



GRIFFITH COLLEGE

Course	MSCC
Module title	Information Security
Tutorial No.	2
Minimum Word Count	n/a
Issue Date	07/04/2025
Due Date	14/04/2025 @ 9.00 am
	Late submissions <ul style="list-style-type: none">• possible up to 17.04.2025 @ 9am• penalised at a rate of 10% per day (or part thereof)

Important: Please Read

Tutorials are an important aid to learning.

All content should be your own work, copying and pasting content (*or AI generated content*) is NOT PERMITTED, and you will not receive a grade if you do so.

For problem-based questions, you must include all workings (step-by-step) in your solution.

Tutorial submissions should be:

1. Well written
2. Properly structured
3. Use citations and references where appropriate
4. Include a cover page and a cover sheet
5. YOUR OWN WORK!
6. **ALL WORK WILL BE CHECKED FOR PLAGIARISM!**

Tutorial 2 Questions

Q1	Explain how to generate a pair of RSA encryption keys given two prime numbers, $p = 11$ and $q = 3$.
Q2	Find out the secret key that Alice and Bob will share using the Diffie-Hellman key exchange when they start with: $g=7$ and $n = 11$. Alice generates $a=3$ and Bob generates $b= 5$ as their initial secret prime numbers.
Q3	With the help of a diagram, describe in detail how a Certification Authority can be used to provide a secure communication
Q4	What is a public key certificate? And what information does it contain?