

## Faculty of Engineering & Technology Signals & Systems

Information:

Course Code: EED230 Level: Undergraduate Course Hours: 3.00- Hours

**Department:** Computer & Intelligent Systems Engineering

## **Description:**

Continuous-time and discrete-time signals and systems. Linear time-invariant (LTI) systems: system properties, convolution sum and the convolution integral representation, system properties, LTI systems described by differential and difference equations. Fourier series: Representation of periodic continuous-time signals. Continuous time Fourier transform and its properties: Time and frequency shifting, conjugation, differentiation and integration, scaling, convolution, and the Parsevals relation. Case studies using S/W tools (e.g. MATLAB).