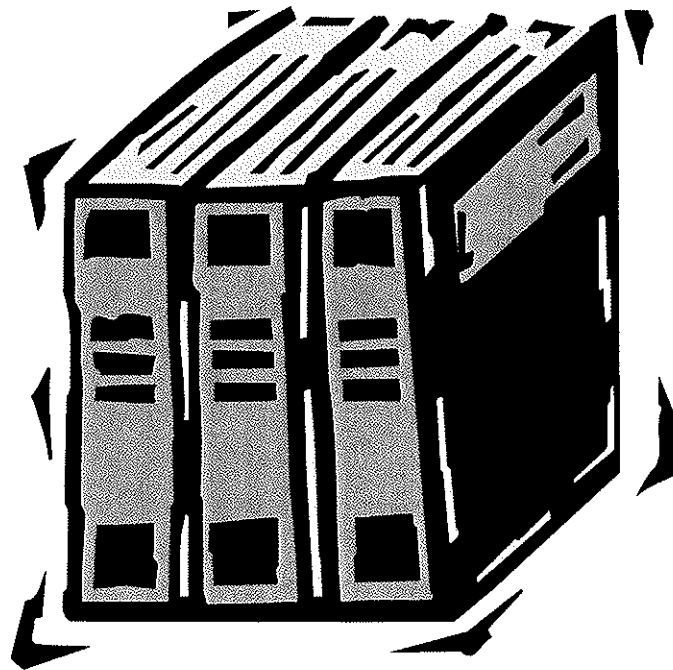


**The Connecticut Glass  
Dealers Association  
State Approved Flat Glass  
Licensing Curriculum**



**Apprentice  
Informational Packet**

# CGDA

## Apprentice Registration “To-Do List”

Before a company registers an apprentice for the Connecticut Glass Dealers Association State Approved Flat Glass Curriculum the company must:

### State Registration Process:

- Fill out and mail in The Connecticut Department of Labor Application for Apprentice Sponsor.
- Once The Connecticut Department of Labor Application for Apprentice Sponsor is processed by the state the Department of Labor will have a site visit and interview the company.
- If the company is approved the company may then self register all apprentices that work for the company.
- A company can self register by completely filling out the five form apprentice registration agreement and sending it back to the Department of Labor. The forms will include a payment to the state of \$25 by the apprentice and \$30 by the employer for each apprentice.
- The state will send you a packet of information, including the apprentice handbook to log their hours.

### CGDA Flat Glass Online Curriculum Registration Process:

- Fill out the registration form and mail it to the CGDA, 330 Main Street, 3<sup>rd</sup> Floor, Hartford, CT 06106, with the correct payment amount.
- The CGDA will register the apprentice for their online courses.
- The apprentice will receive an email with their login and password.
- The apprentice will receive the NGA Glass Installer Reference Manual (book) via mail to the shop.
- The apprentice will have to register themselves for the four (4) state vocational technical classes (1 each semester). *Apprentices can provide high school transcripts to CGDA for classes to be waived.*

# The Connecticut Glass Dealers Association

## State Approved Flat Glass Licensing Curriculum

### Overview

The Connecticut Glass Dealers Association has partnered with the NGA to offer its three (3) year correspondence classes online! The CGDA State Approved Flat Glass Licensing Curriculum is a three (3) year program, which includes (4) four classes offered by the CT State Department of Education at the vocational technical school system and (6) six semesters offered by the new NGA, myglassclass.com, online program, as well as two (2) courses offered by the CGDA.

This program is a combination of online, correspondence, and classroom courses. Each year is broken up with a combination of CGDA/NGA and state instructed courses. This program will provide an apprentice with the opportunity to expand their knowledge and skills in the glazing industry.

### Objectives

An apprentice will learn:

- How to perform the various tasks of glazing in a safe workman like manner
- Safety glazing codes
- Safe operation of mechanical tools & safe glass handling techniques
- The types of glass
- How to cut glass
- How to install glass
- Different types of sealants, their applications, & properties
- Plastic installation techniques
- Measuring & basic blueprint reading
- Sketching & Takeoffs
- Finishes and coating for aluminum and glass
- Metal working equipment & metal frame techniques
- Types of windows
- Entrances and Hardware
- Storefront & curtain wall installation

#### Glazier Apprenticeship Course Sequence & Prerequisites

<b>COURSES</b> <i>(Each course recommended study time is 36 hours)</i>	<b>CGDA/STATE</b>	<b>SEMESTER</b>
<b>FIRST YEAR COURSES:</b>		
Introduction to Glazing/Glass	CGDA/NGA Online	Semester # 1
Glazing I	CGDA/NGA Online	Semester # 2
Basic Math (offered by State)	State Class	
Building Trade Safety (offered by State)	State Class	
<b>SECOND YEAR COURSES:</b>		
Commercial Glazing/Basic Storefronts	CGDA/NGA Online	Semester # 1
Specialty Applications	CGDA/NGA Online	Semester # 2
Advanced Fabrication	CGDA/NGA Online	Semester # 2
Basic Blueprint Reading (offered by state)	State Class	
<b>THIRD YEAR COURSES:</b>		
Job Site Applications	CGDA/NGA Online	Semester # 1
Professionalism in the Trade	CGDA Class Room	Semester # 1
Advanced Applications	CGDA	Semester # 2
CODES	CGDA Correspondence	Semester # 2
Algebra with Trig (offered by state)	State Class	

*\*The intent of this course is to prepare an apprentice to take the state licensing exam.  
It does not guarantee an apprentice's passage of the state exam.*

# Year One

## CGDA Semester 1

### Introduction to Glass:

This course will deal with the introductory knowledge and skills an apprentice needs to learn in order to understand the trade and the most routine tasks. (This course is a prerequisite for all other CGDA offered courses)

#### Objectives

As a result of taking this class each participant should be able to:

- Understand the types of glass & their applications.
- Know the safe handling/moving of glass.
- Understand the use of glazing and cutting tools, techniques, and their applications.
- Understand the basic purpose of sealants, their characteristics and how they are chosen.

## CGDA Semester 2

### Glazing I:

This course will focus on appropriate techniques and sealants for the most common glazing job.

#### Objectives

As a result of taking this class each participant should be:

- Knowledgeable in cutting and installing techniques for mirrors.
- Knowledgeable in the types of plastics, their properties and how they are manufactured.
- Knowledgeable in plastic installation techniques.
- Knowledgeable in metal frame techniques, saw types and metal working equipment.

## State offered courses (year one)

### Basic Math:

This course consists of the basic math skills needed in order for the apprentice to perform their job.

#### Objectives

As a result of taking this class each participant should be:

- Able to do computations by using real numbers, fractions, and decimal fractions.
- Able to understand basic rate and portion with respect to the industry.
- Knowledgeable in computation of area and volume.
- Knowledgeable of the units of measurement.

### Building Trade Safety:

This course will enhance the knowledge of the apprentice with respect to on the job safety.

#### Objectives:

As a result of taking this class each participant should be:

- Understand and explain the general rules of job-site safety.
- Understand and explain the safety rules and guidelines for scaffolding, ladders, and hazardous material.
- Understand and explain safe practices for using hand and power tools and machinery.

# Year Two

## CGDA Semester 1:

### Commercial Glazing/Basic Storefronts:

This course will build on the introductory glazing courses for additional glazing applications.

#### Objectives

As a result of taking this class each participant should be able to:

- Identify various types of windows.
- Recognize and discuss the different types of doors and function of hardware.
- Discuss safety in respect to storefront installation.
- Discuss the pre-installation activities that occur in the shop and at the jobsite prior to the erection of framing.
- Measure rough openings.

## CGDA Semester 2:

### Specialty Applications:

This course will focus on the basic applications of glazing.

#### Objectives

As a result of taking this class each participant should be:

- Able to determine the reasons for building codes.
- Able to understand the recommended use of safety glass installations.
- Knowledgeable about putty and adhesives in glass installations.
- Able to understand the installation techniques and requirements for sealants.
- Able to understand types of shower and tub enclosures and their installations.
- Knowledgeable about frameless shower door installations.

## CGDA Semester 2

### Advanced Fabrication:

This course will deal with the introduction of insulated glass along with glass fabrication and aluminum fabrication.

#### Objectives

As a result of taking this class each participant should be able to:

- Discuss thermal barriers.
- Discuss the safe and proper procedures to be used for edging, drilling, and notching glass.
- Assemble a variety of component parts to construct a frame that will permit glazing at an angle.
- Discuss method used in heating glass and glass laminates.

