



UWA Plus Micro-credentials

Critical Information Summary

Title and brief description	<p>MINEM533 Case Studies of Tailings Failures. This micro-credential has been designed for professionals working in the field of tailings management. It is best suited to practicing engineers, geoscientists or individuals with responsibility for input into risk assessments of tailings storage facilities, although the content covered and the principles discussed will find relevance in all fields of mining geomechanics. It is the third of three micro-credentials in Tailings Risk Evaluation.</p> <p>Participants will learn about the key factors that led to two failures that have been well documented in the open literature. Descriptions of the Merriespruit failure that occurred in South Africa in 1994 illustrates how inadequate attention to site investigation, design and analysis contributed to the failure; in addition, the importance of correctly managing a TSF during operations is illustrated. The Cadia TSF failure that occurred in Australia in 2018 provides further evidence of the site investigation phase of a project, particularly the development of a sufficiently detailed geological model.</p>
Certified learning	(1) articulate the link between monitoring and setting suitable TARPs; (2) evaluate how poor operational practices impact on TSF stability; (3) identify the factors to consider in planning an appropriate site investigation for a new TSF; and (4) demonstrate how current best practice could have prevented the TSF failures discussed in this micro.
How learner participated	Online only
Effort required (indicative)	50 hours, including online contact hours, personal study time and assessments.
Main assessment task	Application of multiple skills to complex problems
Indicative equivalent level	Postgraduate
Quality assurance	None
Successful learner earns PD Points for conversion to:	2
. Admission to an award course	No
. Credit towards an award course	Yes
. If yes, how much credit?	Credit is less than one unit
