



# FIBER OPTIC TRAINING

COURSE CATALOG

 Light Brigade<sup>®</sup>

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## CFOE

Light Brigade  
Certified Fiber  
Optic Expert

Our CFOE professional designation consists of three tiers indicating the level of training that the earner has completed. The Light Brigade CFOE digital credential shield is your sign to the industry that you have been trained to the highest level by the Leader in Fiber Optic Skills Training.

**Earn yours today!**

### Level 1: Foundational

Aimed at professionals of all levels, foundational level courses establish and build upon the basics for thorough comprehension. These courses are tailored to establish knowledge for those new to fiber while also broadening knowledge for those more seasoned, while making both feel like the course is suited for their level.

### Level 2: Intermediate

Intermediate level courses review the skills learned in foundational courses and expand to provide a deeper understanding of concepts and how they are applied beyond the basics. These courses are aimed at professionals with a base level understanding and experience that are ready to go to the next level.

### Level 3: Advanced

Light Brigade Advanced level courses explore the bits and bytes that make high-performance fiber networks operate. These next level courses are critically designed for engineers, designers, and technologists working in the design and operation of fiber optic networks to provide an unparalleled knowledge base and level of expertise.



## The Leader in Fiber Optic Skills Training

Since 1987, Light Brigade has trained more than 80,000 students in courses ranging from basic fiber optic theory and practices to comprehensive design and installation courses. We are not just theory based. Our hands-on labs reflect real-world tasks, providing the practical training needed to improve operational efficiencies by reducing costly errors.

We offer several methods for training and can tailor any program to suit your needs.

### Training Solutions

- **Instructor-led Classroom Training**

Our low 7:1 student-to-instructor ratio allows the personal attention needed to attain the required skills and concepts. Many of our courses include hands-on skills labs where students learn by completing practical exercises that reflect real-world situations: preparing cable, splicing, terminating, using testing and troubleshooting equipment to verify their work, and more.

- **Online and Recorded Training**

Light Brigade offers convenient asynchronous (or self-paced) online and recorded training for everyone working with fiber, keeping your employees on-site where you need them most. Educational content covers everything from introductory to advanced topics with several courses building a foundation for certification.

- **Virtual Classroom**

We have developed interactive online versions of the classroom portions of our courses that allow students to be trained remotely in real time with a live Light Brigade instructor. Scheduled throughout the year, our remote classes are a convenient option in today's dynamic travel environment.

- **On-Site | Custom Training**

Each of our customer's fiber applications and challenges are unique, so we are happy to schedule training when and where it works for your team. Customize any course to match the precise needs of your group.

### Our Instructors

Our full-time and contract instructors are a diverse team with a passion for fiber technology. This diversity allows us to ensure the right trainers are leading the right courses where their industry knowledge and practical real-world expertise can be leveraged best. We work with our industry-veteran instructors and subject matter experts to tailor programs for technicians, installers, engineers, designers, and other support staff from a variety of industries and verticals.

### Relevant Technology-based Courses

Course materials are updated frequently to remain current with emerging technologies, products, and best practices. Class materials always reference the latest applicable standards and codes.

# Fiber Optics 1-2-3

## Foundational



This instructor-led course provides a fundamental understanding of fiber optics and the practical hands-on skills training required to install and maintain fiber optic networks. Perfect for those new to fiber or those looking to enhance their current skill set. The first two days of training are dedicated to classroom theory and lecture, which allows students to gain knowledge of fiber technology and network components. The following two days are dedicated to hands-on skills training to learn and apply proper cable preparation, termination, splicing, and testing skills.

**Audience:** Field technicians, installers, IT support staff, engineers, field supervisors, OSP staff, maintenance techs, or technical sales staff

**Prerequisite:** Fiber Foundations is recommended, but not required.

### Credentialing



#### ETA® International Fiber Optics Installer (FOI)

Valid for four years.  
Four-day attendees only.



#### Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



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



#### Sumitomo Fusion Splicing Fundamentals Digital Badge

Available to four-day attendees only.



#### Continuing Education Credits (CECs)

30 BICSI CECs (four-day)  
15 BICSI CECs (two-day)

“They excelled in making fiber optics easy. You can’t improve on perfection.”

— Gabriel Hartman

# Fiber Optics 1-2-3 Remote Classroom

Foundational



Light Brigade offers a virtual option that brings the theory-only component of our Fiber Optics 1-2-3 classroom learning directly to you, making it easier than ever to get the knowledge you need. This instructor-led course gives attendees a fundamental understanding of fiber technology, network components, and equipment that is perfect for those new to fiber or those looking to enhance their current knowledge base.

**Audience:** Field technicians, installers, IT support staff, engineers, field supervisors, OSP staff, maintenance techs, or technical sales staff

**Prerequisites:** Fiber Foundations is recommended, but not required.

We've transformed the Fiber Optics 1-2-3 course's two days of classroom learning into four half-day online sessions with a live Light Brigade instructor. Remote students get the same in-depth knowledge and insights as attendees of our in-person course — including interacting with the instructor and participating in interactive exercises — all from the comfort of their own home or office.

Two days of hands-on skills training can be added later to develop cable preparation, termination, splicing, and testing skills and to qualify for ETA certification and the Light Brigade Fiber Optics 1-2-3 Four Day digital badge.