## State offered Course

### Basic Blue Print Reading:

This course will introduce the apprentice to all aspects of basic blue print reading.

#### Objectives

As a result of taking this class each participant should be knowledgeable in the:

- Application of Building Codes and Standards.
- Alphabet of Lines and Symbols.
- Area of Orthographic Projection Drawings.
- Construction Dimensions and Construction Materials.
- Reading Plot Plans and Contour Maps.
- Footings, Foundations and Floor Blueprint Structural Steel, Framing Blueprints.

# Year Three

## CGDA Semester 1

### Jobsite Applications:

From the main street in your town to a house in a residential neighborhood, every project is different and has different field conditions. This course will teach the apprentice how to work under these different conditions.

### Objectives

As a result of taking this class each participant should be able to:

- Discuss the types of anchors used in metal fabrication & their proper and safe use.
- Describe and discuss rigging and hoisting devices.
- Construct scaffolding.
- Read shop drawings.

## CGDA Semester 2

### Codes – “Know the Code”:

This course will cover all relevant building codes for glaziers. While a comprehensive understanding of all codes is not necessary for glaziers, they must be familiar with aspects that are relevant to the field as well as the building professionals charged with enforcing the codes.

### Objectives

As a result of taking this class each participant should be able to:

- Understand the relevant aspects of each of the codes as it applies to both residential and commercial work.
- Understand their responsibility for following the code, regardless of what an architect, general contractor, etc. may request.
- Understand the appropriate building official responsible for enforcing the code and the remedies they may apply for violations.
- Understand the process for appealing an enforcement action if they feel it is not warranted.

### Advanced Applications:

This course deals with sloped glazing, skylights, curtain walls and finishes and coatings for aluminum glass.

### Objectives

As a result of taking this class each participant should be able to:

- Understand the relationship between the loads the sloped glazing system is exposed to and the design of the system.
- Describe how to install a skylight.
- Discuss all types and aspects of a curtain walls.
- Discuss the differences, benefits and disadvantages between storefronts and curtain walls
- Differentiate between all aluminum finishes and coatings.
- Discuss hurricane impact codes and testing.

### Professionalism in the Work Place:

Given the dominant nature of the small business model in the glazing industry it is critical to ensure that all newly licensed glaziers are able to communicate directly with customers.

### Objectives

As a result of taking this class each participant should knowledgeable in:

- Customer service skills.
- Managing the communication process.
- Supervising an apprentice.

**Connecticut Glass Dealers Association**  
**State Approved Online**  
**Flat Glass Apprentice Curriculum**  
**Registration Form**



**Sponsoring Company Information:**

Company Contact Name: \_\_\_\_\_

Name of Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Apprentice Information:**

Name: \_\_\_\_\_

Home Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: *(required!)* \_\_\_\_\_

Have you already registered as an apprentice with the state?    Yes     No

If you have checked no you must register as an apprentice with the state.

**Registration is for:**

**Year 1** - \$450.00 (*course*) + \$100.00 (*1 time reg. fee*)

**Year 2** - \$450.00

**Year 3** - \$450.00

If a non member would like to enroll in the CGDA State Approved Flat Glass Licensing Curriculum the CGDA membership dues will be added to the registration fee.

**Class Retake Fee:** \$75.00  (for students that are retaking a failed or dropped out of class)

*\* Fee is only for CGDA/ NGA online courses and does not include State Vo-Tech School registration fees.*

**Payment Method:**    Check     Credit Card     Total Amount: \$ \_\_\_\_\_

*(Note: Per CT state law an employer can only require an apprentice to pay 50 % of each class)*

Credit Card # (*MC/Visa only*): \_\_\_\_\_ Exp. Date: \_\_\_\_\_

Name (*as it appears on credit card*): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Fax or mail registration form and checks, payable to, CGDA  
330 Main Street, 3<sup>rd</sup> Floor, Hartford, CT 06106  
Phone: 860.727.0166    Fax: 860.541.6484    [www.ctglass.org](http://www.ctglass.org)

*\*The intent of this course is to prepare an apprentice to take the state licensing exam.  
It does not guarantee an apprentice's passage of the state exam.*

**\*\* Prices are Subject to Change**