

# NANOTECHNOLOGY, CERTIFICATE

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Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

## Program Description

The primary goal of the program is to offer students and incumbent workers worldwide the opportunity to earn this 18-credit certificate, which will be available only online. All candidates are required to successfully complete the required courses.

## What is Nanotechnology?

Nanotechnology is inherently interdisciplinary and bridges across physics, biology, materials science, and chemistry. It is a general purpose, enabling technology that is already impacting a broad spectrum of human endeavors, from medicine and catalysis to textiles and quantum computing. The Nanotechnology certificate is designed to help prepare students from a broad range of disciplines for careers or graduate study in fields involving nanotechnology. It builds upon the strengths of Penn State's faculty, expertise, academic programs, and nanofabrication facilities, including its class 1 and class 10 cleanrooms. The curriculum provides students with fundamental knowledge and skills in nanoscale simulation, design, syntheses, characterization, properties, processing, manufacturing, and applications.

## You Might Like This Program If...

You are interested in gaining fundamental knowledge and skills in nanoscale simulation, design, syntheses, characterization, properties, processing, manufacturing, and applications.