

GUIDELINE FOR MANAGING GENERATIVE ARTIFICIAL INTELLIGENCE USAGE IN POSTGRADUATE THESIS

INTRODUCTION

1. Generative artificial intelligence (GAI) applications (refer to examples in Appendix 1) can be highly beneficial for thesis preparation, but students need to use it responsibly. It can assist in various tasks such as literature review, summarizing research papers, generating ideas, organizing content, and proofreading. GAI tools can also help with data analysis, creating visualizations, and structuring arguments. However, students should be mindful of over-relying on AI, ensuring that their work remains original, critical thinking is applied, and the final thesis reflects their own understanding and contributions. Proper attribution and ethical use of AI tools are crucial, especially when presenting ideas in academic work.
2. In response to this emerging technology usage and to ensure the authenticity of the student's intellectual contribution to the thesis, this document provides a guideline for Universiti Putra Malaysia (UPM) Postgraduate Program's for handling thesis and viva-voce sessions.
3. UPM is expected to provide a thorough oversight and ensure the responsible incorporation of generative AI in research and viva sessions. For programs involving professional bodies, it is subject to regulation by the relevant professional bodies.

BACKGROUND

4. The purpose of the thesis examination process is to examine the creation and interpretation of new knowledge, through original research or other advanced scholarship, of a quality to satisfy peer review, to extend the forefront of their discipline, and to merit publication in an appropriate form.
5. The viva-voce session is a systematic acquisition and understanding of a substantial body of knowledge at the forefront of the discipline or professional practice.
6. This document should be read together in tandem with the following documents:
 - a) UPM Guidelines for Plagiarism Detection
 - b) UPM Guide to Thesis Preparation
 - c) UPM Guidelines for Conducting of Final Examination (Viva Voce) Online
 - d) UPM Tips on Viva Voce for Supervisor, Chairperson & Examiners
 - e) The National Guidelines on AI Governance & Ethics
 - f) Malaysia Artificial Intelligence Roadmap

GUIDELINES FOR THESIS EXAMINATION

7. Students MUST:
 - a) demonstrate that the intellectual contributions of the thesis are predominantly their own, despite AI assistance
 - b) ensure the accuracy of facts and claims in the thesis, supported by appropriate evidence and references
 - c) ensure the originality of the content in their thesis
 - d) demonstrate a comprehensive understanding and mastery of their research contributions
 - e) demonstrate that he/she can maintain control over his/her research process, and AI was used as a supporting tool
 - f) explain clearly and attribute appropriately where and why generative AI was used (e.g., literature review, data preprocessing, or creative simulations)
 - g) outline the areas of the research that were influenced by AI-generated content versus their direct contribution
 - h) ensure ethical handling of any data used in research or interacting with generative AI models

8. Examiners are reminded to assess the student's writing style, the depth of knowledge in the discipline, and the originality of their contributions. Examiners MUST ensure that:
 - a) answer the research context in terms of clarity of the problem statement, literature review, methodology adequacy
 - b) maintain control over his/her research process, and AI was used as a supporting tool
 - c) use AI as a tool to assist, not substitute, their research efforts and intellectual contributions
 - d) defend their work and achieve the novelty of the scope of the degree that the students attended
 - e) critically evaluate and verify the AI-generated outputs (e.g., factual accuracy, relevance, bias in generated text or data)
 - f) ensure ethical handling of any data used in research or interacting with generative AI models
9. The Chairman must ensure that the student declares during the viva session the use of AI in the research, clearly specifying the areas it assisted with, while affirming that the originality and novelty of the research are their own work.

LIST OF REFERENCES

- i. MQA advisory note:
<https://www.mqa.gov.my/new/document/2023/edited/MQA%20Advisory%20Note%20No.22023-%20AI%20Generatif.pdf>
- ii. Garis Panduan Penggunaan Teknologi Kecerdasan Buatan Generatif (KBG) Dalam Pengajaran Dan Pembelajaran (PdP) Pendidikan Tinggi:
<https://jpt.mohe.gov.my/portal/index.php/ms/penerbitan/175-garis-panduan-penggunaan-teknologi-kecerdasan-buatan-generatif-dalam-pengajaran-dan-pembelajaran-pdp-pendidikan-tinggi>
- iii. Panduan AI generatif dalam pendidikan dan penyelidikan
<https://unesdoc.unesco.org/ark:/48223/pf0000390836>
- iv. Panduan Penggunaan Teknologi Kecerdasan Buatan Generatif (KBG) Di Universiti Malaysia Pahang Al-Sultan Abdullah https://caic.umpsa.edu.my/media/attachments/2024/05/21/ai-bm-garis-panduan-kecerdasan-buatan-generatif_bm.pdf
- v. Garis Panduan Penggunaan Kecerdasan Buatan Generatif: <https://cdex-apps.utm.my/files/guidelines/GP-KBG-PP-Terkini-1.pdf>

APPENDIX 1

Type	Application	Function
Text	ChatGPT Gemini Copilot Claude	<ol style="list-style-type: none"> 1. Generates textual answers and image as a response to text prompts. 2. Explain an uploaded image. 3. Generate program code. 4. Perform data analysis.
	Perplexity.ai Scite Elicit Consensus Semantic Scholar ResearchRabbit	<ol style="list-style-type: none"> 1. Generates textual answers as a response to text prompts. 2. Provide links and citation. 3. Generate questions and answers for user's further information digging. 4. Provides in-depth questions and answers for selected articles.
Image	Canva Freepik Midjourney	<ol style="list-style-type: none"> 1. Generate images/videos/speech based on textual prompts. 2. Provide image editing options such as subject, scenario and style.
Video	Elai.io	<ol style="list-style-type: none"> 1. Generate video based on template selection, storyboard input or PDF file. 2. Update videos based on edits by users on generated videos.

