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Benchmarking Engineering Management Graduate Program at the Onset of the AI Era

Dima Jawad

Associate Professor, Engineering Management Graduate Program, Faculty of Engineering and Applied Science
Ontario Tech University
Oshawa, Ontario, CANADA

Abstract

This research delves into the evaluation of graduate programs in Engineering Management as they relate to the rapidly changing landscape of Artificial Intelligence (AI). As AI continues to revolutionize industries and workforce dynamics, this study aims to determine the effectiveness of engineering management programs in accommodating these advancements. The underlying concept of this study is built on the premise that engineering management programs must evolve to meet the challenges and opportunities presented by AI. The research employs a mixed-methods approach, combining qualitative interviews with program administrators, alumni, faculty, and industry professionals with quantitative analyses of curriculum structures, technological integration, and student outcomes. Through an extensive literature review, the research contextualizes the influence of AI on engineering management practices and identifies key competencies and knowledge areas crucial for graduates. Data collection involves surveys and interviews to gather insights into program strengths, weaknesses, and areas requiring enhancement. Findings present comparative analysis of factors such as the incorporation of AI-related coursework, industry partnerships fostering AI applications, and the adaptability of programs to emerging trends.

Keywords

Benchmarking, engineering management education, AI integration