**Year 2 Semester 1 (2025)**

IT2120 - Probability and Statistics Lab Sheet 09

# Lab Exercise 9 (Statistical Inference)



**FacultyofComputing**

## Exercise

1. Assume that the time taken to bake a batch of cookies is normally distributed with mean 45 minutes and standard deviation 2 minutes.

1. Generate a random sample of size 25 for the baking time.

A black text on a white background

AI-generated content may be incorrect.

A close-up of a number

AI-generated content may be incorrect.

1. Test whether the average baking time is less than 46 minutes at a 5% level of significance.

A white background with black text

AI-generated content may be incorrect.

A white screen with black text

AI-generated content may be incorrect.

A computer screen shot of a code

AI-generated content may be incorrect.