

## Faculty of Engineering & Technology

## Strength and Technology of materials 1

Information:

Course Code: SCM221. Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Structural Engineering & Construction Management

Instructor Information :		
Title	Name	Office hours
Professor	Osama Abdel Ghafour Ahmad Ahmed Hodhod	
Assistant Lecturer	Nada Mohamed Abd El Hamid Ali Mohamed	

## **Description:**

Engineering materials, Standardization, Standard specifications, Codes, Total quality concept, Technical inspection and quality control, Principles of materials science, concrete technology: constituent materials for reinforced concrete (aggregates, cement, mixing water, admixtures, steel reinforcement), Concrete manufacturing, Mechanics of engineering materials: loads, stresses, strains, elastic constants, failure criteria, Mechanical properties, Testing machines, Strain gages, Calibration, Strength and behavior of materials under static loading (tension, compression, bending, shear, torsion, hardness), Miscellaneous conventional and Non-conventional construction materials and products.