

Faculty of Engineering & Technology**Stress Analysis****Information :****Course Code :** MEC264**Level :** Undergraduate**Course Hours :** 3.00- Hours**Department :** Mechatronics Engineering**Instructor Information :**

Title	Name	Office hours
Lecturer	AMR MOHAMED METWALLY ISMAIEL	1
Teaching Assistant	Donia Waheed Mohamed Abdelmonem Saleem	

Description :

Equilibrium, Continuity, Normal force, Shearing force, Bending and twisting moment diagrams, Stresses in simply loaded elastic bars: axial loading, bending and torsion, deformation, strain Energy, Stresses in elastic and elasto-plastic bars, Residual stresses. Combined loading, Eccentric normal load, Oblique bending: combined bending and torsion, Two-dimensional stresses, Principal stresses, Maximum shear stress, Allowable stresses, Mohr's circle representation and applications.