## Credentialing



### Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



### Continuing Education Credits (CECs)

15 BICSI CECs



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

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

 Light Brigade®

# Introduction to Air Blown Fiber

NEW!

## Introductory

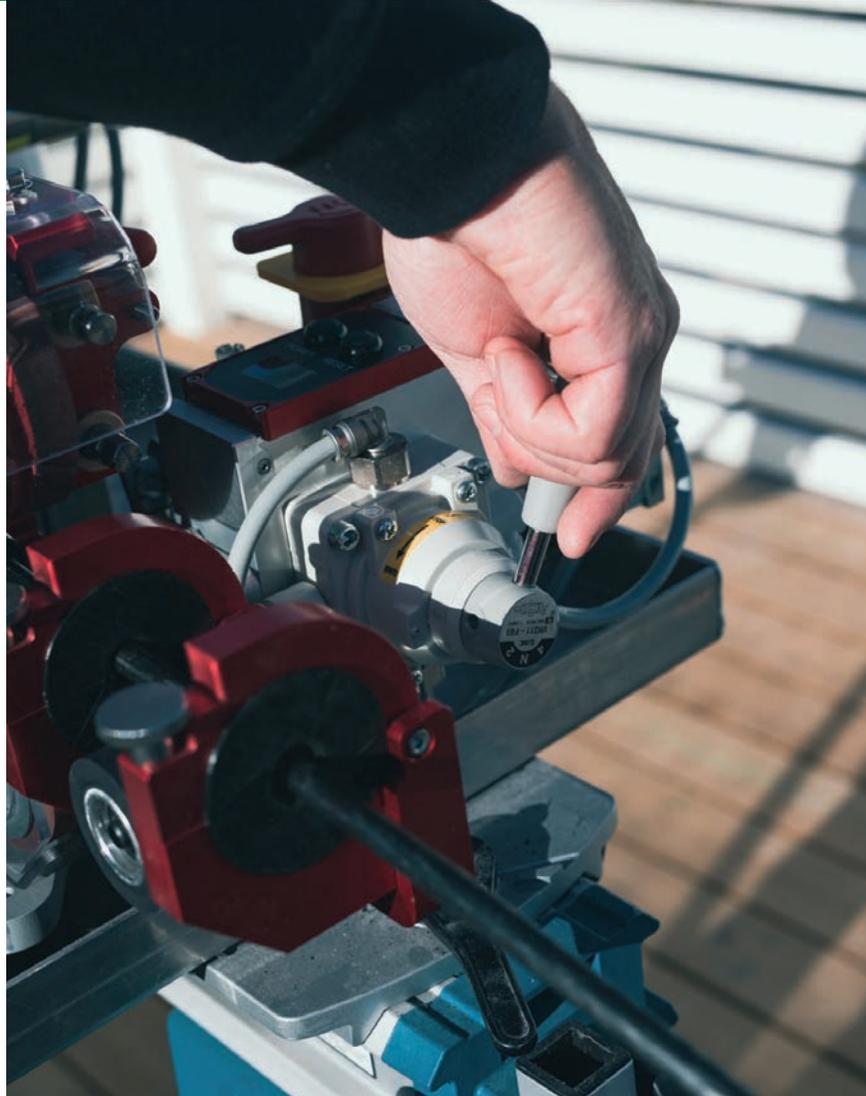
This introductory two-day course focuses on installation, maintenance, and machine operation for those interested in learning the basics of air blown fiber (ABF) technology or that have recently purchased blowing equipment and want to learn how and why to use it. The primary focus of the content is aimed at OSP/FTTx installations; however, the basic principles can be applied equally to indoor applications and campus installations. This course will also serve as a preparatory measure for our four-day instructor-led ABF for Installers and Technicians class.

The course is a mix of classroom theory and hands-on skills exercises that relate to the learned theory. Subjects covered include an overview of air blown fiber technology consisting of terminology, components and equipment, best practices, setup, teardown, safety, communication, and various 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 tests, as well as machine setup and blowing microcables and fiber units.

This course will be taught by a field application engineer and is best suited to be delivered at a Light Brigade Academy or your facility.

**Audience:** Anyone in need of learning the basics of air-blown fiber technology.

**Prerequisite:** None. Entry level.



## 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.

**NEW!**

# ABF for Installers and Technicians

## Foundational/Intermediate

This four-day, foundational/intermediate level, instructor-led course focuses on air blown fiber (ABF) construction, installation, and maintenance practices.

