	Course name: MCE 102 Statics				**Department:** Mechanical Engineering			**Semester**
								2
	Methods of Education							**Credit (ECTS)**
	Lecture	Recitation/ (Etud)	Lab	Project/ Field Study	Homework	Other	Total	6
	56	56				68	180	
Language	English							
Compulsory/Elective	Compulsory							
Prerequisites	None							
Course Contents	Fundamental Concepts and Principles of Mechanics, Moment of a Force About a Point, Concept of Force Couple, Equivalent Force Systems, Concept of Free Body Diagram, Equilibrium of Rigid Bodies in Two and Three Dimensions, Trusses, Section Forces in Beams, Friction Forces, Properties of Surfaces.							
Course Objectives	Learn basic informations of engineering mechanics, learn concept of free body diagram and concept of basic engineering concept.							
Learning Outcomes and Competences	1. To draw free body diagram of a system 2. To analyse static problems 3. To solve basic mechanic problems and to apply the basic principles to problem solving 4. To learn and apply force and stability concept							
Textbook and /or References	1. J.L.Meriam, L.G.Kraige; Engineering Mechanics-Statics 2. Ferdinand P.Beer, E.Russell Johnston Jr.: Vector Mechanics for Engineers-Statics							

Assessment Criteria		If any, mark as (X)	Percentage (%)
	Midterm Exams	X	40
	Quizzes	X	10
	Homeworks		
	Projects		
	Term Paper		
	Laboratory work		
	Other		
	Final Exam	X	50

Course Plan	**Week**	**Topic**
	1	Introduction to statics, basic concepts and basic principles of statics
	2	Vectors, vector operation and force vectors
	3	Stabilty of a participle and free body diagrams
	4	Moment, to move a force to another point
	5	Moment, to move a force to another point, Reduction of a system to a point
	6	Equivalent Force Systems
	7	Stabilty of rigid body and applications
	8	Stabilty of rigid body and applications
	9	Midterm
	10	Cage systems
	11	Statically indeterminent reactions, inadequate constraints
	12	Friction
	13	Center of Gravity, Moment of Inertia
	14	Center of Gravity, Moment of Inertia

Instructors	Prof. Dr. Osman YİĞİT