

# Light Brigade® BROADBAND ACADEMY

# BROADBAND ACADEMY PROGRAM OVERVIEW

# **Program Information**

The Light Brigade Broadband Academy is a broadband centric training program aimed at providing comprehensive theoretical and skills-based education to develop best-in-class employees for the fiber-to-the-home market. The skills learned in the academy prepare staff to navigate all aspects of FTTH deployments and to grow their mastery of the field.

The program is comprised of three main branches with multiple tracks and multiple opportunities for credentialing and/or certification:

### **Technician and Installer**

Our Broadband Fiber Optic Technician (BFOT) curriculum consists of three progressive levels of FTTH-focused broadband technician training courses, each building upon the previous level. This comprehensive learning track is aimed at field technicians, installers, designers, and engineers who are new to fiber or new to broadband FTTH. Attendees will learn not only the hands-on skills needed to complete an installation, but also the theoretical background behind those skills.

Each level offers ETA certification as well as digital credentialing through Credly. After completing all three BFOT levels and gaining their respective ETA credentials, the learner will earn the benchmark Light Brigade Certified Broadband Fiber Optic Technician (CBFOT®) designation.

## Professional

Our Broadband Fiber Optic Professional curriculum consists of two progressive levels of FTTHfocused broadband professional training courses. This comprehensive learning track prepares professionals and designers with the skills required to design, manage, and maintain broadband FTTH networks.

Each course completed will earn digital credentialing through Credly and the learner will be eligible to take an exam to earn certification through the Fiber Broadband Association (FBA). After successful completion of both courses and obtaining their respective FBA credentials, the learner will earn the benchmark Light Brigade Certified Broadband Fiber Optic Professional (CBFOP®) designation.

## Specialist

Our Broadband Fiber Optic Specialist curriculum consists of four specialty-focused deep dive workshops aimed to develop and demonstrate proficiency in broadband technician hands-on skills. This comprehensive workshop learning track prepares field technicians and installers for not only the hands-on skills needed to complete an installation but also to be recognized as the experts in their trade.

Each workshop completed will earn digital credentialing through Credly. Upon successful completion of all four workshops, the learner will earn the benchmark Light Brigade Certified Broadband Fiber Optic Specialist (CBFOS®) designation.











## **Ideal Progression Path**

#### Earn Towards CBFOT® and CBFOS®



## **The Fine Print**

To qualify for a Light Brigade Broadband Academy shield designation, the candidate must pay for and successfully complete all required coursework and earn all related third-party certification designations. Shield designations will be awarded upon completion of all program requirements and verification by Light Brigade. It is the responsibility of the learner to submit confirmation of ETA or FBA credentials to sales@lightbrigade.com prior to any designation being awarded. There is no time limit for earning designations and no registration is required to participate in the program.

#### Individual Program Requirements

#### Certified Broadband Fiber Optic Technician (CBFOT®)

#### Course completions:

- Fiber Foundations online course
- Broadband Fiber Optic Technician Levels 1, 2, and 3

#### Certifications:

- ETA Broadband Installer (BFI)
- ETA Broadband Technician (BFT)
- ETA Broadband Technician 2 (BFT-2)

#### Certified Broadband Fiber Optic Professional (CBFOP®)

Course completions:

- Certified Fiber to the Home Professional
- FTTx OSP Design

#### Certifications:

- FBA Certified Fiber to the Home Professional
- FBA FTTx OSP Design

#### Certified Broadband Fiber Optic Specialist (CBFOS®)

Course completions:

- Fiber Foundations online course
- Air Blown Fiber Workshop
- OTDR Testing Deep Dive Workshop
- Splicing Deep Dive Workshop
- Emergency Restoration Workshop

#### Certifications:

• None

For training, tools, or equipment: 1 (206) 575-0404 • 1 (800) 451-7128 • lightbrigade.com

## Light Brigade<sup>®</sup> BROADBAND ACADEMY

# Broadband Fiber Optic Technician

# Technician



This foundational level instructor-led course is comprised of a two-day introduction to broadband FTTH theory and fiber followed by two days of hands-on skills training to apply that theory to practical tasks. Completing the prerequisite Fiber Foundations online short course will prepare learners to enter this class with a basic understanding of fiber optic principles.

Areas of focus are FTTH and PON methodologies, topologies, optical distribution networks, cable management and installation practices, testing and maintenance, optical cable types, connectorization, splicing methods, and safety best practices.

Learners that complete this course will earn Credly digital badges for Light Brigade course completion and Sumitomo Fusion Splicing Fundamentals and will be eligible to sit for the ETA Broadband Installer (BFI) credential exam.



Click or scan for detailed course information and upcoming locations.

#### Credentialing



ETA<sup>®</sup> International Broadband Installer (BFI) Valid for four years.



Light Brigade Digital Badge Complete this course and receive a Credly digital badge.