	PERKHIDMATAN UTAMA SISWAZAH PEJABAT TIMBALAN NAIB CANSOLOR (AKADEMIK & ANTARABANGSA) Kod Dokumen: PG/TSS/GS-60
	BORANG PENGESAHAN HASIL PENULISAN DAN PENGGUNAAN TEKNOLOGI KECERDASAN BUATAN DECLARATION OF AUTHORSHIP AND USAGE OF ARTIFICIAL INTELLIGENCE FORM

BAHAGIAN A : MAKLUMAT PELAJAR
SECTION A : STUDENT INFORMATION

1. Nama Pelajar :
(*Student Name*)
2. No. Matrik :
(*Matric No.*)
3. Fakulti/ Institut :
(*Faculty / Institute*)
4. Program :
(*Programme*)
5. Bidang Pengajian :
(*Field of study*)
6. Tajuk Tesis :
(*Thesis title*)

BAHAGIAN B : PENGGUNAAN TEKNOLOGI KECERDASAN BUATAN (CHATGPT DLL.)
DALAM PENULISAN TESIS
SECTION B : USE OF ARTIFICIAL INTELLIGENCE TECHNOLOGY (CHATGPT, ETC.) IN THESIS
WRITING

1. Tujuan penggunaan Teknologi Kecerdasan Buatan (sila \surd) :
(*Purpose of using Artificial Intelligence Technology (please \surd)*)
 - Penyuntingan teks (*Text editing*)
 - Penulisan draf awal (*Initial draft writing*)
 - Pemurnian ayat dan struktur bahasa (*Refinement of sentences and language structure*)
 - Cadangan idea dan kerangka (*Suggestions for ideas and framework*)
 - Penyediaan ringkasan atau abstrak (*Preparation of summary or abstract*)
 - Lain-lain (nyatakan) (*Others (specify)*): _____
2. Bahagian dalam tesis yang melibatkan penggunaan Teknologi Kecerdasan Buatan:
(*Parts of the thesis involving the use of Artificial Intelligence Technology*)

Bahagian Tesis (Part of Thesis)	Bab (Chapter)	Sila Tandakan (√) (Please Tick)	Muka Surat (Page No.)	Sumber AI (AI Source)
Pendahuluan (Introduction)	Bab 1			
Kajian Literatur (Literature Review)	Bab 2			
Metodologi (Methodology)	Bab 3			
Analisis Data (Data Analysis)	Bab 4			
Perbincangan dan Rumusan (Discussion and Conclusion)	Bab 5			
Lain-lain (Nyatakan) (Others (specify))				

BAHAGIAN C : AKUAN PELAJAR
SECTION C : STUDENT DECLARATION

Saya, [nama pelajar], dengan ini mengaku bahawa:
 (I, [student's name], hereby declare that)

- a) Teknologi kecerdasan buatan yang digunakan sebagai alat bantu penulisan, bukan sebagai pengganti pemikiran, analisis, atau penyelidikan asal saya.
 (The artificial intelligence technology used serves as an assistive writing tool, not a substitute for my original thinking, analysis, or research).
- b) Semua kandungan yang dihasilkan telah disemak dan diubah suai untuk memastikan keaslian dan kesesuaian dengan kajian saya.
 (All content generated has been reviewed and modified to ensure authenticity and relevance to my study).
- c) Saya memahami bahawa saya bertanggungjawab sepenuhnya terhadap ketepatan, kesahihan, dan integriti akademik tesis ini.
 (I understand that I am fully responsible for this thesis's accuracy, validity, and academic integrity).
- d) Penggunaan teknologi kecerdasan buatan ini telah mematuhi peraturan universiti dan etika akademik.
 (The use of artificial intelligence technology complies with the university's regulations and academic ethics).

Tandatangan Pelajar : _____
 (Student's Signature)

Tarikh : _____
 (Date)

BAHAGIAN D: PENGESAHAN PENYELIA
SECTION D: SUPERVISOR ENDORSEMENT

Saya mengesahkan bahawa penggunaan teknologi kecerdasan buatan oleh pelajar telah dijelaskan dan mematuhi garis panduan etika universiti.

(I confirm that the student's use of artificial intelligence technology has been explained and complies with the university's ethical guidelines).

Tandatangan Penyelia : _____
(Supervisor's Signature)

Nama Penyelia : _____
(Supervisor's Name)

Tarikh : _____
(Date)