



**Faculty of Engineering and Technology**  
**Department of Electrical and Computer Engineering**  
*Wireless and Mobile Networks, ENCS5323*

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*Project – Online Calculator for Wireless and Mobile Networks*

Design and build an online calculator for the following:

1. The number of bits and rate of the sampler, quantizer, source encoder, channel encoder, and interleaver.
2. The number of bits and rate for resource elements, OFDM symbol, Resource Blocks, and maximum transmission using parallel resource blocks.
3. Power transmitted in a flat environment based on the transmitter and receiver specifications.
4. Throughput in percent of Multiple Access techniques.
5. Design of cellular system.

For each of the items above, you must let the user input the maximum system parameters required to solve the computations (refer to the explanation in the video recording of the project). Work in groups of at most two students. Submit, as a reply to this message, a short report that includes the screenshots of each calculator with at least three scenarios.

Deadline: Sunday, 23 June, 2024 at 11:59pm.