

MODULE DESCRIPTOR

MODULE TITLE	ENGINEERING ECONOMICS		
MODULE CODE	EL3803 (L6)	CREDIT VALUE	10 CREDITS (5 ECTS)
CAMPUS	UCLAN CYPRUS		
SCHOOL	SCHOOL OF SCIENCE		

MODULE AIMS

The aim of this module is to enable students to develop a thorough understanding of the fundamental topics in the fields of Engineering Economics

MODULE CONTENT

Introduction to Microeconomics and Macroeconomics

Fundamentals to Engineering Economy: Cost concepts and Design Economics, Cost estimation and Cost terminology, the General Economic Environment

Money time relationship and Equivalence: Simple and Compound interest, the concept of Equivalence, Cash-flow diagrams and tables.

Interest formulas relating Present and Future equivalent values of single cash-flows.

Interest formulas relating a uniform series (Annuity) to its Present and Future equivalent values.

Applications of Money-Time relationships: Minimum Attractive Rate of Return (MARR), Present Future and Annual Worth methods, The Internal Rate of Return (IRR) method, Investment balance diagrams.

Cost estimation technics, cost estimation and design Process

Price changes and Exchange rates, Differential price Inflation and Deflation.

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:	
1.	Critically evaluate and analyse the economic environment before making a feasibility study for future investment.
2.	Evaluate present and future values of an investment, related to future profits.
3.	Discuss and evaluate the Minimum Attractive Rate of Return (MARR) and the Internal Rate of Return (IRR) of a company using various methods.
4.	Apply cost estimation techniques and evaluate the Internal Rate of Return of an investment taking in account the price changes.

TEACHING METHODS

The class contact will consist of lectures and tutorials. Lectures will introduce new material and provide examples. During the tutorials, students will apply lecture theory to solve related problems

ASSESSMENT METHODS

The module is assessed through one short test, one report, and one final exam.