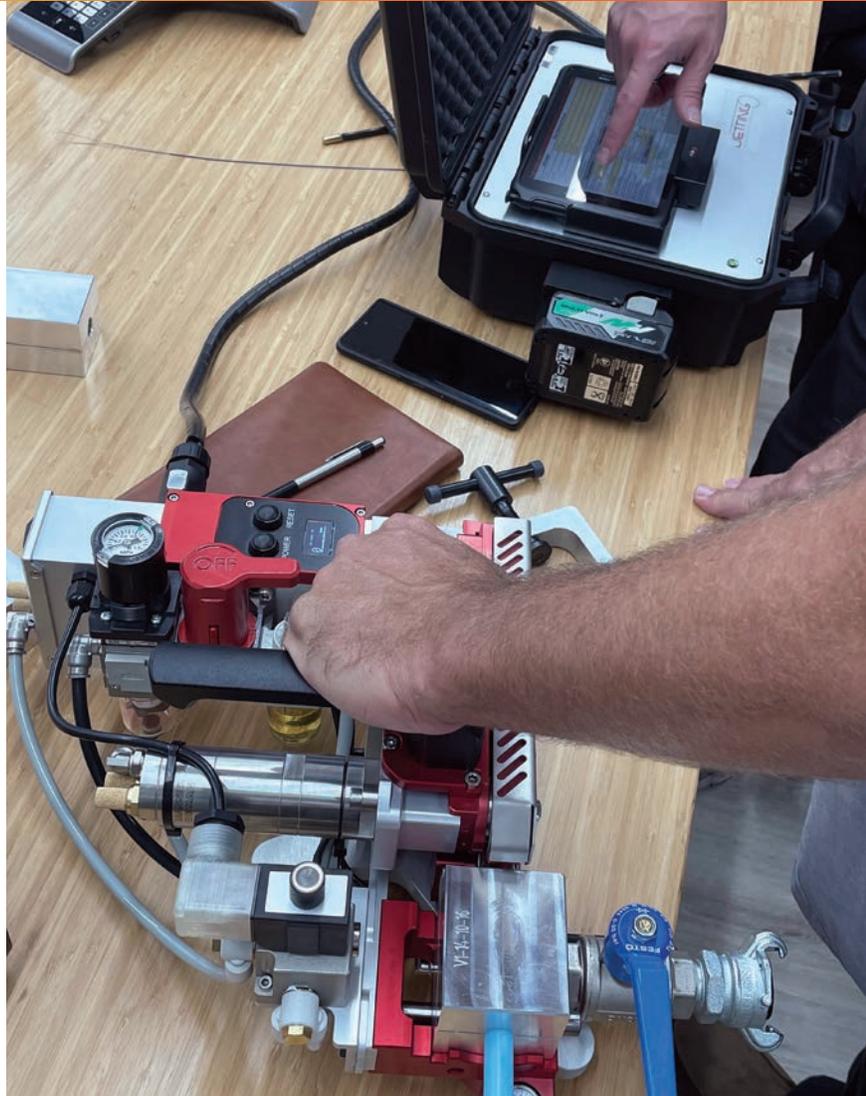
Aimed at anyone working with air blown fiber, the course starts with a review of fiber basics before getting into the details of microduct pathways and installation, tooling and consumables, different types of air blown cable and units, setting up blowing machines, pre-blow tests, blowing of cable, and troubleshooting. The course explores not only point-to-point blowing, but special conditions blowing such as maintenance loops, overblowing, tandem, onward, and center blowing techniques.

Various interactive exercises will be incorporated into the two-day theory part of the course to prepare students for the more in-depth hands-on skills portion of the course that will follow on days three and four.

While the primary focus of the content is presented with the OSP in mind, the same principles equally apply to indoor applications such as MDU, hospitality, and commercial buildings and campuses

**Audience:** Installers, OSP technicians, field supervisors, project managers, and designers

**Prerequisite:** Fiber Foundations and either Fiber Optics 1-2-3 or OSP for Installers and Technicians is recommended, but not required.



## 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.

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# Industrial & Harsh Environments

## Foundational

### Fiber Optics for Oil/Gas

This four-day instructor-led course teaches how to properly install and maintain fiber optic systems in petrochemical environments. Attendees will learn to splice, connectorize, test, and troubleshoot optical fiber networks to increase efficiency and reliability as well as reduce costs and downtime.

**Audience:** Those who design, install, test, or maintain fiber networks in petrochemical applications such as offshore drilling, pipelines, refineries, and processing plants

**Prerequisite:** Fiber Foundations is recommended, but not required.

#### Credentialing

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ETA® International Fiber Optics Installer (FOI)

Valid for four years.



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

### Fiber Optics for Mining Applications

This three-day instructor-led course teaches proper installation and maintenance of fiber optics systems in harsh underground and surface mine environments. Attendees will learn to splice, connectorize, test, and troubleshoot mining-based optical fiber networks to increase efficiency and reliability.

**Audience:** Anyone who designs, installs, tests, or maintains optical fiber networks in harsh or hazardous environments

**Prerequisite:** Fiber Foundations is recommended, but not required.

#### Credentialing

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ETA® International Fiber Optics Installer (FOI)

Valid for four years.



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

# Fiber Optics for Wireless

Foundational

This four-day instructor-led course provides the foundation needed to understand fiber optic applications and challenges in FTTA and small cell network applications. This course examines how fiber works and the fundamentals of different fibers, cables, connectors, and other hardware used in fiber optic communication networks. After learning the basics and nuances of fiber within wireless networks, attendees will build skills and best practices in hands-on labs for cable preparation, OTDR operation, and optical loss testing.

**Audience:** Installers, design engineers, project managers, field engineers, or anyone who is managing or installing fiber for a FTTA/cell site

**Prerequisite:** Fiber Foundations is recommended, but not required.

## Credentialing



**ETA® International Fiber to Any Antenna (FTAA)**

Valid for four years.

