

TIE2140 Engineering Economy
Tutorial 3 (Lab 1)
Using Excel Financial Functions for Project Evaluation

Objectives

- In this lab, you will learn how to use the various Excel financial functions to solve problems and project proposals involving cash flows and the time value of money.
- The following functions will be covered:
 - PV, PMT, FV, RATE, NPER
 - NPV
 - IRR
 - MIRR

Computer Exercises

1. (a) Solve Tutorial 1 Question 5 using Excel's
 - i. Goal Seek
 - ii. RATE function
(b) In Tutorial 1 Question 5, if the account pays interests at 2% per month, use Excel's NPER function to determine how long it would take to achieve the same final amount if the initial amount and monthly contributions remain the same.
2. Solve Tutorial 2, Question 1 using Excel's
 - i. PV function only
 - ii. NPV function
3. Solve Tutorial 2, Question 2 using Excel's FW function. Also, find the IRR using RATE function.
4. Solve Tutorial 2, Question 3 using Excel's PMT function.
5. Solve Tutorial 2, Question 5 using Excel's financial functions. Find the IRR and MIRR using IRR function and MIRR function respectively.