GAU, Faculty of Engineering

Course Unit Title	**Production Information Systems Management**
Course Unit Code	IE 412
Type of Course Unit	Compulsory
Level of Course Unit	4th Year BSc
National Credits	3
Number of ECTS Credits Allocated	6
Theoretical (hour/week)	3
Practice (hour/week)	0
Laboratory (hour/week)	0
Year of Study	4
Semester when the course unit is delivered	8
Mode of Delivery	Face to Face, Class discussions, Lab Support
Language of Instruction	English
Prerequisities and co-requisities	-
Recommended Optional Programme Components	-

Objectives of the Course:

- Analysis and design of information systems with special emphasis given to production subsystemsThe information requirements of production systems in modular form.
- Basic information concepts, data processing technology and its applications.
- Information systems development methodology in terms of systems analysis, design and implementation.
- Relational database design

Learning Outcomes

When this course has been completed the student should be able to		Assesment.
1	Identify and explain the basic concepts related to information systems	1,2
2	Explain and apply systems analysis methods	1,2
3	Explain the methods for system design	1,2
4	Identify the metdos for system improvement	1,2,3
5	Apply system analysis and design techniques to design an information system for a real company as part of a project	1,3,4,5

Assesment Methods: 1. Written Exam, 2. Assignment 3. Project/Report, 4.Presentation, 5 Lab. Work

Course's Contribution to Program

		CL
1	Ability to understand and apply knowledge of mathematics, science, and engineering	2
2	Ability to design and conduct experiments as well as to analyze and interpret data	2
3	Ability to work in multidisciplinary teams while exhibiting professional responsibility and ethical conduct	4
4	Ability to apply systems thinking in problem solving and system design	5
5	Knowledge of contemporary issues while continuing to engage in lifelong learning	5
6	Ability to use the techniques, skills and modern engineering tools necessary for engineering practice	5
7	Ability to express their ideas and findings, in written and oral form	4
8	Ability to design and integrate systems, components or processes to meet desired needs within realistic constraints	5
9	Ability to approach engineering problems and effects of their possible solutions within a well structured, ethically responsible and professional manner	4
10	Ability to design systems, processes or products by applying modern methods of work study, ergonomics, production systems and simulation while fulfilling requirements under realistic conditions	4
11	Ability to plan and improve system performance using production planning, quality planning and control, information system design and project planning techniques	5

CL: Contribution Level (1: Very Low, 2: Low, 3: Moderate 4: High, 5:Very High)

Course Contents

Week			Exams
1		Introduction	
2		MIS &IT Concepts; Interpreting and Understanding Information	
3		Organizational Issues & Information Technology	
4		Systems Analysis Concepts	
5		Systems Analysis (Emphasis on Production Systems)	
6		Systems Analysis (Emphasis on Service Systems)	
7		Systems Alternatives; Systems Design & Construction	
8		Systems Alternatives; Systems Design & Construction	Midterm
9		Systems Alternatives; Systems Design & Construction	
10		Systems Design & Construction: Database Design	
11		Systems Design & Construction: Database Design	
12		Systems Implementation	Quiz
13		Systems Implementation	
14		Project Presentations	
15			Final

Recommended Sources

Textbook:

1.K. C. Laudon, J. T. Laudon, *Managing the Digital Firm*, 9th Ed.,2005 Prentice Hall.

2. Whitten, Jeffrey L., and L.D. Bentley, Systems Analysis and Design Methods, 4th Ed., 2005, McGraw-Hill

Assessment

Attendance&Assignments	5%	
Midterm Exam (Written)	25%	
Quiz (Written)	10%	
Project Report and Presentation (Written and Oral)	20%	
Final Exam (Written)	40%	
Total	100%	

ECTS Allocated Based on the Student Workload

Activities	Number	Duration (hour)	Total Workload(hour)
Course duration in class (including the Exam week)	15	3	45
Labs and Tutorials	-	-	-
Assignments	2	3	6
Project/Presentation/Report Writing	1	30	30
E-learning Activities	-	-	-
Quiz	1	7	7
Midterm Examination	1	22	22
Final Examination	1	25	25
Self Study & Lab Support	14	4	48
Total Workload			183
Total Workload/30 (h)			6.1
ECTS Credit of the Course			6