

## MSEN6374 - Optical Properties of Solids

[MSEN 6374](#) ([PHYS 6374](#)) Optical Properties of Solids (3 semester credit hours) Optical response in solids and its applications. Lorentz, Drude and quantum mechanical models for dielectric response function. Kramers-Kronig transformation and sum rules considered. Basic properties related to band structure effects, excitons and other excitations. Experimental techniques including reflectance, absorption, modulated reflectance, Raman scattering. Prerequisite: [MSEN 5371](#) or [PHYS 5371](#) or equivalent. (3-0) R