The course focuses on the components that we need in order to build simple electrooptical systems used to generate, modulate, and receive optical signals. It assumes a basic knowledge of optics, semiconductors, and electromagnetic waves; many of the key background concepts are either reviewed in the beginning or linked to related subjects. Devices covered include optical couplers, electro-optic devices, magnetooptic devices, acousto-optic devices, nonlinear optical devices, light-emitting diodes (LEDs), photodetectors, thermal detectors and optical modulators. Special attention is paid to cameras and spatial light modulators and their involvement in optoelectronic information processors. Some examples of applications are described.
# Content

<table>
<thead>
<tr>
<th>Topic</th>
<th>Degree competences to which the content contributes</th>
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<tr>
<td>- Radiometry and Photometry</td>
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<td>- Radiation sources</td>
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<td>- Radiation Detectors</td>
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<td>- Non Linear Photonics</td>
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<td>- Optical Modulators</td>
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<td>- Optical Couplers</td>
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</table>

## Qualification system

- Practical numerical exercises.
- Presentation and discussion of works done by students = 40%
- Global examination = 60%

## Regulations for carrying out activities

The usual in university teaching
Bibliography

Basic:


Complementary: