

# Carbon Education

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# What is Carbon Education?

Carbon Education was developed to educate and train customers throughout the entire learning process (before, during, and after installation).

There are four key components to Carbon Education:

1. **Carbon Academy Online:** User-directed web-based learning platform and resource library available 24/7.
2. **Carbon Initial Training:** Training at the customer site.
3. **Carbon Academy Onsite:** Hands-on training events at Carbon, taught by our experts.
4. **Carbon Certification Program:** Goal-driven, three-step program to direct customers to become Carbon experts.



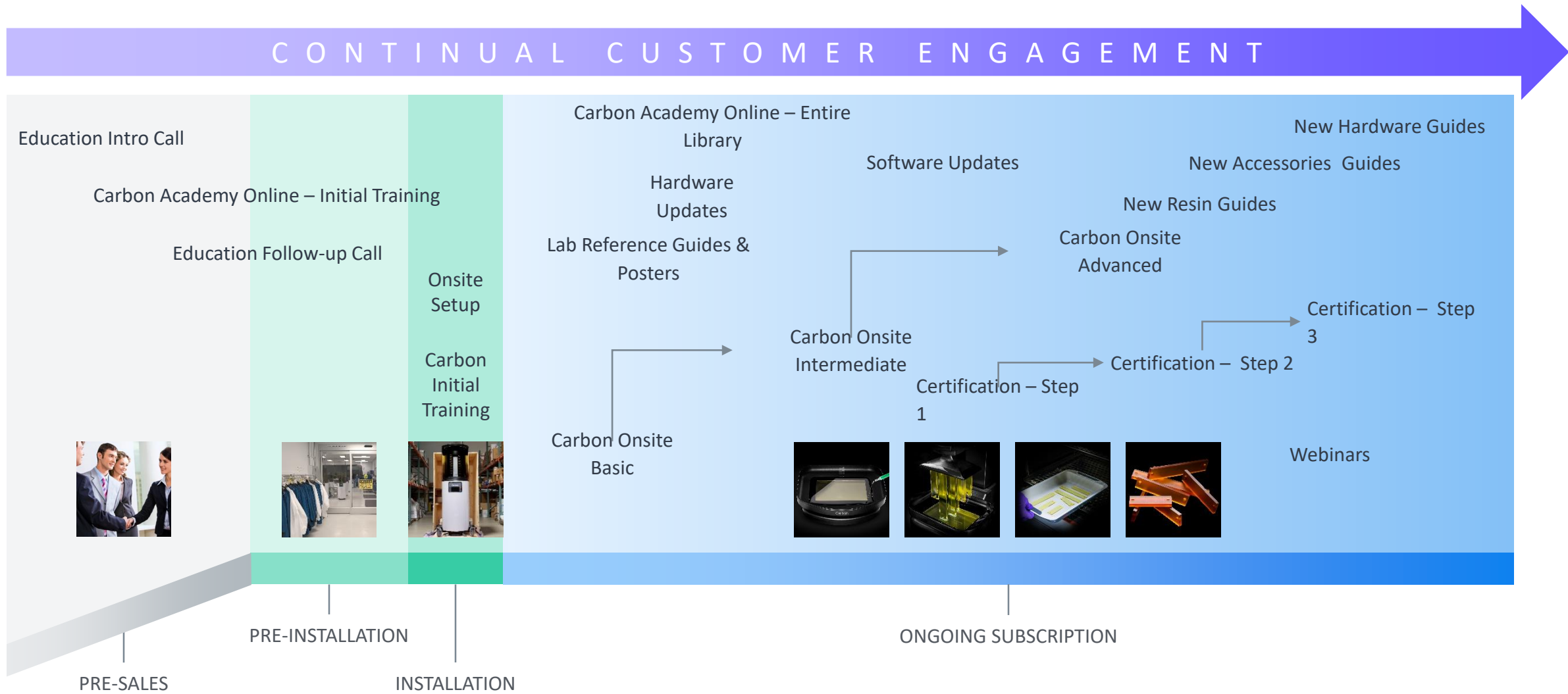
# Carbon Education Goals

Industry-best education program

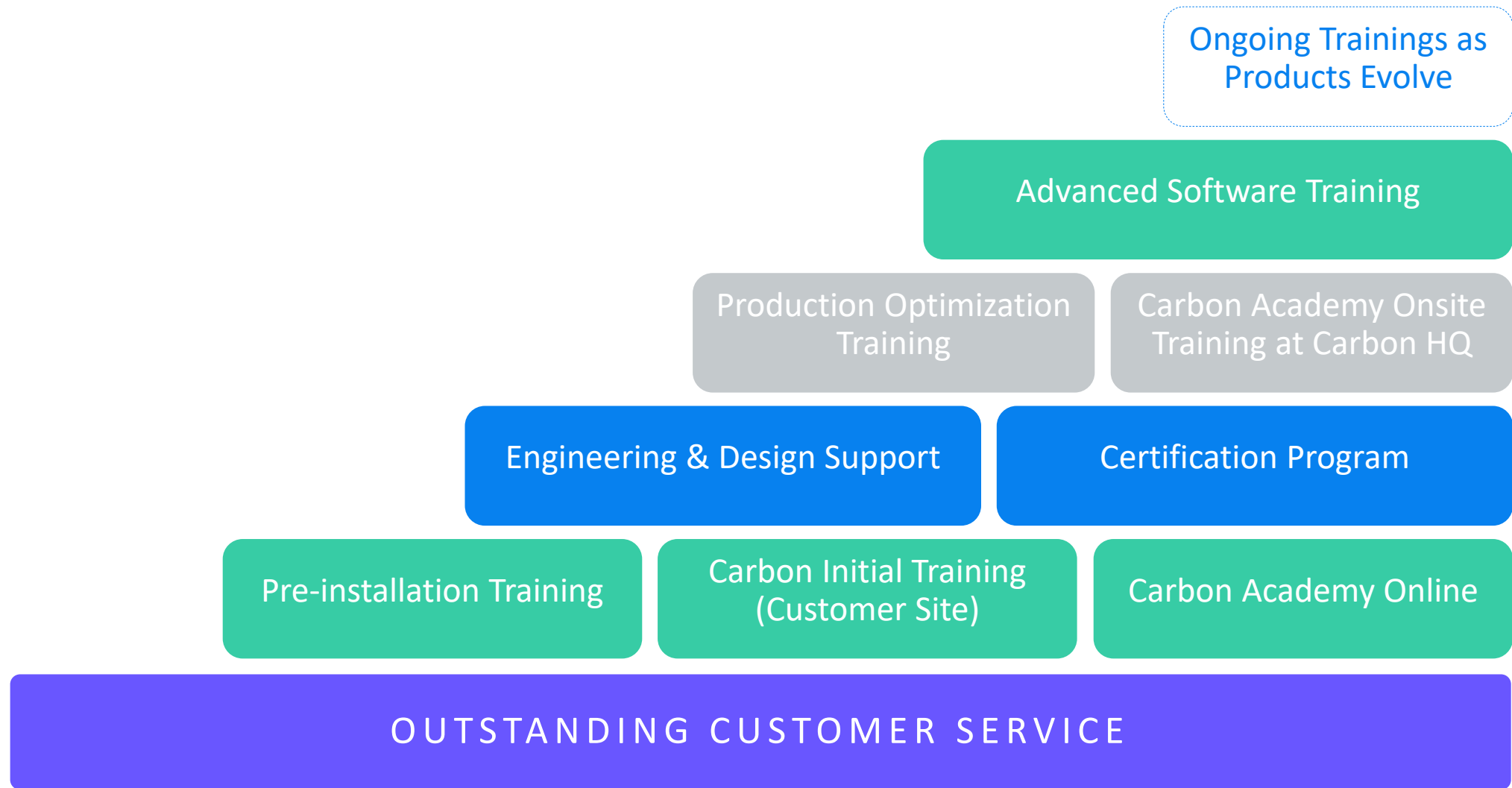
- Ongoing and sustained training
- High-quality and user-friendly
- Provides success as early as possible



# Customer Education Timeline



# How Will We Meet End User Goals?





# Carbon Academy Online

Over 150 training modules, videos, and reference guides

- Hardware
- Software
- Materials
- Advanced topics

## Ongoing and sustained training

Carbon's products are always evolving, and your training journey will continue as we release new products, refine our processes, and develop better tips and tricks.

