

**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 :**

<b>Title</b>	<b>Name</b>	<b>Office hours</b>
Professor	Mohamed Abdel Moaty Khalaf Mohamed	
Professor	Mohamed Abdel Moaty Khalaf Mohamed	
Assistant Lecturer	Youssef Ahmed Elsayed Kamaleldin Ahmed Awad	
Assistant Lecturer	Youssef Ahmed Elsayed Kamaleldin Ahmed Awad	
Assistant Lecturer	Ahmed Amr Kadry Ahmed Shaheen	

**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.