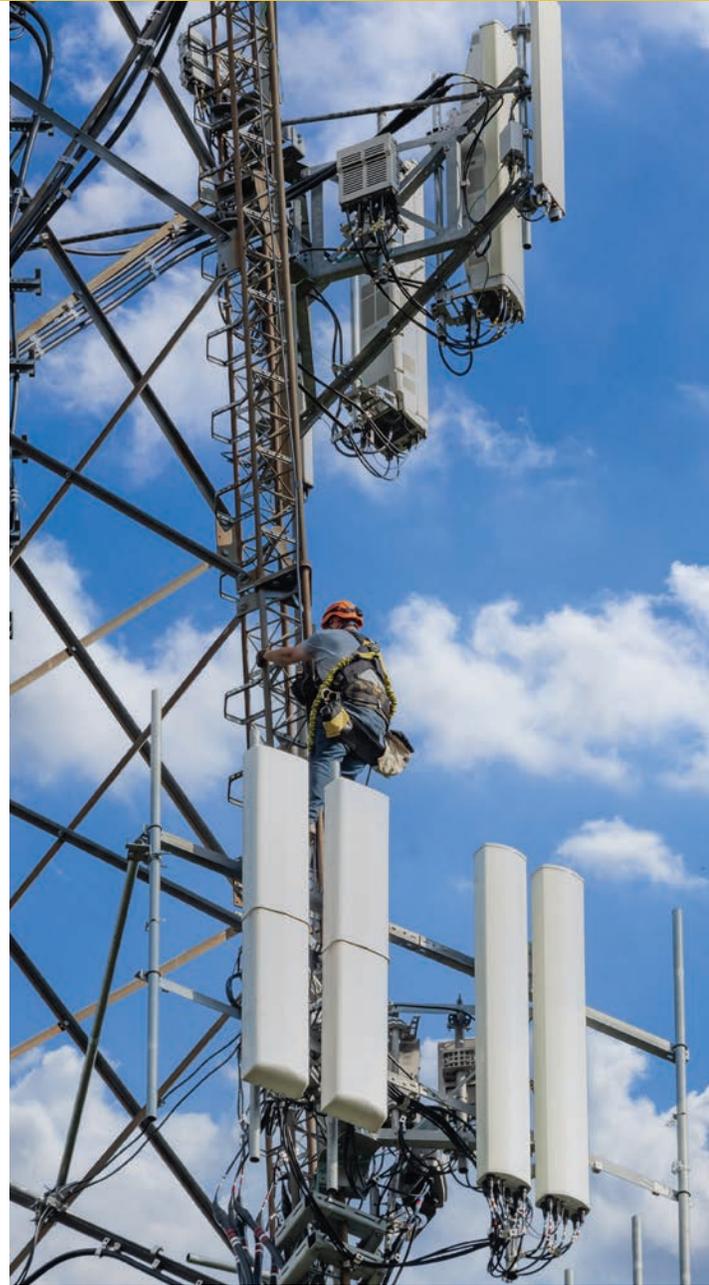


**Light Brigade Digital Badge**

Complete this course and receive a Credly digital badge.



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



**“The instructor showed ample knowledge not only in the field of fiber optics but in all industries that may use it.”**

—James Stephens, Schlumberger

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# Fiber Optics for Utilities

## Foundational

### Level 1 Technician

This three-day instructor-led course teaches basic fiber optic theory and the products used in fiber networks, focusing on the proper installation and maintenance of aerial and underground utility fiber optic systems. Hands-on skills training includes splicing, termination, testing, and troubleshooting to increase efficiency, reliability, and deployment speed in the field.

**Audience:** Installers and technicians in the utility telecom industry

**Prerequisite:** Fiber Foundations is recommended, but not required.



## Intermediate

### Level 2 Designer

This one-day course examines fiber optic design parameters, cable management alternatives, route planning, optical testing requirements, test results interpretation, and cable system design.

**Audience:** Those involved in the design, administration, operation, and supervision of utility-based fiber optic networks

**Prerequisite:** Any Light Brigade introductory courses like Fiber Optics 1-2-3, online training, or equivalent field experience



## Advanced

### Level 3 Adv. Designer

This one-day course focuses on DWDM systems and transmission impairments such as PMD and CD that limit the bandwidth and operating rates of fiber optic transmission systems. It covers xWDM theory and applications with a special emphasis on fiber dispersion limits and system design considerations.

**Audience:** Design engineers, or project managers

**Prerequisite:** Knowledge of fiber optic theory, plus field experience or formal training such as Fiber Optics for Utilities Level 2 Designer



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

## Credentialing



UTC Fiber Optic Professional  
Valid for three years.



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

“The instructors were great at presenting the material. They showed us better ways to terminate.”

—Travis Buenning, AEP

# OSP for Installers and Technicians

Foundational



This four-day instructor-led course is designed to provide useful technical knowledge of fiber optics relating to outside plant (OSP) and FTTx applications, as well as the skills needed to install and test the physical layer for active Ethernet and passive optical networks (PON). Students will gain practical knowledge and hands-on skill in all aspects of FTTx deployments including specific issues—such as testing splitters, WDM devices, measuring reflectance, and bidirectional testing—that are unique to FTTx networks.

**Audience:** Beginner and experienced technicians, or supervisors

**Prerequisite:** Fiber Foundations is recommended, but not required.



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

## Credentialing



**ETA® International Fiber Optics Technician—Outside Plant (FOT-OSP)**

Valid for four years.



**Light Brigade Digital Badge**

Complete this course and receive a Credly digital badge.



