



Unit Outline (Higher Education)

Institute / School: Institute of Innovation, Science & Sustainability

Unit Title: Company Economics and Finance

Unit ID: ENGRG4403

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): (ENGIN5510)

ASCED: 030303

Description of the Unit:

This unit qualifies participants to apply an advanced body of knowledge in the area of mineral economics and equips them with highly developed skills for research and enquiry. Students enrolled in this unit will be able to apply the body of knowledge to a range of contexts within the mining industry enabling them to undertake professional or highly skilled work within the mining industry and allow them to undertake further study.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the Unit but gained a final mark of 45 per cent or above, has completed all major assessment tasks (including all sub-components where a task has multiple parts) as specified in the Unit Description and is not eligible for any other form of supplementary assessment

Course Level:

Level of Unit in Course	AQF Level of Course					
	5	6	7	8	9	10
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:
Knowledge:

- K1.** Review capital and operating costs for mining systems employed in the mining industry.
- K2.** Recognise and interpret the relationship between mining costs and revenues.
- K3.** Identify and analyse the effect of time on the determination of the feasibility of mining projects.

Skills:

- S1.** Appraise, consolidate and synthesise knowledge and identify and provide solutions to complex mine problems.
- S2.** Evaluate complex ideas in mineral economics.
- S3.** Select appropriate tools (that may include software) to solve problems in mineral economics.

Application of knowledge and skills:

- A1.** Design a mining system/project from an economics perspective.
- A2.** Interpret the economical viability of mining projects.

Unit Content:

Topics may include:

- In depth analysis of techniques employed in the mining industry, focussing on the estimation of capital and operating costs and the impact of limited information on the estimation of these.
- Taking into account time in economic feasibility determination for mines.
- Mining Project Analysis: accounting for uncertainty.
- Production Economics: Production from orebody extensions at marginal cost; Equipment maintenance and replacement decisions; Optimisation of blasting patterns; The cost of secondary breaking; Cost control systems and reporting.

Learning Task and Assessment:

Learning Outcomes Assessed	Assessment Tasks	Assessment Type	Weighting
K1-3, S1-3, A1	Numerical and conceptual tasks	Written assignments	50-60%
K1-3, S1-3, A2	Evaluation of a mining project	Project report and associated Excel files	40-50%

Adopted Reference Style:

Other (IEEE-Refer to the library website for more information)

Refer to the [library website](#) for more information

Fed Cite - [referencing tool](#)