

## Faculty of Engineering & Technology

## **Communication Systems**

**Information:** 

Course Code: COM 414 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Specialization of Electrical Power Engineering

Instructor Information :		
Title	Name	Office hours
Lecturer	MOHAMED MOUSA SAYED EMAM AHMED	11
Assistant Lecturer	SHEROUK SOBHI ABDELSALAM FOUDA	
Assistant Lecturer	Marwa Mohamed Zaki Mohamed Shaheen	
Teaching Assistant	Roshan Mohyeldeen Ahmed Abdelaziz	

## **Description:**

Communication Systems objective, block diagram, transmission media, signal impairments. SNR, and channel bandwidth, Shannon's equation. Analog and digital messages. Amplitude modulation (conventional AM, SSB, DSB and VSB) and demodulation, Angle modulation and demodulation (PM and FM), Broadcast transmitters and receivers (AM and FM). Principles of digital data transmission: Digital communication system: Sampling Theorem, PCM, and DM techniques Regenerative repeaters. Optical fiber communication system (Main features, OPGW Cable System). Hybrid networks (Power and data networks).