MIME 567. ADVANCED ELECTRONIC PROPERTIES OF MATERIALS.

Credits: 3

Offered by: Mining & Materials Engineering (Faculty of Engineering)

This course is not offered this catalogue year.

Description

Electrons as particles and waves, Schrodinger's Equation, electrical and thermal conductivity, semiconductors, semiconductor devices, fundamentals of magnetism, superconductivity and superconductive materials, dielectric materials, optical properties of materials, LASERs and waveguides. Advanced materials and their technological applications. An introduction to quantum mechanics; energy band diagrams.

- (3-1.5-4.5)
- Prerequisites: MATH 263, MATH 264 and MIME 261
- Restriction: Not open to students who have taken MIME 367 or MIME 467