ISHIK UNIVERSITY
FACULTY OF ENGINEERING
Department of CIVIL ENGINEERING,
2018-2019 Fall
Course Information for CE 319 ENGENEERING ECONOMY

Course Name:	ENGENEERING ECONOMY

Code	Course type	Regular Semester	Theoretical	Practical	Credits	ECTS
CE 319	2	5	3	-	3	

Name of Lecturer(s)-Academic Title:	Barham Haydar - MSc mohammed arif - MSc
Teaching Assistant:	-
Course Language:	English
Course Type:	Main
Office Hours	Saturday, 08:30 am to 12:00 Thursday 12:00 - 1:00
Contact Email:	barham.haydar@ishik.edu.iq muhammad.rashid@univsul.edu.iq Tel:07705042603 07501953822
Teacher's academic profile:	MSc holder in construction materials Civil Engineering: Structural Engineering http://sites.univsul.edu.iq/muhammad-arf/
Course Objectives:	1. Understand the link between time and money 2. Understand the value of money. 3. Improve decision making skills.
Course Description (Course overview):	: Engineering Economy, General introduction and Background, objectives, references, The Economic Environment and Cost Concepts, Cost – Volume Relationships, Law of Supply and Demand, Introduction to Selection in Present Economy, Total Cost in Material Selection, Economy of location, Alternative Machine Speed, Materials with Limit Supply, Proficiency, Economy Selection of Beams, Production, Money-Time Relation, Simple and Compound Interest, Finding F when Given P, Finding P when Given F, Finding F when Given A, Finding A when Given F, Finding A when Given P, Summary. Deferred Annuities, Beginning of Period CF, Middle of Period, Gradient F/G, A/G, Changing Interest Rates, Basic Methods for making Economy Studies-five methods.PW, AW, CR, Future Worth, and IRR, ERR, ERRR, The Payback Period.

COURSE CONTENT

Week	Hour	Date	Topic
1	3	2-4/10/2018	Introduction and Background
2	3	7-11/10/2018	Break-even comparisons
3	3	14-18/10/2018	Financial Mathematics
4	3	21-25/10/2018	Series compound amount factor
5	3	28/10-1/11/2018	Arithmetic gradient
6	3	4-8/11/2018	Geometric gradient
7	3	11-15/11/2018	Basic Methods for making Economy
8	3	18-22/11/2018	Midterm Exam
9	3	25-29/11/2018	Basic Methods for making Economy
10	3	2-6/12/2018	Selection in Present Economy
11	3	9-13/12/2018	Applications of Engineering Economy
12	3	16-20/12/2018	Economy Studies for Public Projects

13	3	23-24/12/2018	Site Visiting
14	3	2-3/1/2019	Presentation (seminar)
15	3	7-10/1/2019	Reviewing
16	3	13-17/1/2019	Final Exam
17	3	20-24/1/2019	Final Exam

COURSE/STUDENT LEARNING OUTCOMES

1	Understand in depth using mathematical in economic
2	Improving decision making skills
3	Understanding in depth the value of money

COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES

(Blank : no contribution, I: Introduction, P: Profecient, A: Advanced)

	Program Learning Outcomes	**Cont.**
1	An ability to apply knowledge of mathematics, science, and engineering	P
2	An ability to design and conduct experiments, as well as to analyze and interpret data	
3	An ability to design a system, component, or process to meet desired needs	
4	An ability to identify, formulate and solve engineering problems	A
5	An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice	I
6	Skills in project management and recognition of international standards and methodologies	
7	An ability to function on multi-displinary teams	I
8	An understanding of professional and ethical responsibility	P
9	An ability to communicate effectively	I
10	The broad education necessary to understand the impact of engineering solutions in a global and social context	P
11	A recognition of the need for and ability to engage in, lifelong learning	
12	A knowledge of contemporary issues	P

Prerequisites (Course Reading List and References):	Basics of Engineering Economy. Engineering Project Management for the Global HighTechnology
Student's obligation (Special Requirements):	Submitting assignments on time
Course Book/Textbook:	Basics of Engineering Economy. Engineering Project Management for the Global HighTechnology
Other Course Materials/References:	Basics of Engineering Economy. Engineering Project Management for the Global HighTechnology
Teaching Methods (Forms of Teaching):	Lectures, Excersises, Presentation, Seminar, Self Evaluation, Project, Case Studies

COURSE EVALUATION CRITERIA

Method	**Quantity**	**Percentage (%)**
Attendance	1	5
Participation	1	5
Quiz	1	20
Project	1	10
Midterm Exam(s)	1	10
Presentation	1	10
Final Exam	1	40
Total		**100**

Examinations: Essay Questions, True-False, Short Answers

Extra Notes:

ECTS (ALLOCATED BASED ON STUDENT) WORKLOAD

Activities	Quantity	Duration (Hour)	Total Work Load
Course Duration (Including the exam week: 16x Total course hours)			0
Hours for off-the-classroom study (Pre-study, practice)			0
Assignments Mid-terms			0
Final examination			0
Other			0
Total Workload			**0**
ECTS Credit (Total workload/25)			**0**

Peer review

Signature:	Signature:	Signature:
Name:	Name:	Name:
Lecturer	Head of Department	Dean