

Abstract

This project is centred on the development of a web-based, e-learning tool to assist students in studying WiFi, WiMAX and LTE. It provides a “blended learning” experience which embraces a number of multimedia modes such as text, video and audio. The learning aid teaches

- Basic Digital Communication Theory to ensure that a rudimentary understanding of the terminology has been acquired.
- Wi-Fi, WiMAX and Long-term Evolution (LTE)

As a basis for the development of the content, material from the Advanced Networks Systems course on myBU provided the starting point. Further extensive research was then carried out to enlarge and extend the coverage of Wi-Fi, WiMAX and LTE.

Key words

e-learning tool, blended learning, Wi-Fi, WiMax, LTE, LTE-Advanced, IMT-Advanced, 2G, GSM, EDGE, 3G, HSDPA, SAE, OFDMA