

FOOD ENGINEERING DESIGN

1	Course Title:	FOOD ENGINEERING DESIGN	
2	Course Code:	GMD4242	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	8	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. OZAN GÜRBÜZ	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Ziraat Fakültesi Gıda Mühendisliği Bölümü 16059 Görükle/Bursa Tel: 0224 2941500 Fax: 0224 2941402 e-posta: ozang@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	<ul style="list-style-type: none"> • Introducing production lines in food • Improving students' ability for process design 	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	The students will be able to solve the problem in any production line
		2	The students will be able to describe industrial requirements
		3	The students will be able to apply math and engineering knowledge to the food industry
		4	The students will be able to find alternative solutions, and present new approaches for the problem
		5	The students will be able to recognize the applicable knowledge to the industry
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Explanation of objective and content of the lecture		

2	Engineering design and its stages	
3	Improving the design, feasibility search, procedure development	
4	Improving the design, feasibility search, procedure development	
5	Factors effecting factory design	
6	Fruit and vegetable process line	
7	Ready to serve soup process line	
8	Potato chips process line	
9	Milk powder process line	
10	Hot break and cold break paste process line	
11	Marmalade and jelly process line	
12	Ready coffee process line	
13	Table olive process line	
14	Repetition of lecture	
22	Textbooks, References and/or Other Materials:	<ul style="list-style-type: none"> • Ozan GÜRBÜZ, "Process Design", unpublished lecture notes. • Rakesh Kumar Singh, 1995. Process Design and Evaluation, Technomic Publishing Company, Inc. ISBN No.1-56676-230-8, pp 257.
23	Assesment	
TERM LEARNING ACTIVITIES		NUMBE R
Midterm Exam		1
Quiz		0
Home work-project		1
Final Exam		1
Total		3
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	1.00	14.00
Homeworks	1	15.00	15.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			97.00
Total work load/ 30 hr			2.90
ECTS Credit of the Course			3.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	5	3	5	2	4	5	4	3	5	4	5	0	0	0	0	0
ÖK2	3	2	3	3	5	5	2	5	4	3	4	0	0	0	0	0
ÖK3	4	5	5	4	2	3	5	4	2	4	5	0	0	0	0	0
ÖK4	5	2	5	4	3	5	3	4	2	4	5	0	0	0	0	0
ÖK5	5	4	5	4	3	5	4	5	3	5	4	0	0	0	0	0
ÖK6	4	5	3	5	2	4	5	4	3	5	4	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				