help bring real-world user outcomes to life by growing collaboration skills and finding opportunities to step up and lead. [Learn more](#)

## **IBM Blockchain Essentials**

This badge earner has developed an understanding of Blockchain principles and practices and how they can be applied within a business environment. They have an understanding of Blockchain and distributed ledger systems, the important concepts and key use cases of Blockchain and how assets can be transferred in a Blockchain network. [Learn more](#)

## **Cybersecurity Fundamentals**

This badge earner demonstrates a foundational understanding of cybersecurity concepts, objectives, and practices. This includes cyber threat groups, types of attacks, social engineering, case studies, overall security strategies, cryptography, and common approaches that organizations take to prevent, detect, and respond to cyber attacks. This also includes an awareness of the job market. Badge earners can use this knowledge to pursue further education for a variety of roles in cybersecurity. [Learn more](#)

## **Job Application Essentials**

This badge earner has demonstrated a strong understanding of how to position themselves effectively for their first job opportunity. The individual knows how to build a strong, professional social media and online presence; how to conduct thorough and effective workplace research personalized to their interests and skills; and how to create a strong entry-level resume, even without any prior work experience. The earner has also practiced interviewing professionally. [Learn more](#)

## **Data Science Foundations – Level 1**

This badge earner has an understanding of the possibilities and opportunities that data science, analytics and big data bring to new applications in any industry. [Learn more](#)

## **Data Science Methodology**

This badge earner has demonstrated a thorough understanding of the different stages that constitute the data science methodology, which is instrumental to solving any data science problem. [Learn more](#)

## **Data Science Methodologies**

This badge earner understands the essential steps used in data science business and research problem solving. This includes problem definition, collecting and analyzing data, building relevant models and understanding model deployment results. [Learn more](#)

## **Big Data Foundations Level 1**

This badge earner has a basic understanding of Big Data concepts and their applications to gain insight for providing better service to customers. The earner understands that Big Data should be processed in a platform that can handle the variety, velocity, and the volume of data by using components that require integration and data governance. [Learn more](#)

## **Big Data Foundations Level 2**

This badge earner understands the big data ecosystem and hadoop commands and operations to work with big data. The earner also has foundational knowledge around Spark and its operations including RDDs, DataFrames, and the various libraries associated with the Spark Core (MLlib, Spark SQL, Spark Streaming, GraphX). [Learn more](#)

## **Data Science Foundations Level 1**

This badge earner has an understanding of the possibilities and opportunities that data science, analytics and big data bring to new applications in any industry. [Learn more](#)

## **Data Science Foundations Level 2 (V2)**

This badge earner has a solid understanding of data science methodologies, and tools. The individual also has a hands-on appreciation of programming languages to use in data science tasks. [Learn more](#)

## Applied Data Science With Python – Level 2

This badge earner is able to code in Python for data science. They can analyze and visualize data with Python with packages like scikit-learn, matplotlib and bokeh. [Learn more](#)

## Hadoop Foundations – Level 1

This badge earner has a basic understanding of Hadoop. The earner can describe what Big Data is and the need for Hadoop to be able to process that data in a timely manner. The individual can describe the Hadoop architecture and how to work with the Hadoop Distributed File System (HDFS) using IBM BigInsights. [Learn more](#)

## Working in a Digital World – Professional Skills

This badge earner has an understanding of key skills for professional success and core soft skills needed in the IT workforce. This knowledge of skills and behaviors includes: creating and delivering presentations; using agile approaches for working professionally to deliver quality work and experiences to customers; collaborating effectively with teams; communicating with impact; dealing with challenges in a controlled and focused manner; and solving problems and implementing solutions. [Learn more](#)

## Explorations Into Mindfulness

This badge earner has developed an understanding of mindfulness concepts and techniques, and has learned how to apply mindfulness practices for various situations. The individual has an understanding of how to further develop focus and self-awareness. Badge earners can use these skills as a foundation for further study in mindfulness and to apply mental and emotional management in any career path they choose. [Learn more](#)

## Step 2

### Complete Required Learning for a Badge

After completing all of the criteria for that badge, you are ready to complete the short course, [How to Claim Your Digital Badge](#).

This mini-course will show you how to claim your badges, set up an account with Acclaim (a badge-issuing platform), and discover other tips to make getting your badges as easy as 1-2-3!

## Step 3

### Accept Your Digital Badge

- You will receive an email from [admin@youracclaim.com](mailto:admin@youracclaim.com) notifying you of your new badge after you complete the required learning activities in Open P-TECH. You might want to add this email as a trusted sender so it doesn't go to spam. Click the Accept your badge button.
- If this is your first badge through Acclaim you will be guided through the necessary steps to create an account. Enter your first name, last name, your country, and postal code, and a password. Review Acclaim's terms of use and check the box to accept them.
- If you already have an Acclaim account, sign into your account to claim your badge. You will be brought to a dashboard area. If you click on one of the badges, you will see a clear call to action. To accept the badge immediately you have two choices. We recommend you allow the badge to be displayed publicly so others can see your achievement. Decide then if you would like badges from Open P-TECH to automatically go into your account.
- Once your badge is in your profile, you can explore the options to share it with others. In addition to popular destinations such as LinkedIn, Facebook, and Twitter, you can also email the badge directly to someone. It's standard for each social media site to require you to link your Acclaim account. Follow the instructions to do so, along with any prompts that pop up to complete the sharing activity.

