

Faculty of Engineering & Technology

Hydraulic Engineering

Information :

Course Code : SCM 461

Level : Undergraduate

Course Hours : 4.00- Hours

Department : Department of Structural Engineering & Construction Management

Instructor Information :

| Title | Name | Office hours |
|---------------------|---|--------------|
| Associate Professor | Yasser Mohamed Sadek Abdel Aziz El Saie | 7 |
| Teaching Assistant | Ahmed Taher Abdelhamed Mohamed Yousef | |

Description :

Open channel flow: types of flow, conservation laws of mass and energy, specific energy concept, flow resistance in channels, sketching and calculations of water surface profile for gradually varied flow, design of cross sections in open channels, momentum equation and specific force concept, design of stilling basins downstream of gates and pipe outlets, physical models, Introduction to river engineering and sediment transport, Pumps: types and characteristics of pumps, pumps and pipeline systems, Hydraulics of groundwater: types of aquifers, groundwater flow.