

Resilient Surveyors: Aligning Competence, Standards, and Ethics with the Demands of Modern Mining

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SUMMARY

The mine surveying profession stands at a crossroads amid rapid technological advancement, environmental imperatives, and shifting societal expectations. To remain relevant, safe, and effective, mine surveyors must future-proof their practice by evolving knowledge, skills, standards, and ethics. This paper explores how these dimensions intersect with emerging challenges such as digitalization, automation, climate change adaptation, and social license demands. Drawing on recent research, professional frameworks, and case studies, it proposes strategic approaches for curriculum redesign, skill development, professional accreditation, and ethical governance to guide the profession's transformation. Recommendations for educational institutions, industry stakeholders, and policymakers conclude the discussion.