**Continuing Education Credits (CECs)**

28 BICSI CECs

**“The most knowledgeable instructor I’ve ever had in the 17 years I’ve been in the industry. I don’t think there is a question he could not answer. Awesome instructor.”**

—Brandon Martinez, Webpass

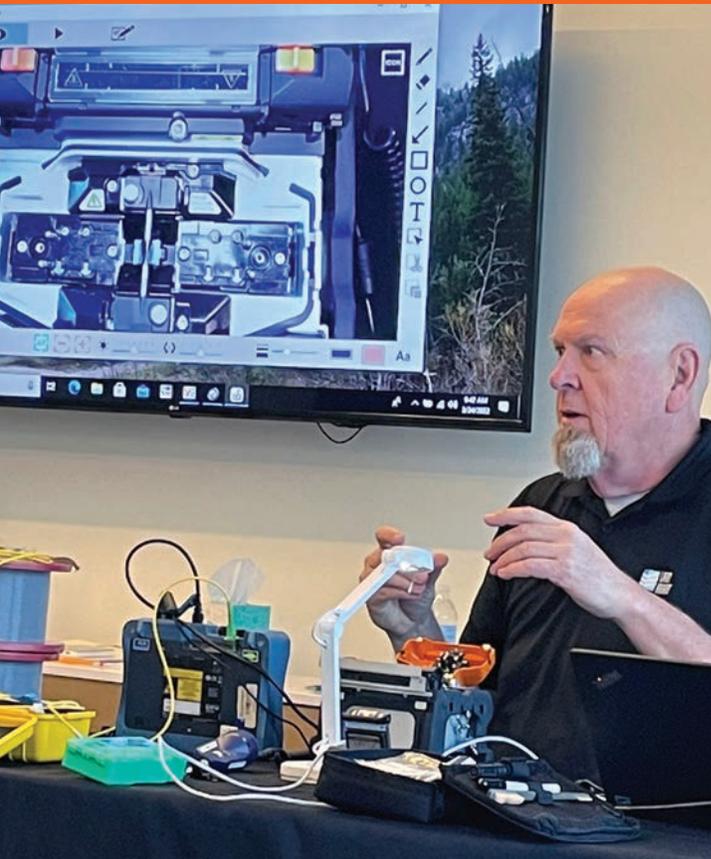
For training, tools, or equipment:

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# Advanced OSP Technician

## Intermediate



This four-day instructor-led course features one day of classroom theory that delivers a quick refresher on fiber terminology and technology before diving into FTTx, emergency restoration, fiber characterization, and how the latest industry trends may impact field practices. This is followed by three days of hands-on skills training, where attendees build and troubleshoot a passive optical network from patch panel to patch panel through various splice closures with multiple drops.

**Audience:** Fiber optic technicians, team leaders, installers, outside plant maintenance staff, or staff engineers

**Prerequisite:** Any Light Brigade introductory courses such as Fiber Optics 1-2-3 or equivalent field experience

### Credentialing



ETA® International Fiber Optics Technician—  
Outside Plant (FOT-OSP)

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 training locations.



Continuing Education  
Credits (CECs)

26 BICSI CECs

“I have now attended three classes taught by Light Brigade instructors and have enjoyed all of them. I have come out with more knowledge than going in. I look forward to more classes in the future.”

—Michael Bass, Opelika Power Services

NEW!

# Splicing Deep Dive Workshop

Intermediate

This immersive instructor-led workshop 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 and 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.

This course will have a maximum ratio of eight (8) students per instructor. Although the class is fully equipped, students are encouraged to bring their own fusion splicing equipment to class.

**Audience:** Installers, ISP/OSP technicians, maintenance techs, field supervisors, or senior technicians

**Prerequisite:** Fiber Optics 1-2-3 or equivalent field experience. Fiber Foundations is recommended, but not required.

## Credentialing



### Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.

