



BENHA UNIVERSITY



FACULTY OF ENGINEERING AT SHOUBRA

Model No.12 Course Specifications (2014-2015) Feasibility study

University: Benha university

Faculty: Shoubra Faculty of Engineering

Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

1- Course Data

Course Code: GEN291

Course Title: Feasibility study (Elective)

Study Year: Second Year

Specialization:

Mechanical Production Engineering (Production)

Teaching Hours: Lecture: 2

Tutorial/ Practical: 0

Total: 2

2- Course Aim

For students undertaking this course, the aims are to:

1. Provide the students with the knowledge and skills for the feasibility studies and preparing it.

3- Intended Learning Outcomes of Course (ILOS)

a- Knowledge and Understanding

On completing this course, students acquiring and understanding of:

- a.1) Fundamental of feasibility study and strategic planning. (A.2)
- a.2) The basic factors effecting on the feasibility study. (A.5)
- a.3) Project selection decisions. (A.10)

b- Intellectual Skills

At the end of this course, the students will be able to:

- b.1) Think in problem solving to prepare a good plan. (B.3)
- b.2) Perform engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact. (B.9)
- b.3) Analyze and interpret data to make economic decisions. (B.14)

c- Professional Skills

On completing this course, the students are expected to be able to:

- c.1) Collect data and write a good feasibility study. (C.1)
- c.2) Develop marketing strategies to study economic feasibility study and competitive analysis. (C.2)
- c.3) Prepare and present technical report of the feasibility study. (C.7)

d- General Skills

At the end of this course, the students will be able to:

- d.1) Work in stressful environment and within constraints. (D.2)
- d.2) Communicate effectively (D.3)
- d.3) Effectively manage tasks, time, and resources. (D.4)



4- Course Contents

No.	Topics
1	Project Feasibility Analysis
2	Analyzing an Investment Opportunity
3	Anatomy of a Financial Model
4	Market Analysis: Using Market Matrices to Analyze Demand
5	Projecting Income- Positive Cash Flows
6	Projecting Expenses- Negative Cash Flows
7	Performing Sensitivity Analyses
8	Feasibility report structure
9	Competitive Analysis
10	Economic feasibility
11	Legal feasibility
12	Cultural feasibility
13	Case Study

5- Teaching and Learning Methods

- 5.1- Lectures
- 5.2- Class activity
- 5.3- Case study
- 5.4- Assignments / homework

6- Teaching and Learning Methods of Disables

Nothing .

7- Student Assessment

a- Student Assessment Methods

1	Five assignments to assess knowledge and intellectual skills.
2	Three quizzes to assess knowledge and intellectual skills.
3	Mid-term exam to assess knowledge, intellectual, professional and general skills.
4	Final exam to assess knowledge, intellectual, professional & general skills.

b- Assessment Schedule

No.	Assessment	Week
1	Assignments	2, 5, 7, 10,13
2	Quizzes	3, 6, 13
3	Mid-term exam	8
4	Final exam	15



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c- Weighting of Assessments

Assessment	Weight
Mid-term Examination	10 %
Final-Term Examination	80 %
Oral Examination	0 %
Practical Examination	0 %
Assignments and Quizzes	10 %
Other types of assessment	100 %
Total	100 %

8- List of References

a- Books

- 1- Course Notes prepared by instructor.

b- Essential Books (Text Books)

1. Georgakellos, D. A. & Marcis, A. M. (2009). Application of the semantic learning approach in the feasibility studies preparation training process. *Information Systems Management* 26 (3) 231-240.

c- Recommended Books

1. O'Brien, J. A., & Marakas, G. M. (2011). Developing Business/IT Solutions. In *Management Information Systems* (pp. 488-489). New York, NY: McGraw-Hill/Irwin.

Course Coordinator: Dr. Mamdouh Mohamed Elsayed Soliman

Head of Department: Prof. Dr. Osama Ezzat Abdelatif



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Model No.11A
Course Specifications: Feasibility study

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Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

Matrix of Knowledge and Skills of the course

No.	Topics	week	Basic Knowledge	Intellectual Skills	Professional Skills	General Skills
1	Project Feasibility Analysis	1	a.1		c.1	
2	Analyzing an Investment Opportunity	2	a.2	b.1	c.3	
3	Anatomy of a Financial Model	3	a.2		c.1	d.1
4	Market Analysis: Using Market Metrics to Analyze Demand	4	a.1	b.2	c.2	
5	Projecting Income-Positive Cash Flows	5	a.1	b.1 , b.2		
6	Projecting Expenses-Negative Cash Flows	6		b.1	c.2	d.2
7	Performing Sensitivity Analyses	7	a.1			
8	Feasibility report structure	8	a.2			d.2
9	Competitive Analysis	9	a.2	b.2	c.2	
10	Economic feasibility	10	a.1			
11	Legal feasibility	11	a.2	b.2		d.3
12	Cultural feasibility	12	a.3		c.3	d.3
13	Case Study	13	a.2 , a.3	b.3	c.1, c.3	

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Matrix of course aims and ILO's

Course Title: Feasibility Study (Elective)

Code: GEN291 **Lecture:** 2 **Tutorial/ Practical:** 0 **Total:** 2

Program on which the course is given: B.Sc. Mechanical Production Engineering

Major or minor element of program: Minor

Department offering the program: Mechanical Engineering Department

Department offering the course: Mechanical Engineering Department

Academic year / level: 2014/2015 Second Year / Second semester

Date of specifications approval: 2014

Course aims	Knowledge skills	Intellectual Skills	Professional Skills	General Skills
Provide the students with the knowledge and skills for the concepts of the types of feasibility studies and preparing it.	a1	b1	c1	d1
	a2	b2	c2	d2
	a3	b3	c3	d3

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