

MM 405 Transport Technique				DEPARTMENT OF MECHANICAL ENGINEERING					
Semester	Methods of Education							Credits	
	Lecture	Recit.	Lab.	Project / Field Study	Homework	Other	Total	Credit	ECTS Credit
7	42	0	-	11	13	9	75	3	3.0
Language	Turkish								
Compulsory / Elective	Elective								
Prerequisites	MM 303								
Course Contents	Commponents of hoisting and conveying machineries; components for load, drive components, reduction gears between motors and load. Sheaves and sheave systems, drums. Stopping and load blocking brakes, arresting gears. Feeders and belt, chain, vibrating, screw conveyors. Pneumatic conveying systems. Design projects.								
Course Objectives	The main objective of the course is to provide the student with a basic engineering information about hoisting and conveying machinery. Students are encouraged to specialize on specific topics with design projects.								
Learning Outcomes and Competences	At the end of the course it is supposed for the students; • Having a general information of the transport machinery • Obtaining the ability of designing hoisting and conveying machinery • Specializing on specific topics								
Textbook and /or Reference	Transport Tekniği, M. Demirsoy, Taşıma Tekniği. D. Cengiz ve N. Sönmez, Kaldırma ve İletme Makinaları, F. Suner, Mechanical Handling with Precision Conveyor,Chain, L.Johes								
Assessment Criteria						If any, mark as (x)		Percentage (%)	
	Midterm Exams					X		40	
	Quizzes							5	
	Homeworks					X		5	
	Projects							10	
	Term Paper					X			
	Laboratory Work								
	Other								
Final Exam					X		40		
Instructors	Prof. Bedri TUC, Assist. Prof. Nihat GEMALMAYAN								
Week	Subject								
1	Material handling systems and their classification								
2	Wire ropes and chains								
3	Sheaves of wire rope and chain and hoisting block and tackle								
4	Hooks, hook bearings and traverses								
5	Drums of wire rope and chain								
6	Calculation of load hoisting systems (Design Project)								
7	Brakes and brake releasing devices								
8	Brakes and calculation of braking torque (MIDTERM EXAM I)								
9	Arresting gears, wheels and rails								
10	Moving systems on rail and power calculation								
11	Design of cranes								
12	Design of belt conveyors								
13	Screw conveyors, vibrating conveyors and chain conveyors								
14	Pneumatic conveying systems								