

# Preface

This edition contains selected articles based on research results presented at the 3rd International Conference on Multidisciplinary Engineering and Applied Sciences (ICMEAS 2025), held from 30 July to 1 August 2025 in Abuja, Nigeria, and presents contemporary research at the intersection of engineering practice of industrial organisation, digital transformation, and next-generation technologies in engineering education. The collected chapters reflect the growing convergence of management strategies, artificial intelligence, cybersecurity frameworks, and advanced educational systems in a rapidly evolving technological landscape.

The edition opens with Engineering Management, which addresses planning, innovation governance, risk assessment, and performance optimisation in aircraft, gas distribution, and water security.

The first chapter is complemented by AI-Powered Engineering, where intelligent algorithms, machine learning applications, and data-driven decision-making are transforming design processes, predictive maintenance, optimisation, and system integration.

Cybersecurity forms a critical pillar of digital transformation, and this volume highlights the protection of digital infrastructures, industrial control systems, and institutional data environments against increasingly sophisticated threats. The contributions emphasise secure architectures, risk mitigation strategies, and resilience in interconnected systems.

The final chapter explores Next Generation Technologies in Education and University Management, focusing on digital learning ecosystems, smart campus solutions, data analytics for academic administration, and technology-enhanced teaching methodologies. These advances redefine institutional efficiency, accessibility, and educational quality in the era of digital transformation.

This volume aims to serve researchers, practitioners and academics seeking integrated approaches to innovation, digital security, and sustainable technological development.

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