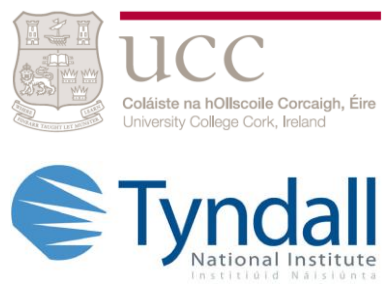


# University College Cork Tyndall National Institute 12 month MSc in Photonics



**Objectives:** To understand the physics and engineering of photonic materials, devices, systems and applications, and to develop the necessary professional skills for an entry level career in photonics research or industry.



Photonics is an exciting combination of Physics, Materials Science and Electronic Engineering. The MSc in Photonics is designed to complete the education required to move into a PhD in Photonics, and to provide the background necessary to pursue a Photonics career in research or industry.

The MSc in Photonics programme comprises 6 taught modules, laboratory work and a research project to gain industry-relevant experience.

Led by academics and researchers from Ireland's largest Photonics Research Centre  
<http://www.tyndall.ie/photonics/>

## Entry Requirements:

The course is suitable for graduates with a 1<sup>st</sup> or 2<sup>nd</sup> class honours or equivalent in Physics, Engineering, or Optical Science, with significant content in optics, electromagnetics, quantum physics and materials science. Selection will be made by a combination of academic results, references, relevant work experience, and, possibly, an essay or career plan.

## Photonic Materials

- Photonics Theory
- Growth & Characterisation

## Photonic Devices

- Fabrication & Dynamics
- Lasers & Amplifiers
- Photo Detection & Optical Receivers

## Photonic Systems

- High Speed & Integrated Photonics
- Fibre Optics Communications

Part-time registration is possible for those wishing to combine study with employment. Professional training, mentorship and possible project placement in industry.



For further details, please see our website at [www.physics.ucc.ie/mscphotonics](http://www.physics.ucc.ie/mscphotonics)

Or contact: Dr. Frank Peters, Email: [F.Peters@ucc.ie](mailto:F.Peters@ucc.ie)

*Closing date 1st July, 2011*