**Carbon** English

My Courses Course Catalog My Courses

Search...

All (13) Invited (11) Completed (2)

▼ Carbon Initial Training 30

- ✓ Safety Training Guide
- ✓ M Series Training Guide
- DLS Printer Dynamics
- Printer User Interface (UI) Traini...
- Resin Families
- Material Differentiation Overview
- Post-Processing Lab Guide
- Carbon Lab Reference Grid
- ✓ Cassette Care Guide
- One Part Resins with UMA 90
- ✓ UV Curing
- Two Part Resins with RPU 70
- RPU Comparison: RPU 60, 61 & ...
- Thermal Curing
- EPU 40 Training Guide
- FPU 50 Training Guide
- CE 221 Training Guide

**Carbon Initial Training**

The courses in this series are designed to help a new user get proficient with Carbon Technology and process protocol.

Resume Series

You have completed 5 of 30 courses.

Last Activity: -

Progress: In Progress 21%

Score: -

Trainer:

Dee Kerr  
dkerr@carbon3d.com

# Pre-installation Training

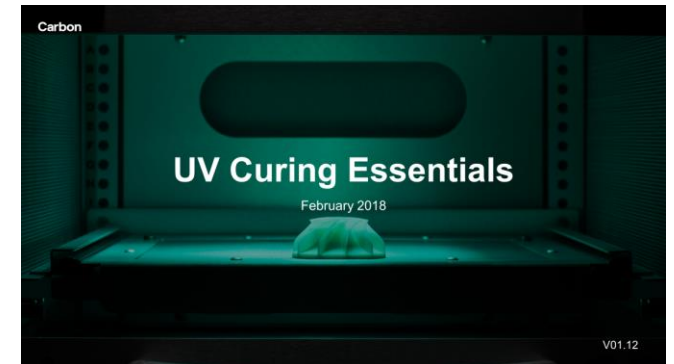
We support you even before your printer is installed. When a customer is preparing for arrival of the printer (site preparation period), we begin working with several groups early on.

## End Users

- Send Carbon Academy Online access to give end users a jump start on learning Carbon's process.
- Invite customers to Carbon Academy Onsite to learn the basics prior to the printer's arrival.

## Application Engineers/Designers/R&D

- Facilitate collaboration between our customers and our Carbon experts (Application Engineers, Production Engineers, etc) on DLS Design, Application Discovery, and Production Optimization.



# Initial Training

## 1.5 days onsite at installation

- Assist team onsite with lab setup
- Initial training
  - Safety
  - Hardware and software
  - Printing and post-processing basics



# Carbon Academy Onsite

As part of our initiative to provide ongoing and sustained training, we invite customers to participate in training events each month at Carbon.

- **Basic Training**
- **Intermediate Training**
- **Advanced Training**
- **Custom Training\***

\*If you have a particular area of interest or need, we can create a program specifically tailored to your needs.



# Application Discovery



# Design Consultation

## Original

- Unvented volumes
- No drainage
- Weak clip
- Stepped design
- Blocky clip catch