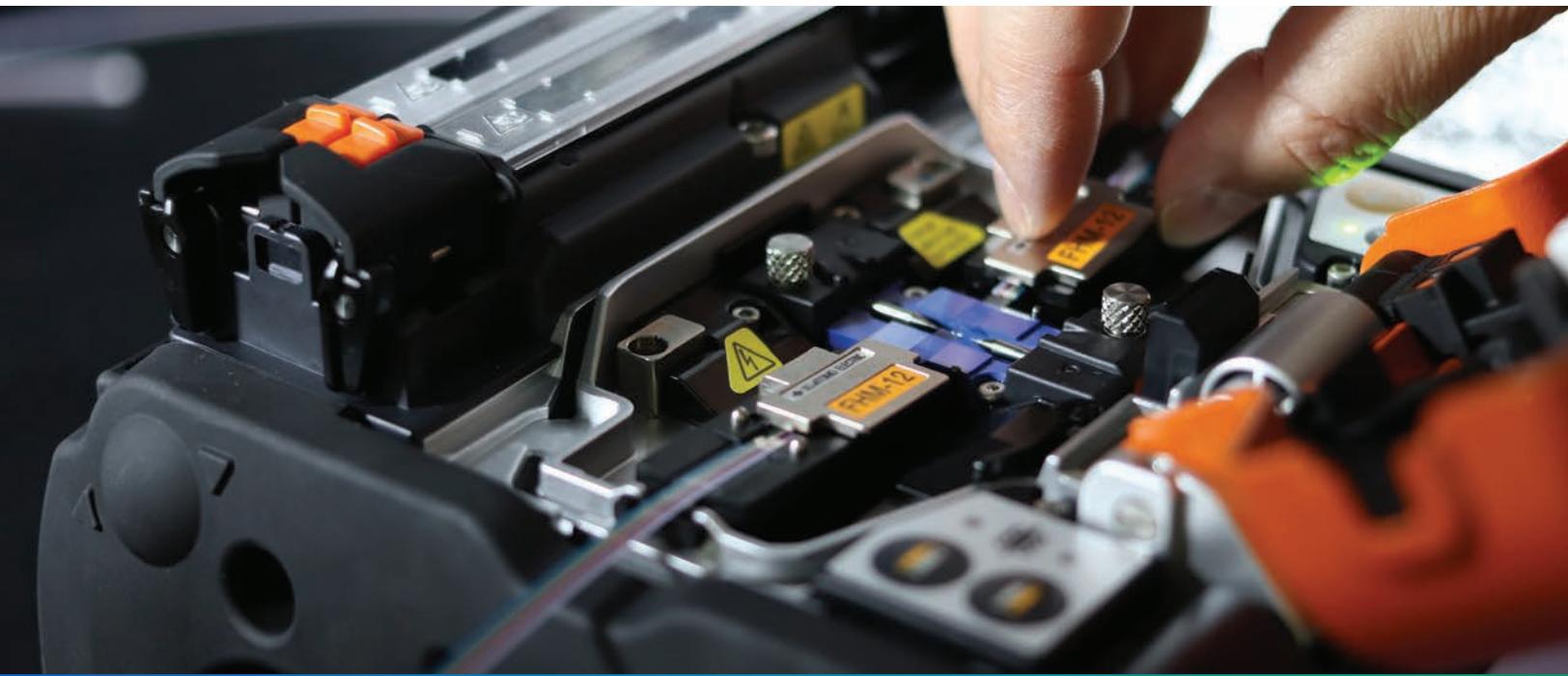


### Sumitomo Advanced Fusion Splice Skills

Complete this course and receive a Credly digital badge.



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



For training, tools, or equipment:  
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 Light Brigade®

# OTDR Testing Deep Dive

REVAMPED!

## Intermediate



This two-day instructor-led 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 understanding proper OTDR settings, overall testing, and evaluating results.

**Audience:** Installers, OSP technicians, maintenance techs, field supervisors, or senior technicians

**Prerequisite:** Fiber Optics 1-2-3 or field experience with fiber optic testing. Fiber Foundations is recommended, but not required.

### 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.

Did you know – OTDR Testing Deep Dive and Emergency Restoration are often offered back-to-back in the same week?

“This course was very helpful in learning about the OTDR test equipment. Recommend to anyone using this equipment.”

–Tom McLaughlin, Anoka County Highway Department

# Emergency Restoration

Intermediate

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 outages.

**Audience:** Fiber optic technicians, engineers, or managers who work in the OSP environment

**Prerequisite:** Any Light Brigade introductory courses such as Fiber Optics 1-2-3, OSP for Installers and Technicians, Utilities Level 1 Technician, or equivalent field experience

## 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.



**“I liked that you learn the theory then do the hands-on practical work. It helps cement the knowledge in your brain.”**

—Ben Peyton, Chatham Electric

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# Certified FTTH Professional

## Intermediate

Our Certified Fiber to the Home Professional (CFHP) course is available as either a self-guided online study course or as in-person training. It is designed for those involved in deploying and maintaining FTTH and FTTB networks. Students will gain a broad base of knowledge and familiarity with FTTH architectures, network design, deployment technology, and operational skills.

**Audience:** Network designers, network planners, supervisors, and project managers

**Prerequisite:** Fiber Foundations is recommended, but not required.

## CFHP Online Training

This interactive online course features 16 modules that offer a broad base of knowledge around FTTH architecture, network design, deployment technology, and operational skills. These topics include:

- 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

Ideal for remote and international students looking for the comprehensive material found in our CFHP instructor-led course, without the added expense of travel.

## CFHP Instructor-led Training

This two-day instructor-led course focuses on the fundamentals of FTTH architectures, network design, deployment technology, and operational skills. It covers everything from FTTx systems to components, including discussion around the business issues involved with planning FTTx deployments.

## 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.**

**“An invaluable addition to our knowledge base especially with future planning.”**

—Brian Perch, Cable & Wireless Barbados, Ltd.

# FTTx OSP Design

Advanced



This three-day 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 course is also offered as a remote instructor-led course spanning five consecutive half-day sessions.

**Audience:** Outside plant and network engineers

**Prerequisite:** Knowledge of fiber theory and basic network engineering concepts

## Credentialing



**Fiber Broadband Association  
FTTx OSP Design**  
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.**

**“Well done! I will definitely be sending additional design engineers to future sessions.”**

—Matthew S., Crossroads Communications Solutions

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# Fiber Characterization

## Advanced

### Fiber Characterization Fundamentals

This two-day instructor-led course focuses on the principles behind building and maintaining high-speed optical networks where key parameters such as polarization mode dispersion and chromatic dispersion must be calculated to evaluate system capabilities and potential upgrades to higher bit rates.

