



DURATION

9.00am - 5.00pm
(inclusive of 1 hour lunch break)

COURSE DATES

<https://asktraining.com.sg/course-schedule/>

COURSE FEE

S\$817.50 (inclusive of 9% GST)

Course Code: **ASKGAT**

Generative AI Threats and Deepfake Detection Essentials

COURSE SYNOPSIS

Generative AI has made it possible for anyone to create convincing videos, clone voices, and produce professional-looking content in minutes. This same technology is increasingly being misused to deceive individuals and organisations through fake videos and audio that are difficult to distinguish from the real thing. Singapore has seen several high-profile cases involving AI-generated impersonations of senior public figures used to defraud victims of significant sums. The threat is real, it is current and knowing how it works is the first step to staying protected.

This 1-day workshop takes a unique approach to awareness: participants develop the ability to **spot and resist AI-generated deception** by first experiencing how such content is made. See how voice cloning works from a short recording to a finished AI voice. Watch how an AI avatar is created and directed to deliver any script. Learn how to **create AI podcasts and audiograms** from any document, generating content useful for training materials, briefings, and internal communications.

Building on that creative experience, participants then **apply detection skills** using current AI content verification tools, learn to recognise the signs of AI-generated fakes, and understand the **legal and ethical boundaries** around creating and sharing AI content in Singapore. By the end of the day, participants leave with both the creative knowledge to produce AI content responsibly and the critical awareness to verify what they receive.



COURSE OBJECTIVES

By the end of this course, you should be able to:

- ✓ Explain how voice cloning and AI avatar creation work, with an understanding of the steps and tools involved in producing convincing AI-generated content.
- ✓ Describe how AI podcasts and audiograms are created from documents and identify practical use cases for these formats in a government work context.
- ✓ Explain in plain language how AI-generated deepfakes are constructed, including the methods commonly used to make fake video and audio content convincing.
- ✓ Apply practical detection techniques to assess whether video, audio, or image content is AI-generated, using current AI content verification tools.
- ✓ Identify the visual and audio signs that indicate AI-generated content and apply a simple verification checklist before acting on or sharing digital content received in a professional context.
- ✓ Identify the key legal and ethical boundaries around AI-generated content in Singapore, including consent requirements and responsible use guidelines for the public service context.



PRE-REQUISITES

There are no formal prerequisites for this course.
Participants are expected to:

- ✓ Be comfortable using a laptop and standard browser-based applications
- ✓ Have basic familiarity with typing, uploading files, and navigating web-based tools
- ✓ Have a general awareness of AI tools, though no prior hands-on experience is required before attending

COURSE REQUIREMENTS

Participants are required to bring their own **laptop** and a pair of **earphones** for this course.

- ✓ **Device:** Personal or work laptop (Windows or Mac). Chrome browser recommended. Tablets and mobile phones are not suitable for this workshop. Participants on government-issued devices should confirm that browser access to AI tools is not restricted before attending.
- ✓ **Earphones:** Recommended so participants can clearly hear AI voice and audio output during demonstrations. Standard earphones or earbuds are sufficient.



COURSE OUTLINE

Learning Unit 1:

Generative AI and Deepfakes: How the Technology Works and Why It Matters Now

Learning Unit 2:

Voice Cloning and AI Avatars: How Convincing AI Content Is Made

Learning Unit 3:

AI Podcasts and Audiograms: Creating Audio and Video Content from Any Document

Learning Unit 4:

How Deepfakes Are Made: Understanding the Technology from the Attacker's Perspective



COURSE OUTLINE

Learning Unit 5:

Spot the Fake: Visual and Audio Detection Techniques

Learning Unit 6:

AI Content Verification: Tools and Techniques for Checking What Is Real

Learning Unit 7:

What Is Legal, What Is Not: Singapore's Framework for AI-Generated Content

Learning Unit 8:

Responsible Creation: Using AI Content Tools Safely in a Government Context