

## OPTICAL FIBER COMMUNICATION SYSTEMS

**ECTS credits: 3**

**Period : year 2, semester 1**

**Objectives:**

To give an overview of the techniques used in optical telecommunication area: to present the advanced optical components and functions and the different optical fiber transmission systems.

**Contents:**

Basic components for optical communication systems:

- Lasers
- Optical fibers
- Photodiodes
- Optical modulation (Digital, analog optical fiber systems)
- Optical amplification

Optical fiber system design

- Link budget

Optical networks

- WDM
- Optical packet switching
- Fiber To The Home technologies

**Prerequisites:**

Basics in signal modulations, solide state physics.