Optical fibers are one of the most relevant technological achievements of photonics, as all the Internet traffic generated in any European country can be transported by a single fiber. Nevertheless, several physical effects limit the maximum transmission distance, influenced also by performance limitations of optical sources, amplifiers and receivers used in contemporary fiber-optical communication system. ¿Fibres and Telecoms¿ provides a comprehensive overview of the key characteristics of the optical and optoelectronic technologies and components used in up-to-date transmission systems.

One of the main goals of F&T is to provide a solid background to physicists and engineers for: designing and dimensioning optical communication systems, with the assistance of tutorial software, and the understanding of the physical phenomena limiting current systems and the new photonic technologies overcoming current limitations.
### Content

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<tr>
<th>Topic</th>
<th>Degree competences to which the content contributes</th>
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<tr>
<td>(ENG) - Light propagation in fibers</td>
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<td>(ENG) - Optical transmitter and receivers</td>
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<td>(ENG) - Optical amplifiers</td>
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### Qualification system

- Class exercises and participation
- Team work for solving a System project with tutorial software
- Oral presentation of the main challenges and results of the project

### Regulations for carrying out activities

The usual in University teaching
32062 - FT - Fibres and Telecommunications

Bibliography

Basic:


Complementary: