

CURRICULUM RESOURCE

Explore the Construction Training and Apprenticeship Ontario (CTAO) Hub

OALCF ALIGNMENT

Competency	Task Group	Level
Competency A - Find and Use Information	A1. Read continuous text	2
Competency A -Find and Use Information	A2. Interpret documents	2
Competency A -Find and Use Information	A3. Extract information from films, broadcasts and presentations	2
Competency B - Communicate Ideas and Information	B2. Write continuous text	2
Competency D - Use Digital Technology	N/A	2

Goal Paths (check all that apply)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Employment | <input type="checkbox"/> Postsecondary |
| <input checked="" type="checkbox"/> Apprenticeship | <input type="checkbox"/> Independence |
| <input type="checkbox"/> Secondary School Credit | |

Embedded Skills for Success (check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Adaptability | <input type="checkbox"/> Numeracy |
| <input type="checkbox"/> Collaboration | <input checked="" type="checkbox"/> Problem Solving |
| <input checked="" type="checkbox"/> Communication | <input checked="" type="checkbox"/> Reading |
| <input type="checkbox"/> Creativity and innovation | <input checked="" type="checkbox"/> Writing |
| <input checked="" type="checkbox"/> Digital | |

NOTES: This Level 2 resource introduces prospective apprentices interested in the construction trades to the Construction Training and Apprenticeship Ontario (CTAO) online hub. In this resource, learners will explore the hub and learn more about the skills, requirements, and responsibilities for different construction trades. They will view videos demonstrating the work done in the trades and learn how to view or download "Trade Cards" related to their areas of interest.

ACKNOWLEDGEMENTS

Project Host

Community Literacy of Ontario

Research & Writing

Summer Burton



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Canada



Ontario



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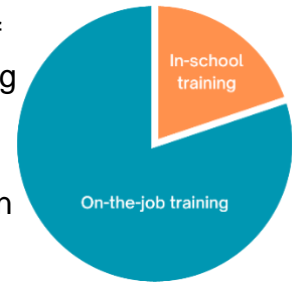
 @love4literacy

 @love4literacy

Introduction

Are you considering a job in the skilled trades? It's a great career choice, and it offers people the chance to learn in a more hands-on way known as "apprenticeship training."

An apprenticeship is employment and training where you do most of your learning on the job with support from a mentor/supervisor, along with some of your learning in a classroom. Learning from an expert while getting hands-on experience is a great way to learn new skills. Because most of your learning is done while you work, you can learn a skilled trade while getting paid. People often use the phrase "*earn while you learn*" to describe this kind of training.



If you go to college or university, you may study for one year (for a college certificate), two or more years (for a college diploma), or three to four (or more) years for a degree. You will pay tuition for each of the years you are in school. The length of time it takes to complete an apprenticeship will change depending on the trade and level of certification you are working towards. Typically, an apprenticeship lasts between two and five years and includes two or three sessions of in-school training. You will earn money during your on-the-job training and pay a reduced tuition fee for your shorter in-school training.

Not every skilled trade requires that you become an apprentice to learn the job. But over 140 trades offer apprenticeship opportunities in Ontario! Many of those trades are in construction, and that is the skilled trades sector we will look at now.



Construction Training & Apprenticeship Ontario (CTAO)

Construction Training & Apprenticeship Ontario (CTAO) helps people who are:

- interested in **exploring** the construction trades
- registered in a construction-related **pre-apprenticeship** training course
- **apprenticing** in a construction trade



Which of these categories do you fall into? Check the box below.

☐ Exploring

☐ Pre-apprenticeship

☐ Apprenticing

If you are an **explorer**, the CTAO website can help you learn about 32 different construction trades. Some of these trades include:

- Concrete Pump Operator
- Heavy Equipment Operator
- Plumber
- Refrigeration & Air Conditioning Systems Mechanic
- Welder

If you are a **pre-apprentice**, the CTAO website can help you find and apply for apprenticeship opportunities in your area.

If you are a signed **apprentice**, the CTAO website can help you prepare for your in-class technical training and to succeed on the job.



What construction trades interest you the most? If you have one or more in mind, write them below. If you haven't decided yet, that's okay! You will have plenty of trades to explore on the CTAO website.

The CTAO Website

Let's take a look at the Construction Training & Apprenticeship Ontario (CTAO) website. Open a web browser and go to www.ctaontario.ca so you can follow along.

At the top of the website, you will see five links. Look at the explanations below:

1. Home will bring you to the CTAO landing page. **2. Exploration** will give you the options of exploring the trades or exploring local trades unions or councils.

3. Education will let you create an account or sign into the Build Your Skills learning portal. **4. Application** will bring you to the Apprenticeship Navigator to find local apprenticeship jobs. **5. Contact Us** will take you to an online form you can fill out to contact CTAO.



- 1.
Home
- 2.
Exploration ▾
- 3.
Education ▾
- 4.
Application ▾
- 5.
Contact Us
- | 🔍

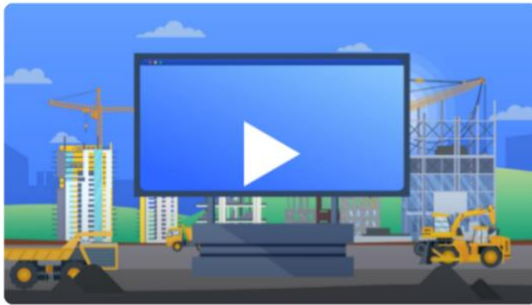
Construction Training & Apprenticeship Ontario

Construction Training & Apprenticeship Ontario (CTAO) provides exploration, education, and apprenticeship application opportunities in the skilled trades, targeting Explorers, Pre-Apprentices and Apprentices.

[Learn More](#)



Scroll down further on the Construction Training & Apprenticeship Ontario (CTAO) website, and you will find this video. On your own or with a group of classmates, play the video. Pause the video when you hear information that will help you answer the questions below.



See what the
**Construction Training &
Apprenticeship Ontario**
has to offer

Watch the Video!

1. When you're on the CTAO website, can you watch videos of the trades in action?

☐ Yes ☐ No

2. Do you need to create an account to use the Build Your Skills learning centre?

☐ Yes ☐ No

3. If you need to upgrade, the interactive courses can help you build your skills in several subjects. What are two of these subjects?

4. On this website, can you access trade-specific prep guides with step-by-step instructions, mock questions, and answer keys?

☐ Yes ☐ No

5. Fill in the blanks: If you're already in an apprenticeship, the learning centre has tutoring videos and tips from _____ that can help you through your training. You can also find resources that can help you prepare for your _____ or _____.

Scroll down further on the Construction Training & Apprenticeship Ontario (CTAO) website, and you will find a section with three links.



Websites will often give you more than one way to find information. Here are some examples of how the CTAO website does this.

Clicking **Explore the Trades** will take you to the same place as clicking the same words under the heading “Explore” in the toolbar at the top of the page.

