Tampere University as a unique environment for Photonics studies

from advanced education to world-class research and wide industrial collaboration

Prof. Goëry Genty
goery.genty@tuni.fi

Director of International MSc Program in Photonics Tech.
Director of Flagship for Photonics Research and Innovation
Professor in Ultrafast Photonics
Photonics is the science and technology of light
It is the technology of the 21st century

Study photonics
= broaden your horizon
A unique ecosystem

MSc Program in Photonics Technologies

Strong academic partners

Worldclass research

Large industry network

- Huawei
- Microsoft
- AAC Technologies
- Valmet
- DTU
- CNRS
- Nokia
- Aston University
- Fraunhofer IOM
- EPFL
- ANU
Master’s Programme in Photonics Technologies 120 ECTS

**General studies 10 ECTS**
- Introduction to Graduate Studies (1 ECTS)
- Finnish language (5 ECT)
- Thesis Seminar (1 ECTS)
- Thesis Writing in English (3 ECTS)

**Advanced Studies in Photonics 90 ECTS**
- Fundamentals of Optics and Photonics 25 ECTS
- Light-matter Interaction 20 ECTS
- Photonic Materials (15 ECTS) or Ultrafast Photonics & Lasers (15 ECTS)
- Master’s thesis 30 ECTS

**Elective Studies 20 ECTS**
- Minor (20 ECTS) or elective courses
International MSc Program in Photonics Technologies

<table>
<thead>
<tr>
<th>High-quality teaching</th>
<th>Tailored education</th>
<th>Targeted specialization</th>
<th>Research Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalized study experience</td>
<td>Extensive photonics major, also minor of your interest</td>
<td>Photonic materials Ultrafast photonics and lasers</td>
<td>Qualifies for competitive PhD program</td>
</tr>
</tbody>
</table>

Work in high-tech industry

Our program promotes sustainable development

<table>
<thead>
<tr>
<th>ECONOMIC</th>
<th>SCIENTIFIC</th>
<th>SOCIETAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Digital Technology</td>
<td>Climate change monitoring</td>
<td>STEM education and careers</td>
</tr>
<tr>
<td>Environmental monitoring</td>
<td>Light-based diagnostics and treatments</td>
<td>Promoting equality</td>
</tr>
<tr>
<td>Communications</td>
<td>Clean energy</td>
<td></td>
</tr>
<tr>
<td>AR/VR</td>
<td>Quantum technologies</td>
<td></td>
</tr>
</tbody>
</table>
At Tampere University we do cutting edge research in Photonics.
The research environment is worldclass

- Prestigious publications
- Many industrial partners
- Disruptive technologies & spin-offs
- Top facilities
- Highly competitive grants
- International recognition

European Research Council
FLAGSHIP PROGRAMME
erc
HORIZON 2020
SPIE Fellow
OSA Fellow
nature photonics
optica
nLIGHT
Microsoft
HUAWEI
AAC Technologies
Valmet

VEXLUM
CAVITAR
modulight
brighterwave
Flagship for Photonics Research and Innovation

Program of research excellence

Best of Finnish photonics expertise

Tackling important society challenges
- Energy production
- Healthcare
- Environmental monitoring

Collaboration with more 50 international institutions

prein.fi