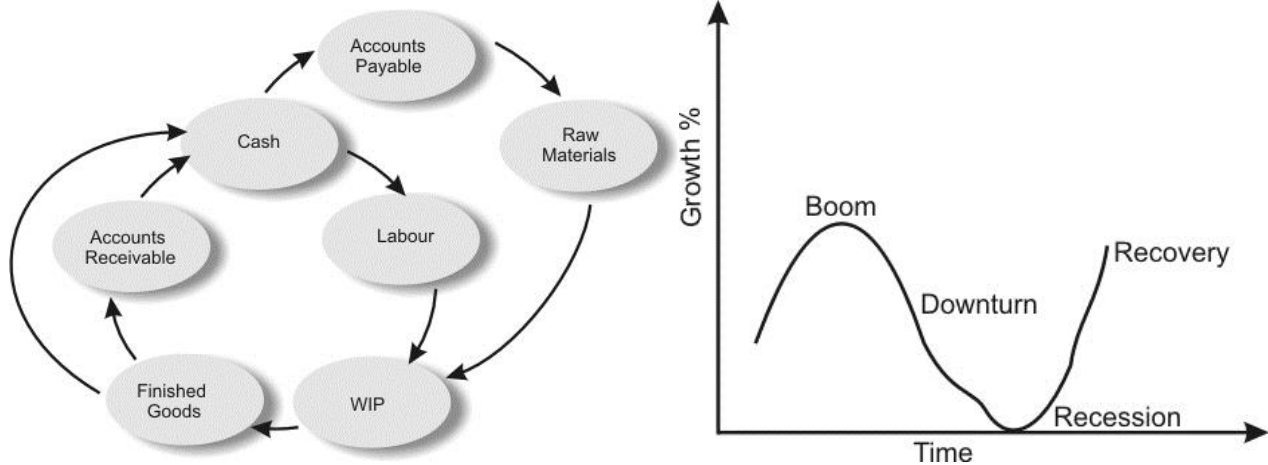




Technology Training that Works

Practical Financial Fundamentals and Project Investment Decision Making For Engineers and Technicians



Practical, Live Online Course

YOU WILL GAIN:

- Understand the financial workings of your company
- Read and explain simple financial statements
- Understand economic evaluation techniques in project proposals
- Calculate the financial viability of expenditure proposals
- Optimise the use of scarce capital on your projects
- Understand the essentials of discounting cash flows for a project and calculate NPV as well as IRR
- Manage your company assets more effectively and know when to replace equipment
- Effectively execute sensitivity studies taking into account risk and uncertainty
- Rank alternative investment proposals using discounted cash flow techniques
- Gain the knowledge of the pros and cons of the different economic evaluation methods
- Prepare project expenditure proposals that can win management approval
- Make effective decisions under capital rationing situations
- Communicate effectively with your financial manager peers
- Manage your personal wealth and finances far more effectively than before

WHAT'S INCLUDED?

- Four 50 minute live, practical sessions with your instructor and attendees
- The full technical eBook manual for "Practical Financial Fundamentals & Project Investment Decision Making For Engineers and Technicians" which includes course slides, cases studies, calculations and practical exercises
- Four hours of additional in-depth video sessions covering many additional areas – yours to keep and watch at your convenience



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THE COURSE

In today's global climate, financial decisions are coming under increasing scrutiny. It is essential that you have enough information to make effective choices and to drive your engineering projects forward with sound justifications. Second to this is ensuring financial meetings and discussions are communicated in a language that non-finance professionals can understand.

Finance courses are among the most frequently requested by engineers and technical professionals. Reasons include rapidly advancing technology, increasing project complexity and competitive pressures. Such factors demand you to do the best possible cost estimation and economic evaluation of your engineering projects, products and services.



This online course commences with the basics of finance pertinent to engineers and technical professionals. Basic accounting and finance terms are explained in simple English with an emphasis on the engineering and technology world. Cash flow concepts are discussed and the issue of making appropriate investment decisions is examined, using such techniques as NPV and IRR. Finally, capital budgeting and risk are discussed in an easy-to-understand manner.

This course has been designed to provide you with the fundamentals of financial management from a practical engineering and technology perspective.

ONLINE COURSE PRESENTER

John Piperides
BE Electrical

John is a professional electrical engineer with over 25 years experience in industrial maintenance, production, management, sales and improvement. He has held management positions in several manufacturing and sales companies. His diverse responsibilities have included contract negotiation, authoring and responsibility of departmental budgets, daily management of over 20 reports, practice of cGMP, auditing in a pharmaceutical plant, and system administration and programming of diverse IT and embedded systems. He has been directly involved with industries including building management, pest control, mining, power utilities, food, pharmaceutical, steel, building products, sugar, paper and pulp, rail and airports.

John has completed many years of further education including developing, writing and delivering many work based courses and seminars. He has spent 10 years as a part time teacher at TAFE in electrical engineering, and 15 years delivering structured courses in thermography, power quality, instrument safety, motor drive theory, PLC, SCADA, and pest inspection.

WHO SHOULD ATTEND?

Anyone looking to increase their knowledge and understanding of finance from an engineers perspective.



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PRE-REQUISITES:

A basic knowledge of projects and accounting concepts would be useful, but is not essential.

CONTENT SUMMARY

INTRODUCTION

*This is an intensive four (4) hour presentation; we will be emphasising sections marked in **BOLD** below. Full recordings will be provided for the lower intensity sessions (another four hours of video as detailed below) to review after the course.*

COURSE STRUCTURE

Live Lecture - 1

COST ESTIMATION

- Direct and indirect costs
- Fixed and variable costs
- Breakeven analysis
- Practical Exercise

Pre-recorded lecture 1.1

INTRODUCTION: FINANCIAL STATEMENTS

Part a.

- Recording of financial information
- Assets, equity and liabilities
- The balance sheet
- The profit and loss statement
- The cash flow statement

Part b.

- Ratio analysis
- Liquidity ratios
- Leverage ratios
- Activity ratios
- Profitability ratios
- Investment ratios
- Cash flow versus profit
- du Pont analysis

Live Lecture - 2

TIME VALUE OF MONEY

- Compounding versus discounting
- Discount rate, hurdle rate and cost of capital
- Present and future values of money
- Effect of compounding period
- Effective and nominal interest rates
- Compounding and discounting multiple cash flows
- Net present value versus internal rate of return
- Annuities
- Compounding and discounting tables
- The use of spreadsheets



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Pre-recorded lecture 2.1

EFFECTS OF INFLATION

- Inflation and NPV

Live Lecture - 3

RANKING OF INVESTMENT PROPOSALS

- Undiscounted and discounted payback method
- NPV method
- NFV method
- IRR method
- Benefit/cost ratio and NPV ratio methods
- Incremental NPV method
- Incremental ROI method

Pre-recorded lecture 3.1

RISK AND UNCERTAINTY

- Sensitivity analysis
- Monte Carlo analysis

Live Lecture - 4

CASH FLOW CONCEPTS

- Cash flow models for manufacturing
- Depreciation methods
 - Straight line
 - Declining balance
 - Years digits
- Cash flow forecasts

CAPITAL MANAGEMENT

- Capital rationing

TYING IT ALL TOGETHER

- Revision of the key concepts
- How to apply this to corporate financial decision making
- How to apply this to personal wealth creation

CLOSING