STATICS STRENGTH OF MATERIALS

1	Course Title:	STATICS STRENGTH OF MATERIALS
2	Course Code:	MIM2005
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	2
6	Semester:	3
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	1.00
9	Practice (hour/week):	2.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. BILAL BAĞBANCI
15	Course Lecturers:	-
16	Contact information of the Course Coordinator:	mbilal@uludag.edu.tr tel:294 21 47
17	Website:	
18	Objective of the Course:	This course aims to teach how structures formed and how it carried different loads. Besides teach how supplied the balance and stability of structures, teach how to draw normal force, shearing force and moment grafics at simply supported beams and frames, cantilever beams and frames, simply supported beams and frames with overhangs, compound (Hung-span) beams under load and teach how found the relocation and deformation amount of the structures
19	Contribution of the Course to Professional Development:	To have knowledge about the mechanical effects on the structural system elements
20	Learning Outcomes:	

	1	To teach general rules of static, stability, the behaviour of structures under loads
	2	To understand the behaviour of the structural elements under mechanical effects
	3	To teach the loads and the colculation of stresses in structures
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21	Course Content:	

Course Content:	

Week	Theoretical	Practice
1	Trigonometric expressions and vectors	Questions and solutions
2	Vectors and rules of static	Questions and solutions

3	Supporting systems and loads	Questions and solutions
4	Compound (Hung-span) beams	Questions and solutions
5	Three-pinned arches and frames	Questions and solutions
6	Trusses	Questions and solutions
7	Centroids and cables	Questions and solutions
8	Repeating courses and midterm exam	
9	Stress and strain, axial, shearing and moment graphics	Questions and solutions
10	Axial force, mohr circle	Questions and solutions
11	Three dimensional stress, shear force	Questions and solutions
12	Moment of Inertia	Questions and solutions
13	Bending and torsion	Questions and solutions
14	Elastic curve	Questions and solutions

22	Textbooks, References and/or Other Materials:	Karataş, H., İşler, Ö., 1987, "Mühendislik Mekaniğinde STATİK Problemleri", Çağlayan Kitabevi, İstanbul. Oğuz, S., 1994, "Teknik Mekanik (I) Statik" Balıkesir Üni. Müh.-Mim. Fak. Yayınları, Balıkesir. Karataş, H., 1988, "Mukavemet", Çağlayan Kitabevi, İstanbul. Özbek, T., 1978, "Mukavemet", Birsen Yayınevi, İstanbul. Kadıoğlu, N., Engin, H., Bakioğlu, M., 1989, "Mukavemet Problemleri", Beta Yayınları, İstanbul

Activites		Number	Duration (hour)	Total Work Load (hour)
Midterm Exam / Theoretical	1	40 / 14	1.00	14.00
Practicals/Labs		14	2.00	28.00
Home work project / Self study and preperation	0	0 / 0.00	0.00	0.00
Homeworks		0	0.00	0.00
Total / Projects	2	100.00 / 0	0.00	0.00
Field Studies		0	0.00	0.00
Success Grade / Midterm exams		1	16.00	16.00
Others		0	0.00	0.00
Total / Final Exams		100.00 / 1	32.00	32.00
Total Work Load				90.00
Course / Total work load/ 30 hr				3.00
ECTS Credit of the Course				3.00

24 ECTS / WORK LOAD TABLE

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	4	3	5	4	3	2	4	4	5	5	0	0	0	0	0
ÖK2	5	3	2	5	4	3	3	4	4	4	5	0	0	0	0	0
ÖK3	5	3	2	5	4	3	3	4	4	4	5	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

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High