

ICT5358 Unleashing the Power of Generative AI Models

Unit Description

Unleashing the Power of Generative AI Models equips students with the knowledge and skills to harness the capabilities of generative AI models.

Throughout the unit, students will explore the world of generative AI, uncovering its applications across various domains. They will dive into state-of-the-art language models, and discover how to leverage them effectively. The unit delves into text-to-image models, enabling students to create compelling visual content from textual prompts. Students will also gain expertise in prompt engineering, system prompts, and fine-tuning pre-trained models for optimal performance. Students also explore ethical considerations, legal implications, and measuring the success and impact of generative AI projects.

Credit Points	8 credit points
Duration	12 weeks (10 teaching weeks and 2 revision and assessment weeks)

Unit Learning Outcomes

On successful completion of this unit, students will be able to:

1. Analyse generative AI models with respect to their roles and capabilities in performing generative AI tasks.
2. Apply prompt engineering to Large Language Models (LLMs) and text-to-image models to achieve desired outputs.
3. Plan and design processes to fine-tune pre-trained generative models to optimise their performance for specific tasks.
4. Critique the use of generative AI models with respect to new opportunities and their ethical/legal implications.
5. Appraise the success and impact of generative AI projects.