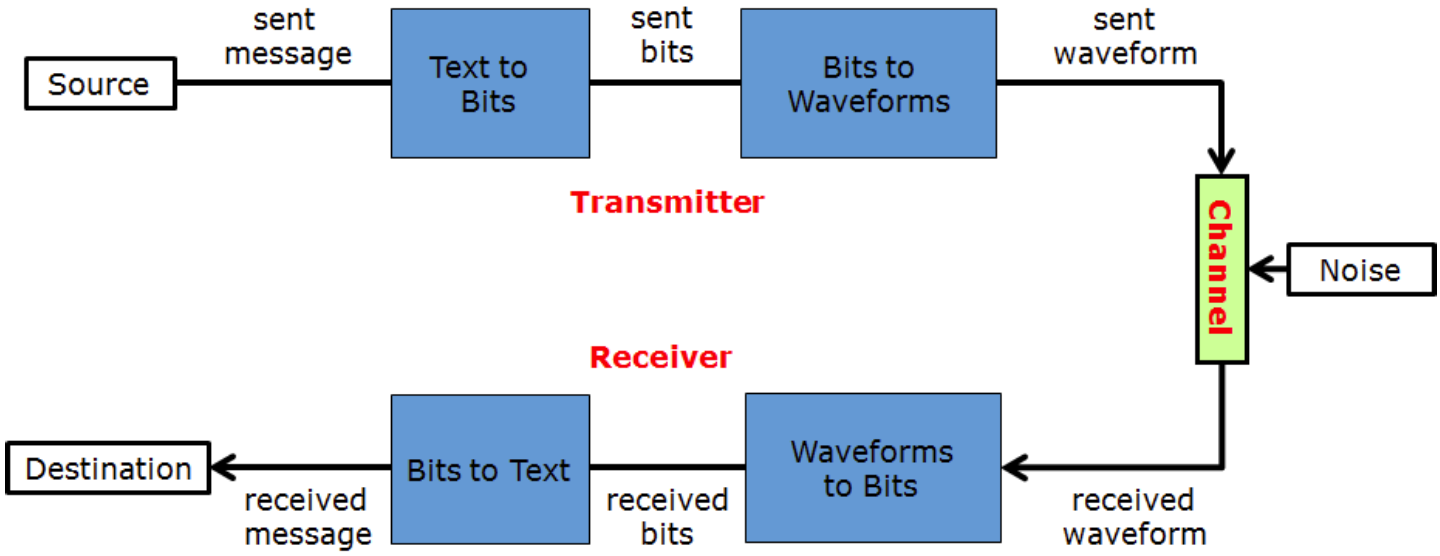
LAB 1 - OVERALL OBJECTIVES

The goal of this lab is to familiarize you with the online lab environment and the edX submission system used for all lab tasks in this course. In this lab, you will simulate a simple communications system which transmits a text message from the source to the destination as shown in the following diagram. Through MATLAB exercises, you will build some of the key blocks in this communications system, and observe signals at different points of this communication system. In this way, you will better understand how these components work together to achieve communication.



To achieve the above goals, you will complete four tasks:

In task 1, you will simulate a simple communication system for sending and receiving a text message.

In task 2, you will look into the steps required to encode a text message as a bit sequence and implement the "Text to Bits" block.

In task 3, you will convert a bit sequence into a discrete-time waveform and implement the "Bits to Waveforms" block.

In task 4, you will convert the received bit sequence to a text message and implement the "Bits to Text" block.

Help