As telecommunications networks replace conventional copper wire cables with new fiber optic cables—hair-thin strands of glass that convey pulses of light—a need has arisen for technicians in the industry. Fiber optic technicians may install outside plant telecommunications cables underground, they may install fiber from local areas directly to homes, and sometimes will also test and troubleshoot networks. The jobs may be simple such as installing telephones and CATV in residences, or complex, involving security systems that require large amounts of fiber. Some technicians may also work in manufacturing jobs.

The Workplace
Most fiber optic technicians work for large companies in the telecommunications industry as installers, lineworkers, cablers and repair specialists, although there are also job opportunities with smaller independent repair shops. Job sites may include residences, businesses and educational institutions.

Educational Requirements
According to the Fiber Optic Association (FOA), programs in telecommunications, electronics or electricity, many of which are operated with assistance from local employers and unions, are offered by a number of
community or technical colleges. Some are one-year certificates that emphasize hands-on field work, and others are more advanced two-year associate degrees that provide students with a broader knowledge of the technology used in telecommunications and electrical utilities. Course topics include electricity, electronics, fiber optics, and microwave transmission. Employers often prefer to hire graduates of these programs for line installer and repairer jobs.

**Earnings**
According to the U.S. Department of Labor's *Occupational Outlook Handbook*, median hourly earnings for telecommunications line installers and repairers were $22.25 in May 2006. The middle 50 percent earned between $15.56 and $28.40, with the highest 10 percent earning more than $32.80.

**Job Outlook**
FOA notes that due to the fast-growing technology, the fiber optic industry is in need of trained workers, and the Labor Department predicts a cumulative national increase of more than 20 percent in the number of telecommunications jobs through 2010. With more education, technicians will have additional job opportunities in supervisory and training positions.

**Explore More**
To learn more about a career as a fiber optic technician and the training and education it requires, here are some places to turn.

Communication Workers of America
[www.cwa-union.org/jobs](http://www.cwa-union.org/jobs)

Fiber Optic Association
[www.thefoa.org](http://www.thefoa.org)

Fiber to the Home Council
[www.ftthcouncil.org](http://www.ftthcouncil.org)

Society of Cable Telecommunications Engineers
[www.scte.org](http://www.scte.org)