



Fiber Optics 1-2-3

This hands-on training course provides a fundamental understanding of fiber optics plus the practical skills required to install and maintain fiber optic networks. It is a great class for those new to fiber as well as those looking to enhance their current skills.

You'll gain an understanding of fiber technology and network components through the instructor lecture and activities that take place the first two days of class. Then you'll develop fiber optic field skills for cable handling, terminations, splicing and testing in the two days of hands-on training. Our instructor-led courses provide an understanding of why certain tools and techniques are used, as well as teaching the skills themselves.

Course Format: The course is available as a two day lecture or a four day lecture/hands-on format

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

Course Outline

Classroom (16 Hours)

- Introduction to Fiber Optics
- Fiber Theory
- Multimode and Single-mode fibers
- Fiber Optic Cables
- Fiber Optic Connectors
- Splicing
- Fiber and Cable Management
- Installation
- Test Equipment
- Testing Best Practices
- Restoration
- Safety
- Communication System Basics
- Loss Budgets

Hands-on Exercises (16 Hours)

- Station #1 – Splicing**
 - Fusion / Mechanical / Pigtail
 - Fiber Handling and Cleaving
- Station #2 – Connectorization**
 - Multiple Bonding Methods
 - Visual Inspection / Cleaning
 - Cable Assembly Testing
- Station #3 – Cable Preparation**
 - Loose Tube Cable Preparation
 - Breakout and Distribution Cable Preparation
 - Patch Panel and Splice Closure Preparation
 - Mid-entry Practices
- Station #4 – OTDR Operation**
 - Acceptance Testing
 - Reflection Testing
 - Span Testing and Splice Loss
 - Emergency Restoration • Troubleshooting
- Station #5 – Optical Loss Testing**
 - Link Loss Measurement
 - Transmit and Receive Power

Certification

ETA International
Fiber Optic Installer



This certification is designed for those working with both multimode and single-mode fibers. ETA FOI certification is valid for four years.

BICSI: 15 (two-day) or 30 (four-day) ITS CECs

Course Fees*

- Four-day course **\$1700**
- Two-day classroom only **\$900**
- Optional ETA FOI exam **\$150**

Course fees include an e-manual.
Printed manuals can be ordered for \$110.

Discounts

- 10% Multiple attendees
- 10% USTelecom members
- 15% IMSA, UTC, and FBA members
- 25% Light Brigade alumni
- 25% GSA #GS02F0012R



* Prices valid for registrations received at least 21 days prior to class.

Upcoming Fiber Optics 1-2-3 Class Schedule

2018 Dates

Albuquerque, NM	Jan 9-12	Minneapolis, MN	Mar 20-23	Jackson, MS	July 10-13	Indianapolis, IN	Oct 9-12
Des Moines, IA	Jan 9-12	Portland, OR	Mar 20-23	Orlando, FL	July 10-13	Las Vegas, NV	Oct 16-19
Helena, MT	Jan 9-12	Edmonton, AB	Mar 26-29	Las Vegas, NV	July 10-13	Memphis, TN	Oct 16-19
St. Louis, MO	Jan 16-19	Baltimore, MD	Apr 3-6	Colorado Sprgs, CO	July 17-20	Seattle, WA	Oct 16-19
Fargo, ND	Jan 23-26	Spartanburg, SC	Apr 3-6	St. Louis, MO	July 17-20	Rochester, MN	Oct 23-26
Las Vegas, NV	Jan 23-26	Burbank, CA	Apr 10-13	Austin, TX	July 24-27	Tampa, FL	Oct 23-26
Columbus, OH	Jan 23-26	Cincinnati, OH	Apr 10-13	Seattle, WA	July 24-27	Louisville, KY	Oct 23-26
Atlanta, GA	Jan 30-Feb 2	Lansing, MI	Apr 10-13	Birmingham, AL	Aug 7-10	Toronto, ON	Oct 30-Nov 2
Columbia, SC	Jan 30-Feb 2	Kansas City, MO	Apr 17-20	Ft. Lauderdale, FL	Aug 7-10	Washington, DC	Oct 30-Nov 2
Little Rock, AR	Jan 30-Feb 2	Calgary, AB	Apr 17-20	Dallas, TX	Aug 14-17	Boise, ID	Nov 6-9
Seattle, WA	Feb 6-9	Hartford, CT	Apr 24-27	Philadelphia, PA	Aug 14-17	New Orleans, LA	Nov 6-9
Frankfort, KY	Feb 6-9	Savannah, GA	Apr 24-27	Sacramento, CA	Aug 14-17	Richmond, VA	Nov 13-16
San Diego, CA	Feb 13-16	Seattle, WA	Apr 24-27	Atlanta, GA	Aug 21-24	Seattle, WA	Nov 13-16
Madison, WI	Feb 13-16	Miami, FL	May 1-4	Nashville, TN	Aug 21-24	Vancouver, BC	Nov 20-23
Providence, RI	Feb 13-16	Salt Lake City, UT	May 1-4	Seattle, WA	Aug 27-30	Anchorage, AK	Nov 27-30
Newark, NJ	Feb 20-23	Mobile, AL	May 8-11	Washington, DC	Aug 27-30	St. Louis, MO	Nov 27-30
Washington, DC	Feb 20-23	Geneva, IL	May 8-11	Albany, NY	Sept 11-14	El Paso, TX	Dec 4-7
Lowell, MA	Feb 27-Mar2	Richmond, VA	May 15-18	Charleston, SC	Sept 11-14	Portland, OR	Dec 4-7
Sioux Falls, SD	Feb 27-Mar2	Raleigh, NC	May 21-24	Louisville, KY	Sept 18-21	Jacksonville, FL	Dec 11-14
Springfield, IL	Feb 27-Mar2	Seattle, WA	May 21-24	Oklahoma City, OK	Sept 18-21	Spartanburg, SC	Dec 11-14
Walnut Creek, CA	Mar 6-9	Anaheim, CA	June 5-8	Omaha, NE	Sept 18-21	Dallas, TX	Dec 17-20
Anchorage, AK	Mar 6-9	Tallahassee, FL	June 5-8	Salt Lake City, UT	Sept 25-28	Milwaukee, WI	Dec 17-20
Dallas, TX	Mar 6-9	Lowell, MA	June 12-15	Riverside, CA	Sept 25-28	Reno, NV	Dec 17-20
Denver, CO	Mar 13-16	San Antonio, TX	June 19-22	Vancouver, BC	Sept 25-28	Seattle, WA	Dec 17-20
Huntsville, AL	Mar 13-16	Baton Rouge, LA	June 26-29	Charlotte, NC	Oct 2-5		
Spokane, WA	Mar 13-16	San Jose, CA	June 26-29	Columbus, OH	Oct 2-5		
Vancouver, BC	Mar 20-23	Spartanburg, SC	June 26-29	Denver, CO	Oct 2-5		

To search for classes by location rather than date, please visit www.lightbrigade.com

"The course will give me the confidence to work with existing fiber components, and the skill set to troubleshoot and repair a fiber optic related discrepancy."
 — John L., Ameren Illinois