

PHYS4371 - Solid State Physics

[PHYS 4371](#) Solid State Physics (3 semester credit hours) This course provides a basic but detailed picture of important concepts in solid state physics. Material covered includes crystal structure, x-ray crystallography, reciprocal space, lattice vibrations, thermal properties of solids, free electron gas, Bloch functions, metals, insulators, and semiconductors. The course concludes with a description of basic semiconductor devices. Prerequisite: [PHYS 3416](#) and [PHYS 4301](#). (3-0) Y