

Nanotechnology and Clean Energy

Can we design nanoscale devices to trap individual strands of DNA?

How can nanotechnology improve solar panels?

How can self-assembly of nanoparticles produce new materials?

How can we synthesize carbon nanotubes for clean energy application?

What do materials look like at the nanoscale?

The physics of nanotechnology describes matter and dynamics at the atomic, and molecular scale.

In this specialization, you'll get hands-on experience with theoretical, computational and experimental techniques. You'll study the nanoscale world and develop new technologies for wide-ranging applications including solar cells, novel nanofilms, and biotechnology.

Study matter at its smallest scales and understand processes that drive everything from clean energy technologies, to life itself.



What will I study?

- Biophysics
- Condensed Matter
- Introductory Environmental Science
- Modern Physics
- Physics of Nanotechnology
- Solar Energy and Photovoltaics

What can I do with my degree?

Pursue career and advanced education opportunities in a variety of areas including:

- Clean energy
- Energy supply
- Government or private research laboratories
- Medical technology and research
- Nanotechnology research and development

An undergraduate Physics degree—with a specialization in Nanotechnology and Clean Energy—allows you to pursue graduate studies. This includes our Master of Science programs in Materials Science or Modelling and Computational Science.

Want more information?

Faculty of Science
2000 Simcoe Street North
Oshawa, Ontario L1G 0C5
Canada

905.721.3190
connect@ontariotechu.ca
ontariotechu.ca/programs



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