**Audience:** Those involved with equipment or systems where fiber characterization is needed to ensure proper operation of 10 Gb/s or higher data rates

**Prerequisite:** Previous experience with fiber optics and knowledge of OTDR testing

#### Credentialing

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#### Light Brigade Digital Badge

Complete this course and receive a Credly digital badge.



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

### OTT Certified Fiber Characterization Engineer (CFCE)

This five-day instructor-led course focuses on mastering the tests required to verify that an infrastructure can support high data rate (10+ Gb/s) applications, Raman amplification, and extended wavelength ranges for CWDM and DWDM systems, as well as those typically required to prove that the fiber will operate properly when dark fiber contracts are signed.

**Audience:** OSP and network engineers, senior technicians, or designers

**Prerequisite:** Previous experience with fiber optics and knowledge of OTDR testing

#### Credentialing

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#### OTT Certified Fiber Characterization Engineer



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

### OTT Certified Optical Network Associate (CONA)

This five-day instructor-led course examines how to design, plan, and implement cost-effective, high-speed networks from single channel systems to multiple channel options using CWDM and DWDM. Attendees will work together on interactive design projects to establish requirements for proper system performance and determine how the network can be affected by the properties of the physical infrastructure.

**Audience:** Outside plant and network engineers

**Prerequisite:** Knowledge of fiber theory and basic network engineering concepts

#### Credentialing

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OTT Certified Optical  
Network Associate



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

### OTT Certified Optical Network Engineer (CONE)

Learn to meet the fast-evolving challenges of increasing capacity, reach, and flexibility, controlling latency, migrating to open/interoperable systems, and providing quality of service while keeping costs under control and reducing power consumption. Learn how the combination of coherent transmission and digital signal processing has transformed optical communications at the higher data rates of 100 to 800 Gb/s and about the changes necessary for DWDM systems to operate efficiently at data rates of 400 Gb/s and above.

Understand how a mix of optical and electronic technologies is used to overcome limitations, and the role of SDN and its implications for facilitating open line systems, ROADMs, and white box solutions. Appreciate the fundamental limitations that apply and the trade-offs and compromises necessary to make strategic decisions about the long-term plans for your network.

**Audience:** Anyone deploying advanced communication networks of 100 Gb/s and above. Typical roles include network designers, planners, network engineers and managers, and strategic network managers.

**Prerequisite:** OTT Certified Optical Network Associate (CONA) certification.

#### Credentialing

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OTT Certified Optical  
Network Engineer

IEEE credits available for additional fee.



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

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# Online Training

## Introductory

### Fiber Foundations

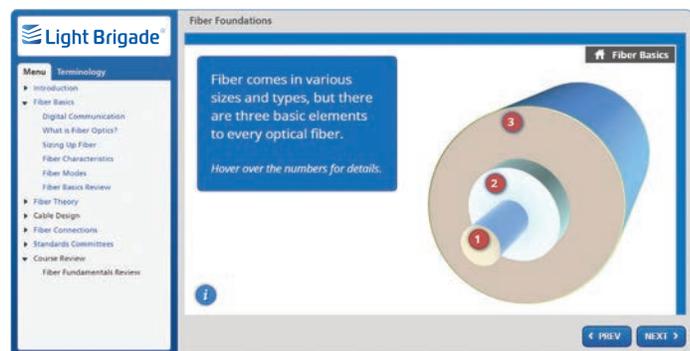
Whether a new employee at an organization that manufactures fiber related products, or a technician moving over from the copper world, this short e-course will introduce technical terminology with accurate, easy-to-understand language.

Perfect for those new to the industry, this interactive online course is the ideal first step into fiber optics. This overview of basic theory, terminology, and key products is designed to provide a baseline on which to build more in-depth training.

Each topic in Fiber Foundations is explained through easy-to-understand definitions that are illustrated through helpful examples and animations. Students will gain a basic familiarity with optical fiber and its foundational concepts, then reinforce that knowledge through a short review session.

Fiber Foundations is self-paced, and should take approximately two hours to complete.

Eligible for 2 BICSI CECs.



Click or scan for detailed course and registration information.



## Certified Fiber to the Home Professional Online Training Program

Learn more on page 12.

# Online Training

## Introductory



## Fiber Optic Safety

### Complete Online Safety Training for the Workforce

When strong health and safety practices become part of the fabric of your organization, everyone wins. Create a positive safety culture by ensuring your employees are trained to follow safety procedures and identify safety concerns unique to fiber optics. Fiber optic professionals can be exposed to a wide variety of hazards — from the glass fibers themselves to chemicals used in cleaners and adhesives, to the sharp tools used to prepare cables for termination. They often encounter heavy equipment and power tools and may be in proximity to high voltage and traffic hazards during cable placement and system restoration.

This course provides recommendations for safe practices when working with optical fibers and cables. It's a solid foundation for ensuring your workforce remains healthy and productive and a great addition to your current safety program. Creating a safety-first culture helps to ensure your workforce is not part of painful statistics involving injuries and costly litigation.



Click or scan for detailed course and registration information.



For training, tools, or equipment:  
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# 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!

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



Register for other Light Brigade classes to earn an Expert Shield



# Certifications & Discounts

## Independent Certifications

Many of our courses are eligible for independent certification through third-party industry organizations and groups. These certifications show competency in hands-on skills and technical knowledge.



