

# STATICS

1	Course Title:	STATICS
2	Course Code:	INS1012
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	1
6	Semester:	2
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. BABÜR DELİKTAŞ
15	Course Lecturers:	Prof. Dr. Babür Deliktaş
16	Contact information of the Course Coordinator:	bdeliktas@uludag.edu.tr 224 2900744 Bursa Uludağ Univ. Müh. Fak. İnşaat Müh. Böl. Görükle, Bursa
17	Website:	<a href="http://insaat.uludag.edu.tr">http://insaat.uludag.edu.tr</a>
18	Objective of the Course:	To provide the theory of engineering mechanics of rigid body in details with its applications.
19	Contribution of the Course to Professional Development:	<p>1 Be able to describe the definition, main branches, fundamental terms, historical development and application fields of the theory of engineering mechanics, both orally and in writing</p> <p>2 Be able to explain Newton Laws of Motions, the basics rules, assumptions and limitations of the theory of engineering mechanics, both orally and in writing</p> <p>3 Be able to express the force systems by using oral, writing and technical drawing skills</p> <p>4 Be able to model the force systems by using simple, drawings or modern computer technology</p> <p>5 Be able to analyze the force systems by using the knowledge of physics, mathematics and theory engineering mechanics along with the use of computer technology</p> <p>6 Be able to establish reasonable and consistent links among real physical system, model, theory, equations, analysis and results</p> <p>7 Be able to design of the new engineering system or to be able to control and judge the existing one</p>
20	Learning Outcomes:	
	1	Be able to describe the definition, main branches, fundamental terms, historical development and application fields of the theory of engineering mechanics, both orally and in writing
	2	Be able to explain Newton Laws of Motions, the basics rules, assumptions and limitations of the theory of engineering mechanics, both orally and in writing
	3	Be able to express the force systems by using oral, writing and technical drawing skills
	4	Be able to model the force systems by using simple, drawings or modern computer technology

	5	Be able to analyze the force systems by using the knowledge of physics , mathematics and theory engineering mechanics along with the use of computer technology
	6	Be able to establish reasonable and consistent links among real physical system, model, theory, equations, analysis and results
	7	Be able to design of the new engineering system or to be able to control and judge the existing one
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21	Course Content:
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	<b>Course Content:</b>
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Week	Theoretical	Practice
1	Introduction	
2	Vectors and Vector Arithmetic	
3	Vectors and Vector Arithmetic	
4	Forces Systems	
5	Forces Systems	
6	Equilibrium of Particles	
7	Canter of Mass, Centroids and Distributed Loads	

Activites	Number	Duration (hour)	Total Work Load (hour)
10 Theoretical Equilibrium of Rigid Bodies	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
12 Self study and preparation Analysis of Frame and Machines	14	4.00	56.00
Homeworks	4	4.00	16.00
14 Projects Analysis of Flexiable Cables- Friction	2	4.00	8.00
Field Studies	0	0.00	0.00
Midterm Exams:	Mehmet Bakioğlu, Birsen yayınevi, 2006	3.00	3.00
Others	0	0.00	0.00
Final Exams	Mehmet Hakkı Omurtag, Birsen yayınevi, 2000	2.00	2.00
Total Work Load			130.00
Total work load/ 30 hr	C., Prentice Hall, 2005.		4.23
ECTS Credit of the Course			4.00

	W.Fowler, Addison Wesley Longman, 1999  Vector Mechanics for Engineers–Statics, 7th SI Ed., Beer F. P., Johnston E. R. and Eisenberg E. R., McGraw-Hill, 2004.  Engineering Statics, 3rd SI Ed., Meriam J. L., Kraige L. G., John Wiley, 2003.
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23	Assesment
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	20.00
Quiz	2	10.00
Home work-project	6	10.00

Final Exam	1	60.00
Total	10	100.00
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	Midterm and Final Exams	
<b>24</b>	<b>ECTS / WORK LOAD TABLE</b>	

<b>25</b>	<b>CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS</b>															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	0	0	3	0	0	2	0	0	0	2	2	0	0	0	0
ÖK2	4	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
ÖK3	5	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	5	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0
ÖK5	5	0	5	0	2	0	0	0	0	0	0	0	0	0	0	0
ÖK6	0	0	0	0	3	5	4	0	0	0	0	3	0	0	0	0
ÖK7	0	0	0	2	4	5	4	0	3	0	0	3	0	0	0	0
<b>LO: Learning Objectives    PQ: Program Qualifications</b>																
<b>Contribution Level:</b>	<b>1 very low</b>			<b>2 low</b>			<b>3 Medium</b>			<b>4 High</b>			<b>5 Very High</b>			