## UNIVERSITY OF CAPE TOWN

## Department of Electrical Engineering



## EEE4122C - 2022: Communication Engineering Practical Assignment 3

In this assignment, the name of the game is symmetric encryption.

Your objectives: Decrypt a symmetrically encrypted image file

## **Details:**

You are given an encrypted image file and the following information

- The file has been encrypted using the python tool Fernet, which uses a symmetric encryption algorithm. See <a href="https://cryptography.io/en/latest/fernet/">https://cryptography.io/en/latest/fernet/</a>
- The key used the encrypt the image file has been made available to you. Use the key to decrypt the file

**Your clue:** Both files have been base64 encoded. So it is recommended that you decode the bytes after you read in the file. See <a href="https://docs.python.org/3/library/base64.html">https://docs.python.org/3/library/base64.html</a>

**Finally:** Once you have decrypted the image, save it to file and open the image to retrieve the full code. This full code must be entered to the VULA assignment page for your reward.

We hope you enjoy practical assignment 3, good luck!