# 32081 - ANOO - Applied Non-Linear Optics and Optoelectronics

<table>
<thead>
<tr>
<th><strong>Coordinating unit:</strong></th>
<th>230 - ETSETB - Barcelona School of Telecommunications Engineering</th>
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<tbody>
<tr>
<td><strong>Teaching unit:</strong></td>
<td>893 - ICF - Institute of Photonic Sciences</td>
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<td><strong>Academic year:</strong></td>
<td>2015</td>
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<tr>
<td><strong>Degree:</strong></td>
<td>MASTER'S DEGREE IN PHOTONICS (Syllabus 2009). (Teaching unit Optional)</td>
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<td></td>
<td>ERASMUS MUNDUS MASTER'S DEGREE IN PHOTONICS ENGINEERING, NANOPHOTONICS AND BIOPHOTONICS (Syllabus 2010). (Teaching unit Optional)</td>
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<tr>
<td></td>
<td>DOCTORAL DEGREE IN PHOTONICS (Syllabus 2007). (Teaching unit Optional)</td>
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<td><strong>ECTS credits:</strong></td>
<td>2,5</td>
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<td><strong>Teaching languages:</strong></td>
<td>English</td>
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## Teaching staff

**Coordinator:** Majid Ebrahim-Zadeh  
**Others:** Valerio Pruneri, Jordi Martorell

## Teaching methodology

Presencial Teaching + activities

## Learning objectives of the subject

The course aims at teaching students several advanced applications in nonlinear optics and optoelectronics. In particular it will try to bridge basic and fundamental science and industrial potentials.
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Content

(ENG) Frequency Conversion Processes

Degree competences to which the content contributes:

(ENG) Integrated and nano-structured electro-optics

Degree competences to which the content contributes:

(ENG) Acousto-optics and Applications

Degree competences to which the content contributes:

(ENG) Micro Non-Linear Optics

Degree competences to which the content contributes:

(ENG) Microstructured optical fibres

Degree competences to which the content contributes:

Qualification system

Assistance - literature study - small specialized presentation - evaluation meeting with tutor

Regulations for carrying out activities

The usual in University teaching

Bibliography

Basic: