Laptop requirements for Winter School 2026

Introduction

This is a list of the requirements stated by the trainers. Setup is NOT a quick task. There are some large downloads to make and these alone may take too much time if the network is constrained (ex: by having a lot of people trying to do big downloads at the same time!).

So, you are advised to check these setup instructions before the Winter School and raise any questions in a timely manner.
Instructions will also be updated considering those questions and further feedback from the trainers. So, check this document through several days.

Equipment requirements:

Most sessions will use a VM image to run the examples and exercises. These require a fair ammount of resources (memory, storage, CPU).
This means the required laptop should have at least

- **16GB RAM**,
- **4 cores** and
- **over 100GB** of free storage space.

Naturally, **virtualization technology** (commonly referred to as **Intel VT-x or AMD-V**) must be **enabled in the system BIOS settings.**
If you don't have the permissions to enable these settings, you may need to check with your IT department to enable them for you (or provide a specific machine with them enabled).

Software requirements:

These are some general requirements:

- Virtual Machine with Kali Linux (https://www.kali.org/get-kali/#kali-installer-images):
  - 4–8 GB RAM
  - 2 or more CPU cores
  - 40 GB or more disk space (with dynamic allocation)
  - 3D acceleration enabled
- Host or Virtual machine:
  - Ollama - https://ollama.com/download
  - Garak - https://docs.garak.ai/garak/llm-scanning-basics/setting-up/installing-garak

In Ollama, you will also need to download some small LLMs (llama2, llama3 and mistral):
You can download the models by typing in a terminal:

```
ollama pull llama2
ollama pull mistral
# optional if you don't have storage space
ollama pull llama3
```

After downloading, you can check if the models are there by typing

```
ollama list
```

Each model is about 4-5GB large.