

Preface

This publication contains articles on research and engineering design results, which were presented at the 5th International Conference on Experimental and Computational Mechanics in Engineering (ICECME 2023, 9-10 November 2023, Banda Aceh, Indonesia) and brings together two directions of modern engineering practice: computational modelling and production management.

In Chapter 1: Modeling and Computational Research in Engineering, readers are introduced to advanced techniques and tools that support simulation, analysis, and optimisation across some engineering domains. These methods not only enhance our understanding of complex systems but also drive innovation and efficiency in design and development.

Chapter 2: Production Management and Quality Control explores the principles and strategies behind effective manufacturing, operational excellence and ergonomics in production. With a focus on planning, coordination, and quality assurance, this chapter provides insights into the practices that ensure products meet rigorous standards while optimising resources and work productivity.

This edition offers a comprehensive foundation for researchers and professionals seeking to integrate analytical rigour with solving practical engineering problems.

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