# DESN 2017 GENERATIVE AI FOR DESIGN PRACTICE

### **Credit Points** 10

Description This subject applies the fundamental concepts of generative design using Artificial Intelligence (AI), with a particular emphasis on how these methods are practically implemented within the context of design (Visual Communication). Students will explore how AI can be applied in design, including the use of AI-driven tools, automatic image generation, and intelligent design recommendations. Throughout the subject, students will engage with real-world design challenges, utilising AI to develop creative solutions. In addition to technical skills, the subject emphasises a critical and ethical approach to AI in design, encouraging students to consider the broader implications of AI technologies in their practice. By the end of the subject, students will have a strong foundation in AI principles and generative techniques, as well as the ability to critically evaluate and ethically integrate AI into their design processes.

School Humanities & Comm Arts

## **Student Contribution Band**

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current\_students/fees/) page.

Level Undergraduate Level 2 subject

#### Restrictions

Successful completion of 40 credit points

# **Learning Outcomes**

Apply generative models to solve real-world design problems, to generate creative solutions using Al technologies.

Critically analyse different AI applications/tools in graphic and interactive design, and evaluate their impact on the design process.

Develop innovative design solutions by leveraging AI capabilities, to enhance creative problem-solving skills in visual communication design.

Assess the ethical implications of using AI in design, ensuring responsible and informed application of AI technologies in professional practice.

ice based projects utilising AI processes in visual communication design. Develop and produce practice based projects utilising AI processes in visual communication design.

# **Subject Content**

# Introduction to Generative AI in Design

- Understanding Al-driven design tools and their applications in visual communication
- Differentiating generative models from other AI techniques in design contexts

# **Practical Application of Generative AI Tools**

- Hands-on experience with AI tools for automatic image generation and intelligent design suggestions
- Integrating Al-driven recommendations into creative design workflows

## Problem-Based Learning with Generative AI

- Applying AI to solve real-world design challenges through problembased learning approaches
- · Generating and curating design data suitable for Al-driven models

# **Critical and Ethical AI Design Practices**

- · Developing a critical approach to the use of AI in creative processes
- Reflecting on the ethical implications of AI integration in design projects

#### **Advanced Generative AI Techniques**

- Experimenting with advanced generative algorithms in innovative design scenarios
- · Customising AI tools to meet specific design needs and objectives

#### **Final Integrative Project**

- Creating a comprehensive design project that incorporates generative AI
- Reflective and analytical processes to evaluate Al's role in the creative outcome