



A) COURSE

Course Id:	Course
5644	FORMULATION AND EVALUATION OF PROJECTS

Class Hours per Week	Lab hours per week	Complementary practices	Credits	Total hour course
4	0	4	8	64

B) GENERAL COURSE INFORMATION:

	EE (IEA)	ME (IM)	MME (IMA)	EME (IME)	MTE (IMT)
Level:	NA	NA	IX	NA	NA
Course Type (Required/Elective)	NA	NA	Required	NA	NA
Prerequisite Course:	NA	NA	PERSONNEL MANAGEMENT, PRODUCTION SYSTEMS II	NA	NA
CACEI Classification:	NA	NA	IA	NA	NA

C) COURSE OBJECTIVE

At the end of the course, the student will be capable of:

Within the administrative branch is a very important part regarding decision making in investment initiatives. The concepts contained in the course, help students in how to use tools in the selection of Investment alternatives from economically

D) TOPICS (CONTENTS AND METHODOLOGY)

1 . FORMULATION OF PROYECTS.		16 Hours
Specific Objective:	The student will learn and apply the theory of project formulation	
1.1	What is a project?	
1.2	Market feasibility study	
1.3	Technical feasibility study	
1.4	Economic feasibility study	
Readings and other resources	Books, Articles, Further literature, Internet Links.	
Teaching Methodologies	Exhibition themes, concept analysis, problem resolution and discussion, group work and individual.	
Learning Activities		



2.- INTRODUCTION TO ECONOMIC EVALUATION OF PROJECTS		2 Hours
Specific Objective:	The student will learn the principles involved in the economic evaluation of projects	
2.1 Evaluation of projects: an introduction 2.2 Main criteria utilized to evaluate a project		
Readings and other resources	Books, Articles, Further literature, Internet Links.	
Teaching Methodologies	Exhibition themes, concept analysis, problem resolution and discussion, group work and individual.	
Learning Activities		

3. - TIME VALUE OF MONEY		14 Hours
Specific Objective:	The student will learn to calculate the time value of money using different methods.	
3.1 Cash flow diagram 3.2 Time value of money formulas 3.2 Effective and nominal interest rates		
Readings and other resources	Books, Articles, Further literature, Internet Links.	
Teaching Methodologies	Exhibition themes, concept analysis, problem resolution and discussion, group work and individual.	
Learning Activities		

4.- METHODS UTILIZED IN THE ECONOMIC EVALUATION OF PROJECTS		16 Hours
Specific Objective:	The student will learn to analyze one or more projects based on different methods	
4.1 Net present value and capitalized cost methods 4.2 Equivalent uniform annual cost method 4.3 Internal rate of return method 4.3 Internal rate of return method for several projects 4.4 Benefit-cost analysis		
Readings and other resources	Books, Articles, Further literature, Internet Links.	
Teaching Methodologies	Exhibition themes, concept analysis, problem resolution and discussion, group work and individual.	
Learning Activities		

5. - FURTHER ASPECTS TO CONSIDER IN THE ECONOMIC EVALUATION OF A PROJECT.		16 Hours
Specific Objective:	The student will learn concepts as replacement and inflation, also they will learn how to integrated all of this in a process of evaluation of projects.	
5.1 Replacement analysis 5.2 Inflation and its impact on the economic evaluation of projects 5.3 Depreciation methods 5.4 Equilibrium value analysis 5.5 Capital budgeting analysis 5.6 Minimum acceptable rate of return 5.7 Sensitivity analysis 5.8 After-tax economic analysis		
Readings and other resources	Books, Articles, Further literature, Internet Links.	
Teaching Methodologies	Exhibition themes, concept analysis, problem resolution and discussion, group work and individual.	



Learning Activities	
----------------------------	--

E) TEACHING AND LEARNING METHODOLOGIES

It will present the topics in class and we will make drills when we are finished the topic. At the end of the first topic (Formulation of Projects), the student must to do the formulation of one Project and develop it during the course and at the end thereof economic assessment is carried out for the project. This will be supported by the use of computer software.

F) EVALUATION CRITERIA:

Evaluation:	Schedule	Suggested Form of Evaluation and weighing	Topics
1er. Evaluation Partial	Session 16	Exam 85% , Homework 10%, Assistance 5%	Unity 1 y 2
2º Evaluation Partial	Session 32	Exam 85% , Homework 10%, Assistance 5%	Unity 2 y 3
3er. Evaluation Partial	Session 48	Exam 85% , Homework 10%, Assistance 5%	Unity 3 y 4
Evaluation Final Ordinary		100% Average partial evaluations	
Other Activity:			
Exam Extraordinary	Week 17 of the semester in progress	100% Exam	100% Program
Exam of title	According to schedule school secretary	100% Exam	100% Program
Exam regularization	According to schedule school secretary	100% Exam	100% Program

G) BIBLIOGRAPHY AND ELECTRONIC RESOURCES

BLANK LELAND , TARQUIN ANTHONY, Ingeniería económica Mc Graw-Hill, México, D.F. 1991. (Engineering Economy)

BACA GABRIEL Evaluación de proyectos. Análisis y administración del riesgo. 3a. Ed , Mc Graw-Hill, México, D.F. 1995 (Evaluation of Projects, Analysis and risk management)

BACA GABRIEL. Fundamentos de Ingeniería Económica. 2ª. Ed., Mc. Graw-Hill, México, D.F. 1999

Main Books

NEWMAN DONALD , Análisis económico en ingeniería. 2a Ed , McGraw-Hill, 1986. (Engineering economic analysis)



CANAD JOHN, Técnicas de análisis económico para administradores e ingenieros. Diana, 1980. (Economic analysis techniques for manager in engineering)

SOFTWARE TO USE:
MICROSOFT OFFICE.
MICROSOFT PROJECT.

Complementary Books