

Faculty of Engineering & Technology

Fluid Mechanics

Information :

Course Code : MEC241 **Level :** Undergraduate **Course Hours :** 3.00- Hours

Department : Mechatronics Engineering

Instructor Information :

Title	Name	Office hours
Lecturer	Zakaria Mostafa Abdo Salim Marouf	1
Teaching Assistant	Mia Mohamed Fawzy Abdelhamid Alatawy	

Description :

Basic properties of fluids and fundamental concepts. Statics of fluids; pressure, pressure measurement devices, hydrostatic forces and buoyancy. Fluid kinematics. Basic equations of fluid flow; conservation of mass, fluid momentum and energy, Bernoulli's equation, energy equation and applications. Internal flow; laminar and turbulent flow in ducts and pipes and their applications. External flow; lift and drag forces. Basics of dimensional analysis and dynamic similarity.