

TOPICAL ACCREDITATION ISSUE 2025/2026

THE IMPACTS OF ARTIFICIAL INTELLIGENCE ON ENGINEERING EDUCATION

The paper developed by Engineering New Zealand's AI Advisory Group Navigating AI's Future in Engineering recognises the need for Engineering New Zealand to guide the profession through the AI transformation and makes recommendations in six critical areas. Several of these relate directly to engineering education and information and insights gathered through the accreditation process will provide valuable insights to support this process.

Part of our accreditation process is provision to seek feedback from providers on a topical issue impacting engineering education. Recognising the significant, ongoing impact of Artificial Intelligence on the engineering profession and society more generally, providers undergoing accreditation in 2025/26 are asked to include a brief report to provide some context for accreditation panels and assist SAB to consider impacts from an accreditation perspective. Reports should address:

- 1. Approaches to ensuring students develop a general understanding of AI principles to underpin effective use of different AI tools in different situations
- 2. Approaches to introducing students to the opportunities and weaknesses of AI and an understanding of how it works, for example to understand and help to identify Hallucinations, hosting bias etc
- 3. Any discipline-specific curriculum considerations such as:
 - o rapid integration of AI into areas like machine design/mechatronics
 - o Developing specialist AI engineering skills to develop AI tools and technologies
 - Monitoring and responding to changes AI bring
- 4. Ethical and responsible use considerations around AI models, including IP protection and bias
- 5. Academic integrity responses to challenges around the assessment of foundational engineering concepts
- 6. Any pedagogical innovations, such as examples where Gen AI is being used to enhance teaching and learning