

ADVANCED MATERIALS, POST-BACCALAUREATE CERTIFICATE

Advanced materials are engineered materials with designated properties created by specialized process and synthesis technology, and involves nanomaterials which are materials "with any external dimension in the nanoscale or having internal structure or surface structure in the nanoscale." The study of advanced materials has touched all aspects of human life and is a growing and active field. Advanced materials require a broad knowledge in chemistry, biology, physics, materials science, and engineering. The Post-Baccalaureate Certificate in Advanced Materials program allows students with STEM bachelors degrees to understand the fundamental concepts in advanced materials and prepare them for their future careers related to this ever-expanding field.

For information regarding deadlines and requirements for admission, please see the Guide to Graduate Admissions (<https://grs.uncg.edu/prospective/guide/>).

A baccalaureate degree in Chemistry, Physics, Engineering, Biology, or a closely related STEM field.

Certificate Program Requirements

Required: 12 credit hours*

Code	Title	Credit Hours
Select four courses (12 credits) from the following:		12
NAN 601	Nanomaterials Chemistry	
NAN 603	Principles of Quantum and Solid State Physics	
NAN 604	Nanotechniques	
NAN 615	Introduction to Spectroscopy Methods in Nanoscience	
NAN 616	Principles of Nanoscience I: Physical, Chemical, and Biological Foundations	
NAN 640	The Science and Engineering of Thin Films	
NAN 655	Biomimetics and Biomaterials	
Total Credit Hours		12

* *Transfer courses may not be used to satisfy the certificate requirements.*