



University College Dublin
Ireland's Global University

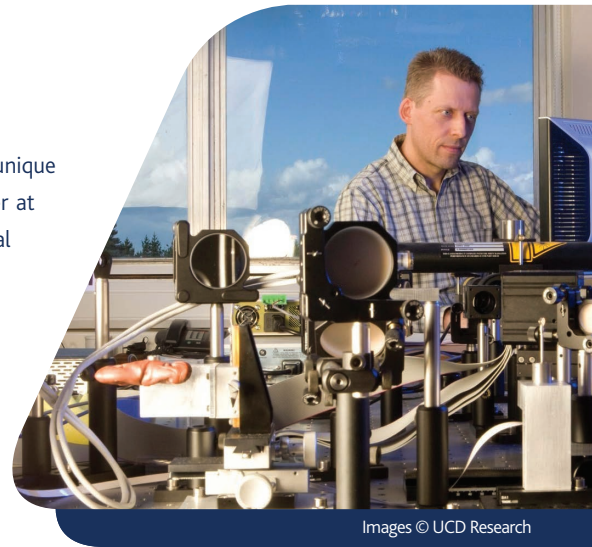
COURSE CODE: T149

MSc NanoBio Science

(1 Year Full Time)

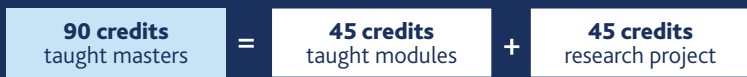
This MSc programme unites the technological with the biological aspects of nanotechnology in a unique way, equipping graduates with a truly interdisciplinary perspective of the field. Manipulating matter at the nanoscale is already leading to new and improved imaging and display technologies, biomedical sensors, and solar cells for environmentally friendly energy production. The design, fabrication and control of devices with nanoscale (billionth of a metre) dimensions is an engine of innovation in almost every sector.

The MSc in NanoBio Science at the UCD School of Physics is for students excited by the prospect of studying and researching in this emerging interdisciplinary area, where physics, chemistry, engineering and life sciences all come together.



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Course Content and Structure



You will gain experimental and theoretical knowledge in the following topics:

- Nano-Optics and Bio-Photonics
- Physics of Nano-Materials
- Spectroscopy and Lasers
- Nano-Mechanics
- Atomic Force Microscopy
- Computational Biophysics
- Biophysics at the Nanoscale
- Biomimicry
- Bio-Fluid Mechanics
- Innovation
- Journal Club and Presentation Skills

Modules and topics shown are subject to change and are not guaranteed by UCD.

APPLY NOW

This programme receives significant interest so please apply early online at www.ucd.ie/apply



Entry Requirements

- This programme is intended for applicants with a degree in Physics, Chemistry, Engineering, Material Science or a related discipline. An upper second class honours or international equivalent is required.
- Applicants whose first language is not English must also demonstrate English language proficiency of IELTS 6.5 (no band less than 6.0 in each element), or equivalent, such as TOEFL (iBT) score of 90 or PTE score of 63. Applicants with an IELTS score of at least 5.5 may apply for admission to the UCD Pre-Masters Pathway programme.



Career Opportunities

The programme prepares you for industry or further research. Career opportunities include the pharmaceutical industry, telecommunications, diagnostic imaging, green technologies and sensor applications, both in Ireland and internationally. It is also a stepping stone to PhD research in the areas of nanoscience, biophotonics and nanotechnology.

Prospective employers include Abbott, Alcon, Allergan, Bausch & Lomb, Becton Dickinson, Boston Scientific, Eblana Photonics, Intel, Pfizer, Pharma-Bio Serv, Philips, and SensL.

Graduate Profile

JiaJun Li, Chinese Academy of Sciences, Shanghai

I chose to study the MSc in NanoBio Science because of its huge potential. The subjects in this course cover areas from physics to biology and the cutting-edge experiments and research will benefit you in your future career. The international aspect definitely brings new ideas and gives you a chance to get to know people in your area of study from around the world.

EU ENQUIRIES

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NON-EU ENQUIRIES

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