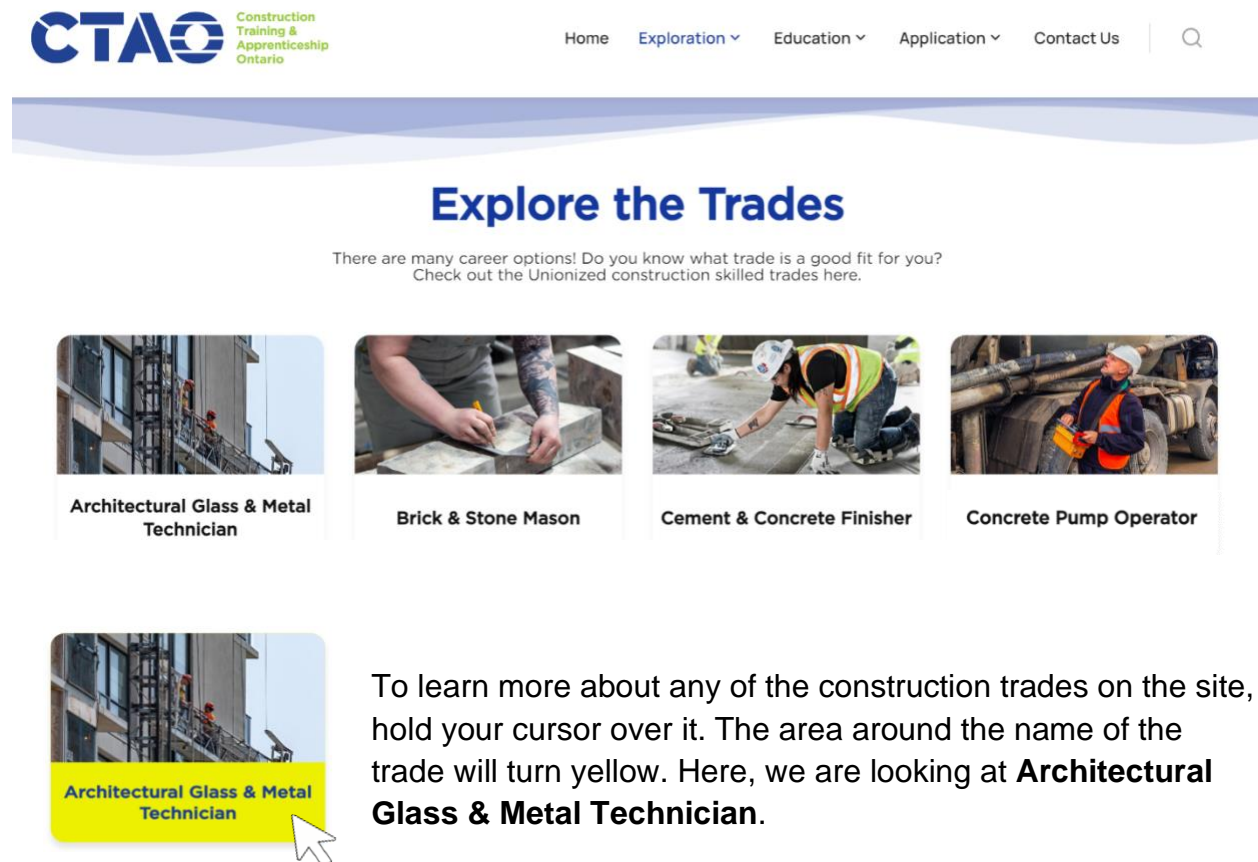
Clicking **Build Your Skills** will take you to the same place as clicking the same words under the heading “Education” in the toolbar at the top of the page.

Clicking **Apprenticeship Navigator** will take you to the same place as clicking the same words under the heading “Application” in the toolbar at the top of the page.

Let’s click the “**Explore the Trades**” button.

Explore the Trades

Here is the **Explore the Trades** section of the Construction Training & Apprenticeship Ontario (CTAO) website.



CTAO Construction Training & Apprenticeship Ontario

Home Exploration Education Application Contact Us

Explore the Trades

There are many career options! Do you know what trade is a good fit for you?
Check out the Unionized construction skilled trades here.

Architectural Glass & Metal Technician

Brick & Stone Mason

Cement & Concrete Finisher

Concrete Pump Operator

Architectural Glass & Metal Technician

To learn more about any of the construction trades on the site, hold your cursor over it. The area around the name of the trade will turn yellow. Here, we are looking at **Architectural Glass & Metal Technician**.

If you click your mouse, a popup window will appear with helpful information about that trade. Here, we learn that an Architectural Glass & Metal Technician is also called a Glazer. We also find out a bit about what they do and the skills they need.

To find out more, we can click the blue **“Learn More”** button in the popup window.



Architectural Glass & Metal Technician

Certificate of Qualification 424A

An Architectural Glass & Metal Technician (also known as a Glazer) handles, measures, cuts, prepares, fits, installs, replaces and repairs all types of glass and glass substitutes, typically in commercial, residential and transportation settings. A Glazer fabricates & installs curtain wall framing, aluminum storefront frames and entrances, doors and hardware, structural silicone glazing, skylights and sloped glazing.

Key Skills & Attributes:

- Knowledge of building & construction
- Strong Attention to detail
- Strong communication, reading & writing, numeracy & problem-solving skills

Learn more

A new page will appear, with much more information about this trade. At the top of the page, we will see:

1. a quote from someone already certified to work in this trade
2. a link to download a one-page document with information about the trade. CTAO calls this a Trade Card. We will look at one later in this resource.
3. links to photos and videos that show tradespeople on the job
4. a description of some of the tasks involved in this trade



Architectural Glass & Metal Technician

Certificate of Qualification 424A

"My work is steady. I can go from working on new construction and the big shiny towers, to working on someone's home. There's a lot of pride in that."

Downloadable PDF

WINDOW INSTALLER

URBE 2236-7000

An Architectural Glass & Metal Technician (also known as a Glazer) handles, measures, cuts, prepares, fits, installs, replaces and repairs all types of glass and glass substitutes, typically in commercial, residential and transportation settings. A Glazer fabricates & installs curtain wall framing, aluminum storefront frames and entrances, doors and hardware, structural silicone glazing, skylights and sloped glazing.

Tip: The short videos on the CTAO website can give you a real-life look at what's involved in each trade!

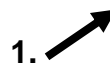
As we continue looking down the page, we will see a list of job responsibilities and information about:

1. the skills you need to be successful in this trade
2. places where you could do this kind of work
3. how many hours of apprenticeship training you would need
4. the level of education you need to start working in this trade
5. the average wage someone fully certified to work in this trade (called a journeyperson) makes


Responsibilities

- Measure, cut, fit, install and/or secure glass panes, window parts & architectural metals
- Read and interpret drawings & specifications
- Work with and install plastic, granite, aluminum panels and other similar materials used as glass substitutes
- Work from mobile equipment, scaffolds and swing stages, sometimes at great heights, to manoeuvre glass panels that are lifted by cranes and other lifting equipment


Key Skills & Attributes

1. 
 - Knowledge of building & construction
 - Strong Attention to detail
 - Strong communication, reading & writing, numeracy & problem-solving skills
 - Patience and the ability to remain calm in stressful situations
 - Manual dexterity


Employment Sectors

- Institutional and Commercial Construction
 - New home building and renovation
 - Self employment
 - Fabrication
2. 


Apprenticeship Program

3.  8000 hours of on-the-job training, supplemented by three 8-week sessions of in-class technical training.

Entrance Requirements

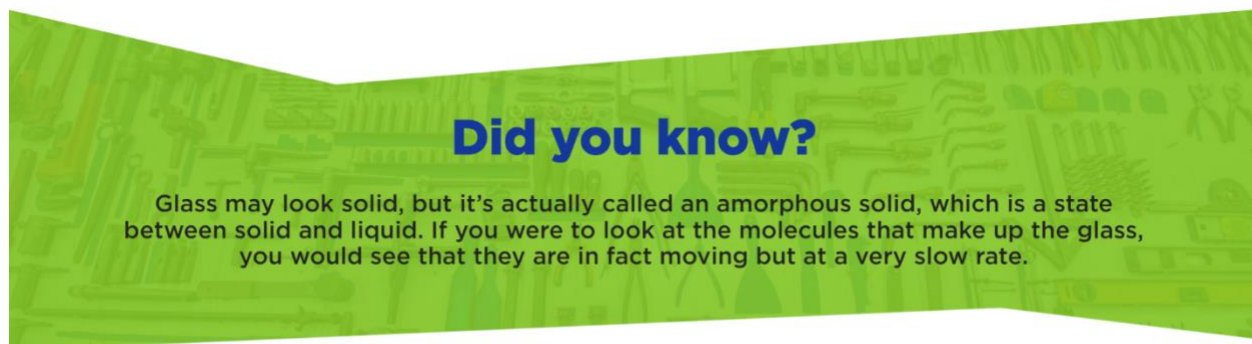
- Grade 12 Diploma preferred (Grade 10 minimum)
4. 

Journeyperson Wage Rate

5.  \$35.82/hr (2021 Provincial Average)

Near the bottom of the page, we can read an interesting fact about this trade and link to other sections of the website. These include:

1. The Build Your Skills section, available under the heading “Not sure where your skills are?”
2. The Contact Us page, available under the heading “Need help?”
3. The Apprenticeship Navigator, available under the heading “Ready to Apply?”
4. A one-page document about this trade, available under the heading “Download Trade Card Information”



Not sure where your skills are?

Build Your Skills is a free tool to help build familiarity and comfort with trade related math, science and document reading. Start learning by clicking the button below.

Learn More

← 1.

Need help?

Send us a message!

Contact Us

← 2.

Ready to Apply?

Visit our Apprenticeship Navigator.

Apply Here

← 3.

Download Trade Card Information

Download the trade information as a PDF.

Download

← 4.

Let's look at the Trade Card for Architectural Glass and Metal Technicians. You will see that it has a lot of the same information that is shared on the CTAO website but in a one-page format that is easier to print or share.

To access the Trade Card, click the Download button on your screen or look on the next page of this resource. When you are done reading the Trade Card, answer the questions on the following page.

Architectural Glass & Metal Technician

Certificate of Qualification 424A

"My work is steady. I can go from working on new construction and the big shiny towers, to working on someone's home. There's a lot of pride in that."

An Architectural Glass & Metal Technician (also known as a Glazer) handles, measures, cuts, prepares, fits, installs, replaces and repairs all types of glass and glass substitutes, typically in commercial, residential and transportation settings. A Glazer fabricates & installs curtain wall framing, aluminum storefront frames and entrances, doors and hardware, structural silicone glazing, skylights and sloped glazing.

**Unionized
Journeyman
Wage Rate:
\$35.82/Hr ***

*2021 provincial average



Scan to learn more



Enjoys working outdoors



Agile and physically fit



Enjoys working at heights

Entrance Requirements

- Grade 12 Diploma preferred (Grade 10 minimum)

Did You Know?

Glass may look solid, but it's actually called an amorphous solid, which is a state between solid and liquid. If you were to look at the molecules that make up the glass, you would see that they are in fact moving but at a very slow rate.

Key Skills & Attributes

- Knowledge of building & construction
- Strong Attention to detail
- Strong communication, reading & writing, numeracy & problem-solving skills
- Patience and the ability to remain calm in stressful situations
- Manual dexterity

Apprenticeship Program

8000 hours of on-the-job training, supplemented by three 8-week sessions of in-class technical training.

Responsibilities

- Measure, cut, fit, install and/or secure glass panes, window parts & architectural metals
- Read and interpret drawings & specifications
- Work with and install plastic, granite, aluminum panels and other similar materials used as glass substitutes
- Work from mobile equipment, scaffolds and swing stages, sometimes at great heights, to manoeuvre glass panels that are lifted by cranes and other lifting equipment

Visit **CTAOntario.com**
for more information



**Construction Training &
Apprenticeship Ontario**

Activity: Answer Questions About Architectural Glass and Metal Technicians

1. An Architectural Glass and Metal Technician (also known as a Glazer) works with glass and glass substitutes in a lot of ways. Circle the **two** items in the list below they do **not** do.

