

FCE 246: Civil Engineering Materials Course Description

The course covers the following key areas; Manufacture and properties of inorganic cements; Portland cements. Hydration of portland cement. Geology of fresh concrete. Workability. Segregation. Properties of hardened concrete. Manufacture of concrete. Ready-mixed concrete. Mix design. Non-destructive tests. Creep Shrinkage. Durability Quality control of concrete. Corrosion of steel in concrete. Thermal properties. Effects of fire on concrete. Materials Laboratory