Sumitomo Fusion Splicing Fundamentals Digital Badge

"Great instructor. Kept the class engaging even with dry technical information. Integration of Kahoot quizzes made digesting the info easy and kept me focused."

-Wesley Belk, Texarkana Water Utilities



# Broadband Fiber Optic Technician

## Technician



This intermediate level course is comprised of four days of blended advanced broadband theory topics and practical hands-on skills to apply the theoretical principles into real-world field practices. It is aimed at those that have completed BFOT Level 1 and are ready to build upon that knowledge to gain a deeper and expanded mastery of FTTH broadband theory and skills.

Areas of focus are standards and codes, advanced topologies and methodologies, active and passive devices, ODN and FTTB installation, testing and troubleshooting, as well as expanding upon the fiber theory areas covered in BFOT Level 1.

Learners that complete this course will earn digital credentialing through Credly and will be eligible to sit for the ETA Broadband Technician (BFT) credential exam.



#### Credentialing



ETA® International Broadband Technician (BFT) Valid for four years.



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Click or scan for detailed course information and upcoming locations.

#### "[The instructor]'s engagement and vast knowledge of fiber optic systems is unmatched and even taught someone with 10+ years experience multiple different things."

-Greg Abbott, Gibson Technical Services



# Broadband Fiber Optic Technician

# Technician

This advanced level instructor-led course is heavily focused on field-simulated hands-on skills. After a brief theory portion that explains the main areas of focus, learners will begin a threeday hands-on project that simulates a real-world installation from receiving the work order to completing a scaled installation to preparing documentation for a closeout package. There is heavy emphasis on repetitive practice in each area of focus to instill the confidence to lead nearly any installation project.

This capstone course offers two track options for completion: Emergency Restoration and Air Blown Fiber. Each is its own four-day course, but they can be combined into a single five-day offering.

Learners that complete either track will earn Credly digital badges for Light Brigade course completion and Sumitomo Advanced Fusion Splicing Skills, as well as be eligible to sit for the ETA Broadband Fiber Technician Level 2 (BFT-2) certification exam.

#### **Emergency Restoration Track**

The emergency restoration track includes theory topics consisting of advanced outside plant, splicing, testing, and troubleshooting. Following the theory, learners will receive a project work order where they will spend one day splicing and routing high fiber count single fiber and ribbon fiber cables. The second day will consist of advanced testing and troubleshooting of the installed network using an optical time-domain reflectometer (OTDR) and light source/power meter set. On the third day, learners will perform emergency restorations of damaged cable and splice breaks, including retesting and preparing performance documentation for the project closeout.

#### **Air Blown Fiber Track**

The air blown fiber (ABF) track includes theory topics consisting of advanced outside plant, splicing, testing, and air blown fiber basics. Following the theory, learners will receive a project work order where they will spend one day preparing ABF duct and blowing cable to splice chambers. The second day will consist of splicing and routing high fiber count single fiber cables. On the third day, learners will perform advanced testing and troubleshooting of the installed network using an optical time-domain reflectometer (OTDR) and light source/power meter set and then prepare performance documentation for the project closeout.

#### Credentialing



ETA® International Broadband Technician 2 (BFT-A) Valid for four years.



**Light Brigade Digital Badge** Complete this course and receive a Credly digital badge.



Sumitomo Fusion Splicing Expert Complete this course and receive a Credly digital badge.



COMING SOON

Click or scan for detailed course information and upcoming locations.



# **Certified FTTH Professional**

## Professional



This 20-hour self-paced interactive online course was developed for network designers, network planners, supervisors, and project managers involved in deploying and maintaining FTTH and FTTB networks. This e-course features 16 modules that offer a broad base of knowledge around FTTH architecture, network design, deployment technology, and operational skills.

- Bandwidth and economic issues
- Evolution of FTTH networks
- Basic fiber optic theory
- FTTH architectures and topologies
- Network components

- Fiber and cable management
- Termination options
- Network design
- Loss budgeting
- Test equipment and procedures

This is an intermediate to expert level course that assumes that the learner has established fiber optic theory knowledge, field experience, or formal training such as the Light Brigade Fiber Optics 1-2-3 course.

Learners that complete this course will earn digital credentialing through Credly and will be eligible to sit for the Fiber Broadband Association Certified Fiber to the Home (CFHP) certification exam.

#### Credentialing



Fiber Broadband Association Certified Fiber to the Home Professional Valid for three years.



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Click or scan for detailed course information and upcoming training locations.

"I would recommend this course to anyone seeking to learn the fundamentals to FTTH/FTTB."

-Aidan Brennan, UPC Communications Ireland



# FTTx OSP Design

# Professional



This instructor-led course begins with fundamental fiber and network component information relating to FTTH network design considerations. The course then covers best practices for product selection and ideal placement for point-to-point, distributed, and centralized split network options. This expert-level course is aimed at outside plant designers and network engineers with established knowledge of fiber optic theory and network engineering concepts. It is available as either a three-day in-person course or a five half-day remote course.

Learners that complete this course will earn digital credentialing through Credly and will be eligible to sit for the Fiber Broadband Association FTTx OSP Design certification exam.



Click or scan for detailed course information and upcoming training locations.

#### Credentialing



Fiber Broadband Association FTTx OSP Design Valid for three years.



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Continuing Education Credits (CECs) 22 BICSI CECs

"Excellent presentation and progression of material presented in a professional manner."

-Douglas DeWitt, Virginia Dept. of State



# **Specialty Workshops**

# Specialist

# **OTDR Testing Deep Dive Workshop**

This two-day instructor-led training course focuses on field testing and troubleshooting fiber optic spans/links and explains the various types of equipment and tools needed for acceptance testing, documenting performance, and finding problems in a fiber physical plant. The emphasis is on applying proper OTDR settings, overall testing, and evaluating results. All equipment and simulators are provided, but students are welcome to bring their own OTDR for personal use in the workshop.

Learners that successfully complete this course will earn digital credentialing through Credly for Light Brigade course completion.

#### Credentialing



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Continuing Education Credits (CECs) 12 BICSI CECs



Click or scan for detailed course information and upcoming training locations.

## **Splicing Deep Dive Workshop**

This two-day instructor-led training course focuses on the setup, operation, maintenance, and reporting aspects of fusion splicing. In this predominantly hands-on course, students will learn the proper usage of various types of fusion splicing equipment as well as best practices for preparing and splicing single fiber, ribbon fiber, and fusion splice connectors. Students will develop expertise through immersive hands-on practice exercises that go beyond typical exposure and manufacturer-hosted training. Other areas covered during the course include cable preparation, proper routing of splice trays, and documenting results. Upon completion, students will be prepared to apply the skills learned in the field.

Learners that successfully complete this course will earn digital credentialing through Credly for Light Brigade course completion and Sumitomo Advanced Fusion Splicing Skills.

#### Credentialing



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Sumitomo Advanced Fusion Splice Skills Complete this course and receive a Credly digital badge.



Click or scan for detailed course information and upcoming training locations.



# **Specialty Workshops**

# Specialist

## **Emergency Restoration Workshop**

This two-day instructor-led course focuses on fault location, troubleshooting, and test equipment with a heavy emphasis on hands-on skills training that simulates actual field restorations for both retrievable and non-retrievable slack scenarios. Attendees will gain the knowledge and skills necessary to help their organizations to better deal with network outages.

Learners that successfully complete this course will earn digital credentialing through Credly for Light Brigade course completion.

#### Credentialing



Light Brigade Digital Badge Complete this course and receive a Credly digital badge.



Click or scan for detailed course information and upcoming training locations.

### **Air Blown Fiber Workshop**

This two-day instructor-led course focuses on installation, maintenance, and machine operation for those interested in learning the basics of air blown fiber (ABF) technology or who want to learn why and how to use blowing equipment. The primary focus is aimed at OSP and FTTH installations; however, the basic principles can be applied equally to indoor applications and campus installations.

The course is a mix of classroom theory and hands-on skills exercises that relate to the learned theory. Subjects covered include air blown fiber terminology, components, best practices, equipment setup and teardown, safety, communication, and blowing techniques. In the hands-on skills exercises, attendees will gain practical experience with calculating fill ratios, duct and microduct joining, proper lubrication methods, duct cleaning and preparation testing, machine setup, and blowing microcables and fiber units.

Learners that successfully complete this course will earn digital credentialing through Credly for Light Brigade course completion.

#### Credentialing



Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



Click or scan for detailed course information and upcoming training locations.



# **Digital Badging**

# Learn it. Earn it. Share it.

We understand that communicating your credentials in an ever-expanding online environment can be challenging. That is why we have partnered with Credly to provide Light Brigade accredited learners an easy way to share their fiber optic credentials. A Light Brigade digital badge shows the world you have earned the knowledge and skills from a respected, credible source. Representing your skills as a badge gives you a way to share your abilities online in a way that is simple, trusted, and can be easily verified in real-time.

#### Look for badge icons on our courses to see what you can earn!

Light Brigade FIBER OPTIC TRAINING COURSE COMPLETED

Successful completion of a Light Brigade course generates an invitation to accept a Credly digital badge. Once you accept your digital badge, you can broadcast it to social media, or add it to your email signature, digital resume, or anywhere else that accepts HTML like web pages and blogs. Your digital badge contains verified metadata that describes your qualifications and the process required to earn them.



After your class is complete, you will receive an email from Credly



Share your success on social media and add it to your email signature



Click the link in the email to create your Credly account and accept your digital badge(s)



Download your printable Certificate of Completion in PDF format



All of your credentials will be stored in your digital wallet for easy retrieval



Attend other Light Brigade classes to earn an Expert Shield



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