

## GAU, Faculty of Engineering

<b>Course Unit Title</b>	Management Information Systems	
<b>Course Unit Code</b>	CEN480	
<b>Type of Course Unit</b>	Elective, computer engineering students	
<b>Level of Course Unit</b>	4th Year BSc	
<b>National Credits</b>	3	
<b>Number of ECTS Credits Allocated</b>	6 ECTS	
<b>Theoretical (hour/week)</b>	3	
<b>Practice (hour/week)</b>	0	
<b>Laboratory (hour/week)</b>	0	
<b>Year of Study</b>	4	
<b>Semester when the course unit is delivered</b>	7	
<b>Mode of Delivery</b>	Face to Face, Laboratory Experiments,	
<b>Language of Instruction</b>	English	
<b>Prerequisites and co-requisites</b>		
<b>Recommended Optional Programme Components</b>	Basic background in computer systems	
<b>Objectives of the Course:</b>		
<ul style="list-style-type: none"> <li>➤ Analyze how IT can be used more effectively to improve businesses</li> <li>➤ Learn how knowledge of IT tools can be applied for solving management problems</li> <li>➤ Get an insight for engineers about management</li> </ul>		
<b>Learning Outcomes</b>		
When this course has been completed the students should be able to		Assesment.
1	Explain why Information Systems are essential in Businesses today	1
2	Asses the role that Information Systems function	1
3	Identify and describe important features of organizations using Information System	1,2
4	Evaluate tools and technologies for providing information databases to improve business performance and decision making	1,2
5	Demonstrate how systems achieve operational excellence by integration of IT	1,3
6	Describe the various types of e-commerce	1,2
Assesment Methods: 1. Written Exam, 2. Assignment 3. Project/Report, 4.Presentation, 5 Lab. Work		
<b>Course's Contribution to Program</b>		
		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	3
3	Ability to work in multidisciplinary teams while exhibiting professional responsibility and ethical conduct	3
4	Ability to apply systems thinking in problem solving and system design	4
5	Knowledge of contemporary issues while continuing to engage in lifelong learning	2
6	Ability to use the techniques, skills and modern engineering tools necessary for engineering practice	1
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	3
9	Ability to approach engineering problems and effects of their possible solutions within a well structured, ethically responsible and professional manner	2
10	To apply fundamental concepts of software design, database design, data processing and artificial intelligence in the modeling, designing, implementing, testing and deploying software solutions.	2
11	Ability to analyse and design hardware systems by applying the principles of embedded systems, microprocessors, computer networks, distributed systems and data communication.	1
CL: Contribution Level (1: Very Low, 2: Low, 3: Moderate 4: High, 5:Very High)		

<b>Course Contents</b>			
Week			Exams
1		Introduction	
2		Information Age	
3		Strategic and Competitive Opportunities	
4		Databases and Data Warehouses	
5		Electronic Commerce	Quiz
6		Review for Midterm	
7			Midterm
8		Systems Development	
9		IT Infrastructures	
10		Protecting People and Information	
11		Emerging Trends and Technologies	Quiz
12		Review for the whole course	
13		Projects	
14		Projects	
15			Final
<b>Recommended Sources</b>			
<b>Textbook:</b> Management Information Systems for the Information Age, Haag, Cummings, Phillips, McGrawHill, 8th edition (Other editions are also useful)			
<b>Supplementary Material (s):</b> Management Information Systems-Managing the Digital Firm, Laudon, Laudon, Prentice Hall, 3rd Edition			
<b>Assessment</b>			
Attendance	5%		
Project	10%		
Midterm Exam	30%	Written Exam	
Quiz	15%	Written Exam	
Final Exam	40%	Written Exam	
Total	100%		
<b>ECTS Allocated Based on the Student Workload</b>			
Activities	Number	Duration (hour)	Total Workload(hour)
Course duration in class (including the Exam week)	14	3	42
Labs and Tutorials			
Assignments	7	4	28
Project/Presentation/Report Writing	1	15	15
E-learning Activities			
Quizzes	2	12	24
Midterm Examination	1	15	15
Final Examination	1	22	22
Self Study	14	2	28
Total Workload			174
Total Workload/30 (h)			5.8
ECTS Credit of the Course			6