

Course G1569: ENGINEERING ECONOMIC AND MANAGEMENT

GENERAL INFORMATION

Spring Semester
6 ECTS credits

INSTRUCTOR(S)

Pedro Díaz Simal(pedro.diaz@unican.es) Profesor Titular. DPTO. ADMINISTRACION DE EMPRESAS

Description

At the end of this subject the student will be able:

- To rigorously formalize the decisions inherent to his technical work to justify and to defend the elections he propose
- To include in his analytical framework economic concepts as inflation, taxation, depreciation, financial planning, economic optimization ...
- To analyze and discuss the selections made by others.
- To understand the economic consequences derived from his personal decisions about savings, investment, retiring...

TEXTBOOK

Introduction to Heat Transfer Frank P. Incropera, David P. DeWitt, Theodore L. Bergman, Adrienne S. Lavine

SYLLABUS

1. The decisions of the engineer and the economy
2. The economic variables in technical selections
3. Temporary equivalence of capitals
4. Financial Mathematics
5. Present Worth Models (PV)
6. Annual Cash Flow Models
7. Rate of Return Analysis
8. Incremental analysis
9. Other analysis Techniques
10. The uncertainty in the election
11. Depreciation
12. Fiscal Effects
13. Replacement Analysis
14. Effects of the inflation
15. Selection of the suitable rate of discount
16. CB Analysis in the public sector
17. Rationing limited financial resources between projects
18. The Accounting information as a source for engineering decisions
19. The models of project evaluation in the very long run