

a) General			
<i>School</i>	ENGINEERING		
<i>Academic unit</i>	MECHANICAL ENGINEERING		
<i>Level of studies</i>	Undergraduate		
<i>Course code</i>	MM207Y01	<i>Semester</i>	7
<i>Course title</i>	Elevating & transporting machines		
<i>Independent teaching activities</i>	<i>Weekly teaching hours</i>		<i>ECTS</i>
Lectures	5		5.5
Laboratory exercises	-		
<i>Course type</i>	Knowledge deepening/consolidation		
<i>Course category</i>	Compulsory for Direction 2		
<i>Prerequisite courses</i>	-		
<i>Language of instruction and examinations</i>	Greek		
<i>Is the course offered to Erasmus students</i>	No		
<i>Course website (url)</i>	https://eclass.uniwa.gr/courses/MECH134/		
b) Learning outcomes and general competences			
b1. Learning outcomes			
Upon completion of the course, students will be able to:			
<ul style="list-style-type: none"> - Select the appropriate transport or lifting machine for each application. - Select and design the proper components that make up this device. - Analyze the stress-strain state of each machine element under loading. - Calculate the strength of each case study. - Select materials and processing method of non-standard elements. - To specify the conditions and operating parameters of each device. - Make kinematic and dynamic calculations of the machines' components. - Predict potential failure conditions - Study the safety of operation. - Design and analyze Mechanical multiple-element arrangements. - Predict potential failure conditions. - Specify maintenance program. - Make damage assessment 			
b2. General competences			
<ul style="list-style-type: none"> - Search, Analysis and Synthesis of data and information with the use of new technologies - Decision Making - Production of new research ideas 			
c) Syllabus			
Introduction, Wire ropes, Sheaves and Drums, Typical elevators, Wheels – Wheel tracks, Typical transporting machines, Cranes, Brakes - Braking Systems, Conveyors.			
d) Teaching and learning methods - Evaluation			
Delivery	Face-to-face		
Use of information and communications technology	<ul style="list-style-type: none"> - Multimedia applications - eclass - Open courses 		
Teaching methods	<i>Activity</i>	<i>Semester workload</i>	
	Lectures	39	

	Tutorials	26
	Laboratory exercises	0
	Computational exercises	0
	Individual work	91
	Course total	156
Student performance evaluation	Written examination	
e) Suggested bibliography		
1. Στεργίου, Ι. Στεργίου, Κ.. (2006).Ανυψωτικές και Μεταφορικές Μηχανές. Σύγχρονη Εκδοτική.		