	MODELING TECHNIC	CS IN	AGRICULTURAL MACHINERY						
1	Course Title:	MODELI	NG TECHNICS IN AGRICULTURAL MACHINERY						
2	Course Code:	BSM6017							
3	Type of Course:	Optional							
4	Level of Course:	Third Cy	cle						
5	Year of Study:	1							
6	Semester:	1							
7	ECTS Credits Allocated:	6.00							
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 f	ace						
14	Course Coordinator:	Prof. Dr. ALİ VARDAR							
15	Course Lecturers:	YOK							
16	Contact information of the Course Coordinator:	e-posta: dravardar@uludag.edu.tr Telefon: 0 224 2941605 Adres: Bursa Uludağ Üniversitesi, Ziraat Fakültesi, Biyosistem Mühendisliği Bölümü, Görükle Kampüsü, 16059, Nilüfer/BURSA							
17	Website:								
18	Objective of the Course:	The aim of the course; To provide students with basic information on scientific research techniques, mathematical modeling, three-dimensional basic design, stress analysis.							
19	Contribution of the Course to Professional Development:	It contributes to the ability of the student to make modeling related to his field.							
20	Learning Outcomes:								
		1	Understanding the importance of the concept of mathematical modeling						
		2	Ability to use mathematical modeling techniques in problem solving						
		3							
		4							
		5							
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	lo o	10							
21	Course Content:								
\\/	Course Content:								
	Theoretical		Practice						
1	introduction		introduction  Application examples						
2	Scientific research techniques		Application examples						
3	Thought and model		Application examples						

4	Mathematical models and rational log models	gic	Application examples						
5	Differential models		Application examples						
6	Experimental modeling principles		Application examples						
7	Rational-experimental modeling		Application examples						
8	Finite small range (numerical) model	ing	Application examples						
9	An overview		An overview						
10	Modeling with probability methods an models	nd churn	Application examples						
11	Modeling with artificial neural network method	ks	Application examples						
12	Modeling with fuzzy logic method		Application examples						
13	Optimization		Application examples						
14	An overview		An overview						
22	Textbooks, References and/or Other Materials:		Şen, Z., 2002. Bilimsel düşünce ve matematik modelleme ilkeleri, Su Vakfı Yayınları, İstanbul. Şen, Z., 2009. Temiz enerji kaynakları ve modelleme ilkeleri, Su Vakfı Yayınları, İstanbul. Elmas, Ç., 2007. Yapay zeka uygulamaları, Seçkin yayıncılık, Ankara. Şen, Z., 2009. Bulanık mantık ilkeleri ve modelleme, Su Vakfı Yayınları, İstanbul. Tülücü, K., 1997. Optimizasyon, Çukurova Üniversitesi Ziraat Fakültesi Genel Yayın No: 189, Adana.						
23	Assesment								
TERM L	EARNING ACTIVITIES	NUMBE R	WEIGHT						
Midtern	n Exam	0	0.00						
Quiz		0	0.00						
Home v	vork-project	0	0.00						
Final Ex	xam	1	100.00						
Total		1	100.00						
Contribution of Term (Year) Learning Activities to Success Grade			0.00						
Contribution of Final Exam to Success Grade			100.00						
Total			100.00						
			The effect of the final exam on the course-passing grade is 100%.						
24	ECTS / WORK LOAD TABLE								

Activites								I	Numb	er		Dura	Duration (hour)			Total Work Load (hour)	
Theoretical								·	14			2.00			28.00		
Practicals/l	Practicals/Labs									14			2.00			28.00	
Self study a	Self study and preperation									14			3.00			42.00	
Homework	Homeworks								1			50.00	50.00			50.00	
Projects	Projects								0			0.00	0.00			0.00	
Field Studio	Field Studies								0			0.00	0.00			0.00	
Midterm ex	Midterm exams								0			0.00	0.00			0.00	
Others	Others								0			0.00	0.00			0.00	
Final Exam	Final Exams								1			36.00	36.00			36.00	
Total Work	Total Work Load															184.00	
Total work	Total work load/ 30 hr															6.13	
ECTS Cred	ECTS Credit of the Course															6.00	
25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS																
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ1 0	PQ11	PQ12	PQ1 3	PQ14	PQ15	PQ16	
ÖK1	4	4	4	4	4	3	3	4	3	3	1	4	0	0	0	0	
ÖK2	4	4	4	3	4	3	3	4	3	3	4	4	0	0	0	0	

LO: Learning Objectives PQ: Program Qualifications

4 High

3 Medium

Contrib

ution Level: 1 very low

2 low

5 Very High