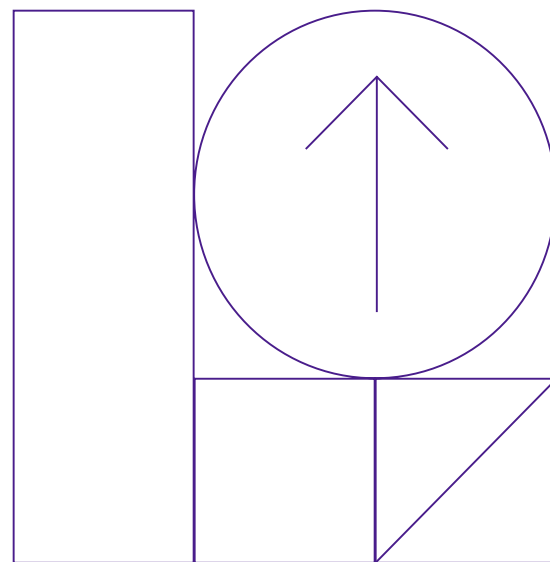
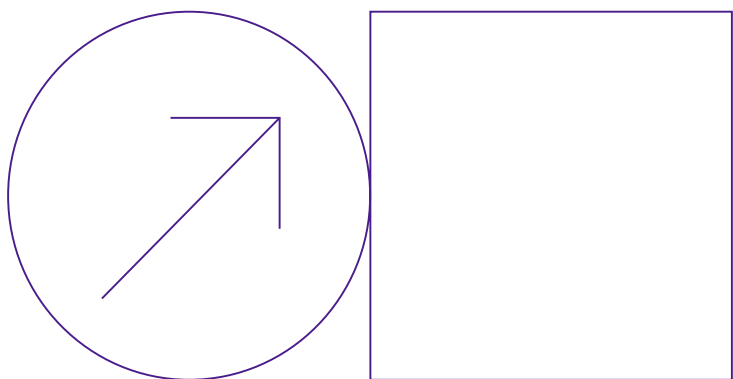
## Badge Claim Support

Open P-TECH support: [ptechusr@us.ibm.com](mailto:ptechusr@us.ibm.com)

Acclaim support: For questions related to your Acclaim badge earner account and profile, as well as issues related to claiming your badge after receiving a notification, go to [Acclaim's Help Center](#).

## Additional Questions

- What badge will your students work towards?
- What's their timeline for completion?



# P-TECH Connect

<https://community.ptech.org>

## A Global Peer Network

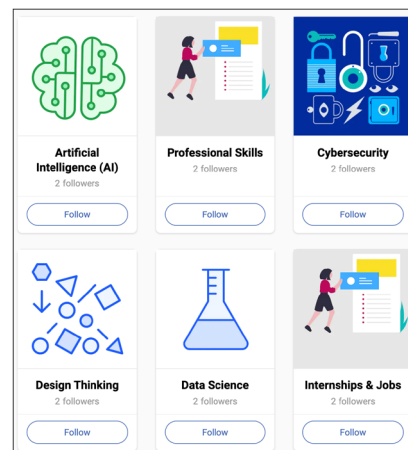
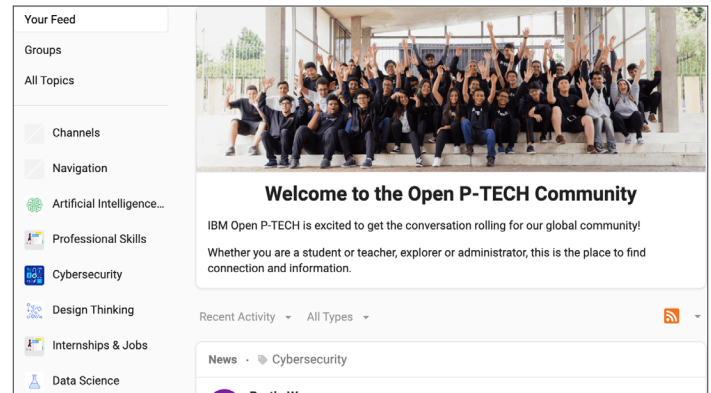
Open P-TECH students can take topics to the next level with discussions on our secure community page.

### All students can participate in the right conversations with:

- Custom, private group pages for your organization or school
- The ability to browse, search, and filter posts by content topics
- “Reputation” rewards for providing interesting and helpful comments and responses

### Teachers and Admins can use TECH Connect to

- Connect with other organizations and crowd-source answers to online learning challenges
  - Post assignments and reminders for Open P-TECH courses
  - Request new features from the Open P-TECH team
- P-TECH Connect provides dynamic communities and forums, with the security of automatic and IBM-supported moderation.



# Feedback

We would love to hear your feedback on the resources provided in this teacher toolkit. Join us on TECH Connect and give us your feedback in our “Teacher Resources” group. [Join here](#)

