

**Faculty of Engineering & Technology**  
**Properties of Matter and Thermodynamics**

**Information :**

**Course Code :** EMP121      **Level :** Undergraduate      **Course Hours :** 4.00- Hours

**Department :** Faculty of Engineering & Technology

**Instructor Information :**

Title	Name	Office hours
Lecturer	MOHAMED EHAB AHMED FAKHERELDIN BAKR	2
Lecturer	AHMED MOHAMED ALI ASHOUR AHMED	2
Lecturer	AHMED MOHAMED ALI ASHOUR AHMED	2
Assistant Lecturer	Noura Khedr Abdul raheem Ahmed	
Assistant Lecturer	Noura Khedr Abdul raheem Ahmed	
Assistant Lecturer	Lamia Hamdy Ahmed Kamal Shehab Eldin	
Assistant Lecturer	Romisaa Gamal Mahmoud Abdelrhman	
Assistant Lecturer	Mohamed Yahia Mohamed Abdelkader	
Assistant Lecturer	Romisaa Gamal Mahmoud Abdelrhman	
Assistant Lecturer	SHEROUK SOBHI ABDELSALAM FOU DA	
Assistant Lecturer	Mohamed Yahia Mohamed Abdelkader	
Teaching Assistant	Mohamed Osama Mohamed Abbas	
Teaching Assistant	Mohamed Fathy Salem Mohamed	
Teaching Assistant	Younna Elsayed Abd Elalem Mohamed Sayed Ahmed	
Teaching Assistant	Nadia Mansour Metwally Ali Mourad	
Teaching Assistant	Amirah Ahmed Mohamed Sobhy Ahmed Helaly	
Teaching Assistant	Mariam Mohamed Kamal Abdelaziz	
Teaching Assistant	Ahmed Mohamed Abdelnaby Ali Shafay	
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**Description :**

Properties of Matter: Units and dimensions, Energy of a system, Elastic Properties of materials, Hydrostatics, Hydrodynamics and viscosity, applications of hydrodynamics. Waves: types, properties, and applications. Heat and thermodynamics: Temperature, thermal expansion of solids and liquids, Heat and internal energy, specific heat and calorimetry, latent heat, work and heat in thermodynamic processes, first law of thermodynamics including some applications, energy transfer mechanisms.

