



# FIBER OPTIC TECHNOLOGY

(CNIT 211 / ELEC 211)

Fiber optic communications media is superior to copper wires in many ways. It:



- Is immune to most radio frequency & electromagnetic interference problems
- Has exponentially greater information carrying capacity
- Can carry information much further without degradation or regeneration
- Is almost impossible to tap without detection and therefore more secure
- Is future-proof, with capacity upgrades requiring only new electronics



Every telephone conversation happening in the U.S. right now could theoretically be carried across a single optical fiber the size of a hair on your head!

Most service provider backbones are now optical fiber, and service providers are extending fiber further into neighborhoods and to homes and businesses. Enterprises are increasingly deploying optical fiber in their networks to improve operations. Technicians with knowledge and skills in optical fiber networks are in ever increasing demand.

City College of San Francisco's Fiber Optic Technology course covers fundamental principles & application of fiber optic technology, in the classroom & in hands-on labs. Students learn:

- Fiber fabrication, splicing and termination
- Operations of lasers, LEDs, detectors and optical amplifiers
- Optical protocols, like FDDI, Gigabit Ethernet and SONET
- Use of optical test tools, like optical power meters & OTDRs
- Network design, testing, troubleshooting and management



Students get real world experience with City College's optical metro & campus networks.

This course prepares students for the Fiber Optic Association (FOA) Certification, counts towards AS degrees and 4 year degree transfers and will be part of future certifications developed in the new ICONS program.

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