“**Elements of Investment Analysis“**

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Investment Analysis is the process of researching and evaluating investment opportunities. In particular, we study how to evaluate different investment alternatives which are usually characterized by estimating the amount and timing of future receipts and disbursements.

Schedule of the classes: *4 appointments of one hour and half each.*

**20.02.2024 -  18:00 -19:30 Bucharest time**

**Session 1 - Calculation and evaluation of the interest rate**

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Loosely speaking interest is a rental amount charged by financial institutions for the use of money.

The concept of interest can be extended to capital assets, which their owner, repaying through the earnings generated. This economic gain from the use of money is what gives money its time value.

Because projects require investment of money, it is important that the time value of the money is properly considered when evaluating these projects. In relation to that the following basic notions and formulas are needed:

• Simple and compound interest

• Interest formulas: single payment compound-amount factor, single payment present-worth factor, equal payment series compound amount factor, equal payment series sinking-fund factor, equal payment series capital recovery factor, equal payment series present worth factor, nominal and effective interest rates.

**22.02.2024 - 18:00 -19:30 Bucharest time**

**Session 2 - The economic equivalence**

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If two , or more, investment alternatives are to be compared, their characteristics must be placed on an equivalent basis. To do this coherently it is necessary to put the two project amounts on an equivalent basis by use of the proper conversion factor. The setup is based on:

• The meaning of equivalence

• Equivalence calculations

• Equivalence between cash flows

**27.02.2024 - 18:00 -19:30 Bucharest time**

**Session 3 - Comparisons of investment alternatives**

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A basis for comparison is an index containing particular information about a series of receipts and disbursements representing an investment opportunity. The reduction of alternatives to a common base is necessary so that real differences become directly comparable and may be used for decision making. Related concepts are:

• Present worth/value

• Annual equivalent

• Future worth/value

• Internal rate of return (IRR)

• Payback period

**29.02.2024 - 18:00 -19:30 Bucharest time**

**Session 4 - Decisions among alternatives**

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A decision criterion is a rule or procedure that prescribes how to select investment alternatives so that certain objectives can be achieved. The degree to which these objectives are realized depends on the efficacy of the decision criterion. The covered topics are:

• Type of investment proposals

• Investment alternatives

• Forming mutually exclusive alternatives

• The differences between alternatives

• The minimum attractive rate of return (MARR)

• The Do nothing alternative

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Her research interests are in the areas of technology transfer, innovation and strategic management, Industry 4.0 and complex networks. She is involved in several European projects regarding technology transfer and business innovation management. She is the author of research papers published in international journals such as Technological Forecasting & Social Change, Technovation, Small Business Economics, Annals of Operation Research, Expert Systems with Applications, Scientific Reports, conference proceedings as well as chapters of books.