- | | |
|----------|----------|
| Handles | Fits |
| Measures | Sells |
| Paints | Installs |
| Cuts | Replaces |
| Prepares | Repairs |

2. What is the average unionized journeyperson hourly **wage rate**? _____

3. What is one of the **key skills and attributes** for this job?

4. Glazers are responsible for reading and interpreting drawings & specifications.

- ☐ True ☐ False

5. Fill in the Blanks: the **apprenticeship program** for Architectural Glass and Metal Technicians includes _____ of on-the-job training, supplemented by _____ 8-week sessions of in-class technical training.

6. The Trade Card tells you that someone who does this job should enjoy working outdoors, be agile and physically fit, and enjoy working at heights. Does this sound like you?

- ☐ Yes ☐ No ☐ I'm not sure

Now, return to the Architectural Glass and Metal Technician page on the CTAO website. The next section of that page links you to any unions representing this trade. These links can also be found under the heading “Explore” in the toolbar at the top of the page.

Here we see that Architectural Glass and Metal Technicians can belong to the International Association of Iron Workers, or the International Union of Painters and Allied Trades. Clicking either of the union logos will take you to their website.



Finally, you can use the links under the heading **Explore Other Trades** at the bottom of the page to learn about different opportunities in construction.

If the trade you are interested in doesn't appear at the bottom of the page, you can return to the main Explore page using the link provided.

Explore Other Trades



Brick & Stone Mason



Hoisting Engineer - Tower
Crane Operator



Hoisting Engineer Mobile Crane
Operator



Return To Explore

Activity: Learn More About a Trade of Your Choice

Now it's your turn! Go to the Explore section of the Construction Training & Apprenticeship Ontario (CTAO) website and pick a trade that interests you.

1. What trade did you choose? _____

2a. Click the name of the trade. What is one of the **key attributes** listed in the pop-up window that appears?

2b. Do you have that skill already? ☐ Yes ☐ I need to work on this skill

3a. Is there a **video** about this trade? ☐ Yes ☐ No

3b. If you chose "yes," watch the video and write down one thing you learned from it.

4. Choose one of the **responsibilities** listed for this trade. What kinds of skills do you think you would need to do that kind of work?

The responsibility I chose is: _____

To do that kind of work, I would need to have these skills:

5a. What are the educational **entrance requirements** for this trade?

5b. Do you meet the entrance requirements? ☐ Yes ☐ Not yet

5c. If you chose “not yet,” what additional entrance requirements do you need to get?

6. How many hours of on-the-job training are required as part of the apprenticeship program for this trade?

7. What are the in-class requirements? _____

8. What is the journeyperson wage rate for this trade? _____

9a. Can apprentices and journeypersons in this trade belong to a union? ☐ Yes ☐ No

9b. If you chose “yes,” which unions can they belong to? _____

10a. Now that you know more about this trade, is it something you would like to do?

☐ Yes ☐ No

10b. Share two reasons for your answer.

Conclusion

Congratulations – you’ve taken the first step in using the Construction Training & Apprenticeship Ontario (CTAO) website! Using this resource, you have:

- discovered different areas of the CTAO site
- used the Explore the Trades section of the site
- learned about the skills, requirements, and responsibilities of different construction trades
- viewed and/or downloaded one of CTAO’s "Trade Cards"
- watched a video about work done in a specific trade
- explored a construction trade that you were interested in

What was the most interesting thing you learned?

Did anything you learned surprise you? If so, what?

Next steps

Are you ready for your next steps toward an apprenticeship in the construction trades? If so, ask your instructor for the resource “Building Your Skills with the Construction Training and Apprenticeship Ontario Hub.”

In that resource, you can learn how to build your apprenticeship skills using the CTAO website. It will guide you through creating an account and profile in the "build your skills" section of the site. There you can watch training videos, complete trade-specific skill-building activities, and practice the math, science, and reading skills used in the trades.