

LE 426 Project

Objective To explore advanced technologies in optical communications.

Detail Make a group of two and study one of the following topics or any other “appropriate” one:

- Soliton
- Optical amplifier
- Dense wavelength division multiplexing/Coarse wavelength division multiplexing
- IP over DWDM
- Optical wireless communication
- RF over fiber network
- Fiber optic sensor
- Optical switch
- Optical computing
- Optical measurement equipments, e.g., optical time-domain reflectometer (OTDR), etc.
- Optical instruments, e.g., interferometer, reflectometer, spectrometer, etc.
- Optical sensor applications, e.g., flow sensor, etc.

write a short report and make a presentation.

Report Write a short report including the following topics:

1. Problem statement (i.e., significance, need, motivation)
2. Theoretical background
3. Detailed theory
4. Applications
5. Summary

Presentation 8-minute long presentation and 5-minute Q&A session.