Nanoscience

Program Requirements

Nanoscience
B.Sc. Honours (20.0 credits)

A. Credits Included in the Major CGPA (11.5 credits)

1. 5.0 credits in:
   - CHEM 1001 [0.5] General Chemistry I
   - CHEM 1002 [0.5] General Chemistry II
   - CHEM 2103 [0.5] Physical Chemistry I
   - CHEM 2501 [0.5] Introduction to Inorganic and Bioinorganic Chemistry
   - CHEM 3100 [0.5] Physical Chemistry II
   - CHEM 3107 [0.5] Experimental Methods in Nanoscience
   - CHEM 3503 [0.5] Inorganic Chemistry I
   - CHEM 3600 [0.5] Introduction to Nanotechnology
   - CHEM 4908 [1.0] Research Project and Seminar

2. 1.0 credit from:
   - CHEM 2203 [0.5] Organic Chemistry I
   - CHEM 2204 [0.5] Organic Chemistry II
   - CHEM 2302 [0.5] Analytical Chemistry I
   - CHEM 2303 [0.5] Analytical Chemistry II

3. 1.0 credit from:
   - CHEM 4103 [0.5] Surface Chemistry and Nanostructures
   - CHEM 4104 [0.5] Physical Methods of Nanotechnology
   - CHEM 4201 [0.5] Macromolecular Nanotechnology

4. 3.5 credits in:
   - ELEC 2501 [0.5] Circuits and Signals
   - ELEC 2507 [0.5] Electronics I
   - ELEC 3908 [0.5] Physical Electronics
   - ELEC 3105 [0.5] Basic EM and Power Engineering
   - ELEC 4609 [0.5] Integrated Circuit Design and Fabrication
   - ELEC 4700 [0.5] The Physics and Modeling of Advanced Devices and Technologies
   - ELEC 4704 [0.5] Nanoscale Technology and Devices

5. 1.0 credit from:
   - ELEC 2607 [0.5] Switching Circuits
   - ELEC 3500 [0.5] Digital Electronics
   - ELEC 3509 [0.5] Electronics II
   - ELEC 3909 [0.5] Electromagnetic Waves

B. Credits Not Included in the Major CGPA (8.5 credits)

6. 2.5 credits in:
   - MATH 1004 [0.5] Calculus for Engineering or Physics
   - MATH 1005 [0.5] Differential Equations and Infinite Series for Engineering or Physics
   - MATH 1104 [0.5] Linear Algebra for Engineering or Science
   - MATH 2004 [0.5] Multivariable Calculus for Engineering or Physics
   - STAT 3502 [0.5] Probability and Statistics

7. 1.0 credits in:
   - PHYS 1003 [0.5] Introductory Mechanics and Thermodynamics
   - PHYS 1004 [0.5] Introductory Electromagnetism and Wave Motion
   - PHYS 2003 [0.5] Advanced Electromagnetism
   - PHYS 2004 [0.5] Advanced Quantum Physics
   - PHYS 2005 [0.5] Advanced Classical Mechanics

Total Credits: 20.0