

## 1. Basics concepts in lighting

- 1. Magnitudes used in lighting.
- 2. Lamps: types and characteristics.
- 3. Lamps: applications and commercial models.
- 4. Luminaries: basic concepts and characterization.
- 5. Luminaries: classifications, types and applications.
- 6. Auxiliary equipment.

## 2. Energy efficiency in internal lighting installations

- 1. Design criteria for an inside installation.
- 2. Regulations: Technical Building Code.
- 3. Control systems in indoor facilities.
- 4. Design Tools for lighting installations.
- 5. Case 1: Proposal to improve lighting at the Conservatory of Music "Mestre Tàrrega" in Castelló.
- 6. Case 2: Proposal to improve lighting in the sports hall "Ciutat Esportiva" in Castelló.

## 3. Energy efficiency in public lighting installations

- 1. Design criteria for an installation of street lighting.
- 2. Regulations: Regulation of energy efficiency.
- 3. Remote management and control systems in public lighting.
- 4. Switchboard from streetlights.
- 5. Audit of a public lighting installation.
- 6. Case 1: Improved street lighting in municipalities.
- 7. Case 2: Comparative study of solutions in an urban road.





