

Course Title: Life Cycle Cost (LCC)

Duration: 2 Days

Course Summary:

The objective of this course is to give you the skills to determine the total cost of ownership of assets using life cycle cost analysis methods, and to understand the scope of the results.

This is an essential course for cost and technical specialists to address the emphasis being placed on estimating the whole of life, total cost of ownership at either the acquisition, sustainment or operational phase of an asset's life cycle.

Life cycle cost is made up of quantitative and qualitative tasks, and these will be addressed during the course lessons. It is important to know how to think about life cycle cost as well as make its calculations. There are many approaches to life cycle cost decisions and they usually have a substantial array of complex and seemingly unfamiliar algorithms to perform the calculations.

The course explores the functional and fundamental ways that life cycle cost is used to address the cost of capability and sustainability decisions. In particular, it discusses fundamental theories and limitations that need to be considered for acquisition, operational, sustainment, and contingent aspects of assets irrespective of their use (mining, defence, process industry, infrastructure, etc). The course is very relevant to program or project management implementations, or improving current performance through operational excellence programs.

You don't need a background in mathematics as the course has been structured for the non-mathematics trained person. Please bring a calculator with standard arithmetic, logarithmic and statistical functions - and know how to use them beforehand. Spreadsheets will be used as training aids and these will be made available to course attendees.

Course Content:

- ❖ **Concept of Life Cycle Cost**
- ❖ **Through Life Economic & Risk Assessment Considerations**
- ❖ **LCC Processes & Management**
- ❖ **Cost Estimating Techniques: Direct, Analogous & Parametric**
- ❖ **LCC Standards: AS 4536, IEC 60300-3-3, ISO 15686, ISO 15663, etc**
- ❖ **Time Value of Money: Discounted Cash Flow (DCF), IRR, MARR, etc**
- ❖ **Sensitivity Analysis**
- ❖ **Trade-off Analysis**
- ❖ **Break Even Analysis**
- ❖ **Marginal Analysis**
- ❖ **Evaluating a Single Project**
- ❖ **Comparative Analysis (Analysis of Alternatives)**
- ❖ **Economic & Residual Life Assessment**
- ❖ **Replacement Analysis**
- ❖ **Level of Repair Analysis**
- ❖ **Product Support LCC**
- ❖ **Software LCC**
- ❖ **LCC Evaluation**