Nanoscience is the study of materials, phenomena, properties, and applications at the smallest length scale at which we can control matter. A nanometer is one-billionth of a meter, just slightly larger than individual atoms.

Nanoscience and nanotechnology have rapidly growing applications in a wide range of technology areas including electronics, information technology, medicine, renewable energy, aerospace, and advanced materials. The National Science Foundation predicts that by the year 2020, $1 trillion of products in the U.S. will contain nanotechnology. The Bachelor’s degree program in Nanoscience at Virginia Tech is one of only two such programs in the U.S.

**Careers in Nanoscience**
Electronics and Semiconductor Industries, Energy Generation and Storage, Pharmaceuticals, Auto and Aerospace Industries, Sporting Goods, Materials Science Medical Devices, Biotechnology, Environmental Monitoring and Remediation, & many others

- Covers materials such as fullerenes, nanotubes, quantum dots, and graphene and techniques such as self-assembly, lithography, electron microscopy, and scanning tunneling microscopy.
- Federal government created National Nanotechnology Initiative (www.nano.gov) in 2000, which has invested >$25 billion in research and development.
- 8 credits of undergraduate research required as part of degree.
- A Nanoscience minor is also available.

http://www.ais.science.vt.edu/