PHY 413: Physical Metallurgy  2 Units

Department of PHYSICS

Covenant University
1. PHY413
1.1. PHY 413: Physical Metallurgy  2 Units

Prerequisite: PHY 333

Sources and methods of production of metals and alloys, effects of heat treatment, irradiation and deformation on the physical properties of metals; theory of metal alloys, binary and ternary alloys, alloys of refracting and rare earth metals melting, casting pressure working and heat treatment of metals and alloys, welding and soldering, single crystals of metals and alloys, methods of growing, degree of purity, substructure; optical and X-ray metallography, ultrasonic examination of metals and alloys, physical metallurgy of steel.