

---

# Scaffolded Student Learning

## Participant Information Sheet

Information sheet version: pilot-information-2026-04b

Project type: MSc Artificial Intelligence project at King's College London

Student researcher: Mustafa Ali Baig

Supervisor: Dr Hannah Cao

Ethics clearance: King's College London minimal-risk route, reference MRSU-25/26-55827 (16 April 2026)

### 1. Purpose of the study

This study evaluates Scaffolded Student Learning, a pedagogically controlled, retrieval-grounded AI tutoring system for Network Security. The system is designed to support guided study, reasoning, explanation checks, and knowledge reflection rather than simply providing direct answers.

This project forms part of an MSc Artificial Intelligence dissertation at King's College London. It is supervised by Dr Hannah Cao.

### 2. Why you have been invited and what participation involves

You are being invited because you are part of the intended student group for the Network Security teaching context. Participation is voluntary.

- Read this information sheet before registering.
- Register with a pseudonymous participant code rather than your real name.
- Choose a week topic, use the tutor for a study session, and complete the short end-of-session feedback form.
- You may stop using the system at any time, although data already recorded may only be removable while they remain identifiable through your participant code.

### 3. What data the system records

The system stores structured study records linked to your pseudonymous participant code so that the research team can later analyse how the tutor was used and how students responded to it.

- Your chosen pseudonymous participant code and password-derived login record.
- The fact that you acknowledged this information sheet, including the consent version and acknowledgement time.
- Session records, student turns, tutor turns, and stage transitions.
- Retrieval and grounding traces used to support tutor responses.
- The final feedback questionnaire for each completed session.

### 4. What you should not enter

Do not type names, contact details, student numbers, passwords, or unrelated personal or sensitive information into the tutor or the feedback form. The system is intended for module learning content, not for personal disclosures.

### 5. Risks and limits

This is a minimal-risk educational study, but there are still practical limits that you should understand before taking part.

- AI risk: the tutor is AI powered and may sometimes produce incorrect, incomplete, or misleading information even when it is retrieval-grounded and application-controlled.
- You should verify important module information and should not rely on the tutor as your sole source of truth for assessed work or real-world security decisions.
- The system includes boundary controls and narrow personal-data filtering, but these controls are not full data-loss prevention and should not be treated as a guarantee against accidental disclosure.

- 
- Because the tutor is intentionally bounded, it may sometimes redirect or refuse requests that seek direct answers or move outside the selected teaching materials.

## **6. Benefits**

There is no guaranteed personal benefit from taking part. The intended educational benefit is support for structured study, guided reasoning, and reflection on the selected week material.

## **7. Confidentiality, pseudonymity, and withdrawal**

This system is pseudonymous rather than fully anonymous. Your records are linked to the participant code you choose so that sessions can be resumed and, where still identifiable through that code, withdrawal can be requested.

If you want to request withdrawal while your records remain identifiable through your participant code, contact the researcher using the details below. Withdrawal may no longer be possible after irreversible anonymisation or after data have been aggregated for analysis.

## **8. Ethics clearance and supervision**

This study has ethical clearance through King's College London's minimal-risk self-registration route (reference MRSU-25/26-55827, approval confirmed on 16 April 2026). The project is conducted as an MSc Artificial Intelligence dissertation by Mustafa Ali Baig and supervised by Dr Hannah Cao.

## **9. Contact details and complaints**

Researcher: Mustafa Ali Baig

Research contact email: [mustafa\\_ali.baig@kcl.ac.uk](mailto:mustafa_ali.baig@kcl.ac.uk)

Withdrawal requests: [mustafa\\_ali.baig@kcl.ac.uk](mailto:mustafa_ali.baig@kcl.ac.uk)

Questions or complaints: [mustafa\\_ali.baig@kcl.ac.uk](mailto:mustafa_ali.baig@kcl.ac.uk)

## **10. Consent**

By registering, you confirm that you have read this information sheet, understand that the study uses pseudonymous participant codes and stores tutoring logs and feedback for evaluation, and agree to take part on that basis.