

# Introduction

## Economic Decision Analysis in Engineering Course Notes

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2025**

## **Introduction**

This document contains notes to be used in industry and university courses on the economics of project decision making. Guy Allinson has prepared these course notes and asserts copyright. No part may be reproduced by any process without written permission from the author.

## **Aims and scope**

The notes are intended to provide practical guidance in the application of the techniques of economic/financial analysis. They cover the economic/financial techniques that assist in making investment decisions.

## **Contents**

The course notes cover the following subjects - Cash Flow Analysis and Economic Indicators. These are described below.

## **Cash flow analysis**

The derivation of cash flow is the starting point of economic analysis. The notes on cash flow analysis cover how to make projections of future net cash flow of a potential investment. They discuss how to make tax projections, how to account for inflation, and how to calculate depreciation by different methods.

## **Economic indicators**

The notes on economic indicators show how to convert cash flows into single number measures of the economic worth of a project. The meaning and methods of calculating net present values, internal rates of return, payback periods, and capital productivity indices are presented. The notes also discuss the relative merits of the different indicators.

## **Disclaimer**

Every reasonable effort has been made to ensure the accuracy and appropriateness of these notes. However, the author takes no responsibility for any errors or omissions.