Course Code & Title:	COMP8505 - Advanced Topics in Language Models				
Semester:	Two			**Academic Year:**	2024-25
This is a Graduate Course. MPhil/PhD students in the Department of Computer Science should read the Coursework Requirement.					
Instructor(s):	Prof. L KONG				
Syllabus:	This advanced course in language models provides a comprehensive exploration of the latest techniques and approaches in natural language processing (NLP) and large language models (LLMs). Students will delve into cutting-edge neural architectures, state-of-the-art training and inference algorithms, and the practical applications of these models. The curriculum includes hands-on experience with leading pre-trained models such as BERT, GPT-4, T5, PaLM, and LLaMA, alongside an analysis of recent research and innovations in the field. Ethical considerations, bias mitigation, and the integration of multimodal models like CLIP and DALL-E are also key components. By critically evaluating different language modeling approaches and developing independent research projects, students will gain the skills necessary to contribute to advanced NLP and LLM research and applications.				
Topics:	-				
Pre-requisites:	-				
Compatibility:	-				
Instructors' website:	https://ikekonglp.github.io/				
Assessment:	• In-course assessment				
Timetable:	**Date**	**Start Time**	**End Time**	**Venue**	**Remarks**
	Monday	14:30	17:20	HW312	
	Teaching Period: Jan 20 - May 3, 2025 **Reading Week: Mar 10 - 15, 2025**				