

MSEN6339 - Nanostructured Materials: Synthesis, Properties and Application

[MSEN 6339](#) Nanostructured Materials: Synthesis, Properties and Application (3 semester credit hours) Exploration of the synthesis, properties and applications of quantum dots, wells, rods, wires, particles and related nanostructures. The theoretical and experimental evidence for quantum-confinement effects, which are of considerable fundamental and applied interest, will be discussed. The manipulation of surface properties of nanostructures, their incorporation into bulk nanocomposites and their application to technological devices will be discussed. Prerequisites or Corequisites: [MSEN 5310](#) and [MSEN 5360](#) and [MSEN 6319](#) and [MSEN 6324](#), or equivalent. (3-0) T