## Iteration 1

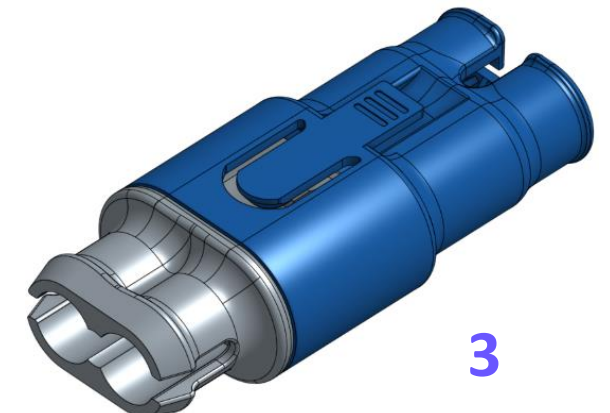
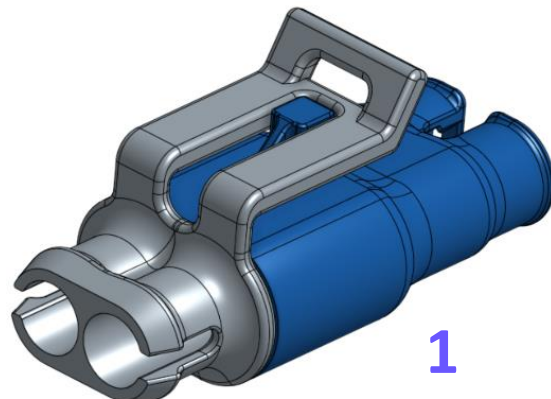
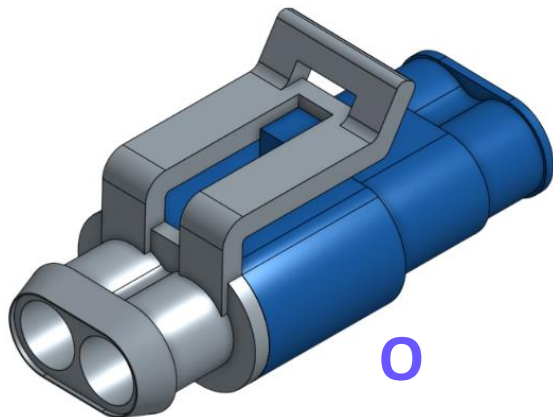
- Provide venting
- Provide drainage
- Strengthen clip
- Gradual cross section changes in print
- Gusseted clip catch

## Iteration 2

- Improve clip design
- Reduce mass
- Increase yield
- Improve part stability
- Reduce supports
- Improve engagement

## Iteration 3

- Self-supporting clip design (reduce supports)
- Smoother engagement of clip
- Improve drainage
- Tolerance iteration



# Carbon Certification Program

Carbon Education is pleased to announce the **Carbon Certification Program**, which launched in January, 2018. The program is goal-driven and provided to end users in a easy to follow three-part series. Customers can participate in the program and track their progress from a beginner level to an expert level. We have Certification tracks for Enterprise, Life Science, and Production Partners (with Dental Certification coming soon).



# Incentives for User/Technician

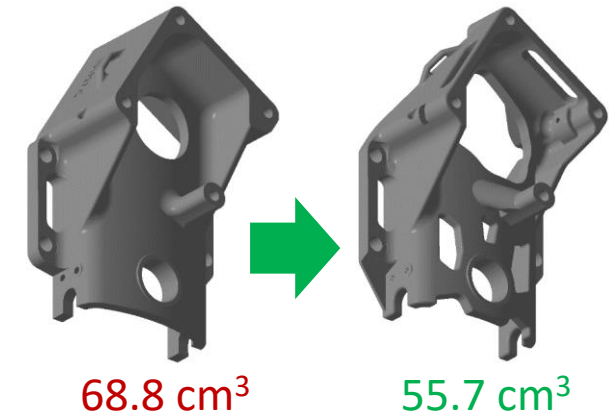
CERTIFICATION LEVEL	BASIC	INTERMEDIATE	ADVANCED
Credibility	Certified user identified as expert within organization		
Career Development	Certification can be listed on user's resume		
Special Events	Quarterly product call	VIP events at AMUG / other trade shows	Executive Speaker Series events
Software Tools	N/A	Early access to software releases	Free access to advanced design tools
Training	Invitation to webinars	Design consultations; up to two parts per month	Waived fee for Advanced Training if all other "Expert" requirements are achieved
Carbon Branded Items	Coffee mug	T-shirt	Pull-over



## Executive Speaker Series Events



## Design Consultation



# Carbon Difference



*With Carbon, the Sale is much more than a transaction;  
it's the beginning of a collaborative partnership.*

*Training is more than a technical guide;  
it's a learning experience.*

Carbon's Education Program Is With  
You Every Step Along The Way!





# Questions

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