

SYLLABUS :-

Physico-mechanical properties of rocks; Elastic and time dependent behaviour; Rock mass classification; Theories of rock failure; Stress analysis; Insitu stresses and stress distribution around mine openings; Ground failure and pressure on supports; Stability of wide openings; Design of supports in mine workings; Subsidence: Causes and impacts of subsidence; mechanics of surface subsidence , discontinuous and continuous subsidence; monitoring, prediction, control and management of subsidence; Mechanics of rock burst and bumps; Stability of slopes; Instrumentation and measurement of insitu stresses and rock strength; Photoelasticity and scale model studies; Basics of numerical methods in geomechanics with applications.