

### SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

#### **COIMBATORE-35**

Accredited by NBA-AICTE and Accredited by NAAC – UGC with A+ Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

## COURSE NAME: 19MEE301/ ENGINEERING ECONOMICS AND COST ANALYSIS

III YEAR / V SEMESTER

Unit 1 – BASIC ECONOMICS

Topic 1: Economics and Managerial Economics

01/10

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19MEE301/EECA/Mrs.B.CHRISTYJULIET/ AP/EEE





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## Economics & Engineering Economics

- Economics is science that deals with the production and consumption of goods and services and the distribution and rendering of these for human welfare
- In simple, it is the study of how individuals and groups make decisions about the allocation of limited resources.
- Engineering Economics / Managerial Economics is the application of economic techniques to engineering decisions.
- Engineers often have to decide among alternatives.
- Engineers have to decide which of several designs to use? Which of several projects to pursue?
- Engineering Economics gives engineers the tools they need to make decisions that maximize the use of resources.





#### Definition

- Engineering Economy involves the systematic evaluation of the economic merits of proposed solutions to engineering problems.
- To be economically acceptable or affordable, solutions to engineering problems must demonstrate a positive balance of long-term cost.





## Why Engineering Economics

Why Engineering Economy is Important to Engineering



Engineers design and create.

01

02

Designing involves economic decisions.

Engineers must be able to incorporate economic analysis into their creative efforts.

03

Often engineers must select and implement from multiple alternatives.

Understanding and applying the time value of money, economic equivalence, and cost estimation.

05

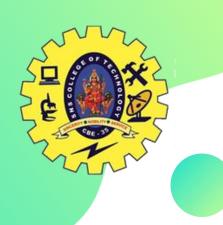
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A proper economic analysis for selection and execution is a fundamental task of engineering.



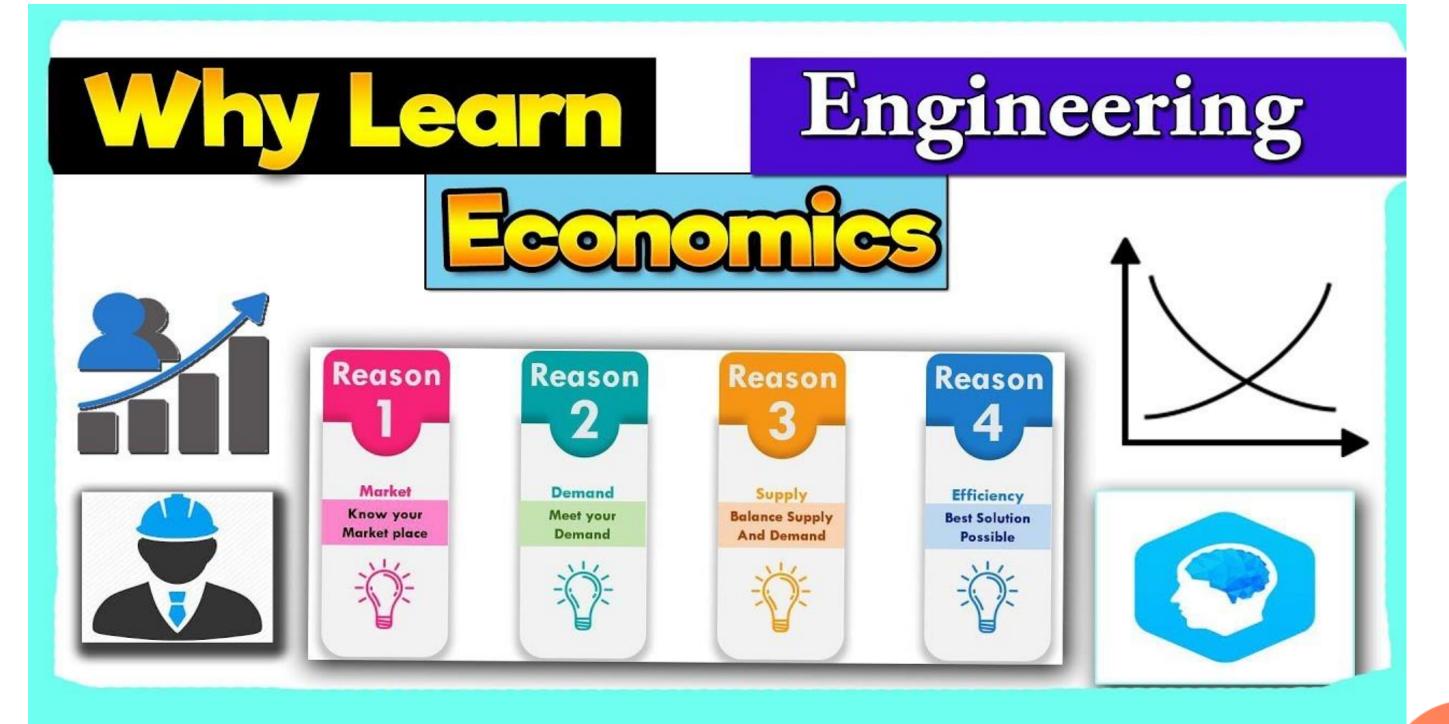


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# Difference between Economics and Managerial Economics



Basis of Difference	Economics	Managerial Economics
Meaning	It involves the framing of economic principles to solve economic problems.	It involves the application of economic principles to solve economic problems.
Character	It is microeconomic as well as macroeconomic in character.	It is microeconomic in character.
Main Task	In it, the fulfilment of the needs of individuals as well as entities is the main task.	It involves proper decision making as its main task.
Nature	It is positive as well as normative in nature.	It is only normative in nature.
Scope	It has a wider scope.	It has a narrower scope as compared to the scope of Economics.



# Difference between Economics and Managerial Economics



Basis of Difference	Economics	Managerial Economics
Branches	It involves managerial economics as its applied branch.	It is an applied branch of economics.
Concerned with	It is concerned with all the theories starting from production to consumption including distribution.	It is concerned with only profit theory and ignores other theories.
Analysis Involved	It includes the analysis of macro-level issues like growth, inflation, and employment, etc.	It includes the analysis of micro-level issues like demand, supply, and profit, etc.
Concentration	It concentrates only on the economic aspects of any business problem.	It concentrates on both economic as well as non-economic aspects of any business problem.
Validity of Assumptions	It is based on certain assumptions.	In it, some assumptions become invalid when applied.

08/10



## Nature and Scope of Managerial Sites



Economics