## Third-party Credits

BICSI Continuing Education Credits (CECs) and NCTI Master Technician credits are available for many Light Brigade training courses.



## Sumitomo Fusion Splicing Fundamentals Digital Badge

Light Brigade and Sumitomo Electric Lightwave have collaborated to develop a comprehensive introduction to fusion splicing for our Fiber Optics 1-2-3 course. This structured skills competency assessment ensures that students leave class with a firm understanding of splicer maintenance, equipment, fiber preparation, splicing and splice protection, estimated and actual splice losses, and how to troubleshoot and correct common splice errors. Those who demonstrate these competencies during the hands-on portion of the class will earn the "Fusion Splicing Fundamentals" Credly digital badge.



## Training Discounts

Light Brigade offers a variety of discounts and special pricing. Look for the green tag icon for courses that are eligible for any of the discounts below:

- 10% discount for four or more attendees from the same organization.
- 10% discount for Low Voltage Nation Gold Members.
- 15% discount for UTC and FBA members.
- 10% discount for previous attendees of our three or four-day courses. Good for four years!

Note: Discounts cannot be combined.

CONA and CFCE courses are only eligible for the 10% discount for four or more attendees. Other discounts do not apply.

## Early Bird Pricing

Receive up to \$150 off the list price by registering more than 90 days prior to the start of class. Classes booked 90 days or less will be charged the full list price. Book early and save!

Combine Early Bird Pricing with one of our many discounts for additional savings!

# On-site & Customized Training

## Customized Training

Don't see exactly what you need?

Need training on something more unique or specific to your business?

Our subject matter experts can work with you to develop a course that meets your precise needs and then deliver it at your location. Whether you require small or large changes, we have the experts who can give your team the knowledge and skills needed to get the job done right.

## Benefits of On-site Training

- **Convenience**  
Schedule training exactly where and when you need it.
- **Cost Savings**  
Save travel time and expenses by bringing training to your facility.
- **Expertise**  
Learn on your own equipment or use our extensive inventory of equipment and supplies. You decide!
- **Flexibility**  
Courses can be scheduled throughout the year and delivered at different company locations.



# Fiber Optic Blowing Machines



## TriggAIR Fiber Blowing Machine

**For Cable 0.8-3mm / Duct 3mm, 5mm, 7mm, 8mm**

This handheld fiber blowing unit is optimized for FTTx installation of blown fiber and 0.8mm to 3mm micro/nano cables from into 3mm, 5mm, 7mm, and 8mm ducts. TriggAIR is battery powered and offers adjustable clamping force.



## V0 HD Fiber Blowing Machine

**For Cable 0.8-6.5mm / Duct 3-16mm**

This electrically-operated fiber blowing unit is optimized for FTTx installation of blown fiber and micro/nano cables from 0.8mm to 6.5mm into 3mm to 16mm ducts. The V0 HD is extremely compact and can be operated directly from its case.



## V2 Fiber Blowing Machine

**For Cable 2.4-16mm / Duct 7-50mm**

This pneumatic blowing machine features a unique joystick controller for optimal speed control during installation and can be configured for 2.4mm to 16mm blown fiber cable and 7mm to 50mm fiber duct. Compact and easy to maintain.



## V3 Fiber Blowing Machine

**For Cable 4-40mm / Duct 10-63mm**

This pneumatic blowing machine can install cables from 4mm to 40mm in ducts from 10mm to 63mm. The unique joystick offers forward and reverse direction control, while the agile motors provide powerful pushing capability.



## JetLogger Documentation System

**For V2 and V3 Fiber Blowing Machines**

The JetLogger is a blown fiber documentation system for the installer who needs an efficient and professional electronic documentation of the cable blowing process. The JetLogger can be incorporated with V2 and V3 fiber blowing machines.



# All Your Fiber Optic Product Needs



Tools



Tool Kits



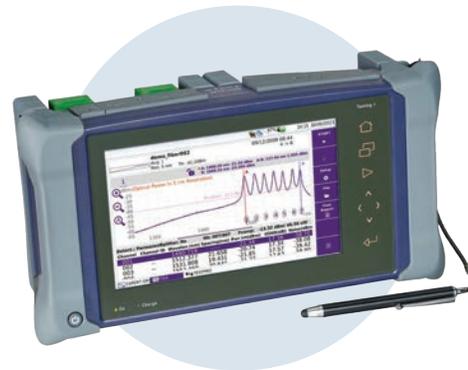
Cleaning & Consumables



Splicing & Accessories



Test & Inspection



OTDR & Fiber Characterization

# Top reasons to join the Light Brigade family

1

## Expertise

We know fiber optics inside and out. It's all we do.

2

## Tools, Equipment & Accessories

We offer comprehensive solutions designed for field use.



Learn More

3

## Partnerships

We work with the leading suppliers and industry associations.



We offer our attendees lifetime technical support as well as Alumni Benefits!

Save 5% on splicers with 'SPLICER-05' • Save 10% on additional products with 'ATTENDEE10'\*

\*First course must be completed in full to be eligible for discount.

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



Light Brigade  
835 Central Ave N.  
Suite D-132  
Kent, WA 98032

“

Amazing instructors who explained everything to the fullest. Best class I have ever done for sure.

- Robert Keller, City of Fairfax

”

(206) 575-0404  
1(800) 451-7128



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