

GE 1b

Academic Writing Tools: Practical

120 Hours
(120hrs Practical)

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-Requisite of the Course (if any)
		Lecture	Tutorial	Practical/ Practice		
GE 1b: Academic Writing Tools: Practical	4	0	0	4	BLISc	-

Course Objectives

This course develops proficiency in ethical academic writing by integrating AI-driven tools for literature synthesis, data analysis, and content creation. Students will master search strategies, grammar enhancement, and citation management while navigating the complexities of scholarly publishing, including peer-review processes and the prevention of plagiarism.

Learning Outcomes

After completing this course, students will be able to:

- ☞ Develop proficiency in academic and research writing, with effective and ethical use of digital and AI-based writing tools.
- ☞ Impart skills for conducting systematic literature reviews using specialized tools.
- ☞ Enhance competence in data analysis, interpretation, and scholarly communication.
- ☞ Manage citations and references using reference management tools and promote awareness of referencing, plagiarism detection, and publishing ethics.

UNIT I: Content Creation for Academic Writing **30 Hours**

- ☞ Search Strategy Development, Keyword Optimization, and Citation Chaining
- ☞ Content creation, editing, and formatting for research publications
- ☞ Ethical Use of Artificial Intelligence Tools for Article Writing

UNIT II: Review of Literature and Scholarly Discovery **30 Hours**

- ☞ Bibliometric and Visualization Techniques
- ☞ AI-assisted Literature Review and Summarization
- ☞ Exploration of Various Types of Databases
- ☞ Managing and Synthesizing Scholarly Information

UNIT III: Grammar, Paraphrasing, Data Analysis, and Interpretation **30 Hours**

- ☞ Grammar and Paraphrasing and Summarization
- ☞ AI-Driven Data Collection and Analysis
- ☞ Data Visualization and Interpretation in Research

UNIT IV: Referencing, Publishing, and AI-Enhanced Academic Communication **30 Hours**

- ☞ Reference Management and Citation Creation
- ☞ Web and AI-based Citation Generation and Plagiarism Detection
- ☞ Scholarly Publishing: Journal Selection, Peer-Review, and Open Access
- ☞ Identifying predatory journals and maintaining publication ethics

Essential Readings

- ☞ BOOTH (W C), COLOMB (G G) and WILLIAMS (J M). The craft of research. University of Chicago Press. 2024.
- ☞ HART (C). Doing a literature review: Releasing the social science research imagination. Sage. 2025.
- ☞ PAN (L M) and CRAVEN (J S). Preparing literature reviews. Routledge. 2024.
- ☞ UGC. Regulations on academic integrity and plagiarism. 2018.

- ☞ UNESCO. Recommendation on the ethics of artificial intelligence. 2021.

Suggested Readings

- ☞ MADHUSUDHAN (M). AI in action: enhancing every stage of scientific publishing. In Management of Digital Information Resources. Noida: Allied Publishers, 51-64. 2024.
- ☞ ONLINE Tutorials and documentation for Content creation, review of literature, grammar, paraphrasing, data analysis and referencing tools.
- ☞ WIPO. Artificial intelligence and intellectual property. Available at <https://www.wipo.int/portal/en/index.html>