COURSE INFORMATION FORM	
Faculty/ Institute	Faculty of Fine Arts and Architecture
Department	Department of Industrial Design
Course Code	EUT 249
Course Title	Materials and Manufacturing I
Language	English
Program	Industrial Design Undergraduate Program
Course Type	Must
Course Level	
Course ECTS	3
Prerequisites	None
Course Catalogue Description	This course focuses on the importance of material selection for industrial design, identification of material behaviors, frequently used materials in industry, their application areas along with the manufacturing methods of the mentioned materials.
Course Objectives	It is aimed in this course to provide students with the necessary knowledge about choosing the right material that would respond to the defined needs in the most effective way. Additionally, students learn to take into consideration the characteristics of different materials, their availability, manufacturing methods and their cost in the industrial design processes.
Course Learning Outcomes	At the end of this course, students are expected to gain knowledge on the materials that is frequently used in the industry and meet the end user and relatedly make right material choices for their design projects. It s also aimed to foster students' industrial design processes through the learning of manufacturing methods for certain materials which would lead to better designed products.
Resources and References	ASHBY M., SHERCLIFF H., CEBON D., 2007, 'Materials: Engineering, Science, Processing and Design', Butterworth-Heinemann. ASHBY M. and JOHNSON K., 2002, 'Materials and Design: The Art and Science of Material Selection in Product Design', Butterworth-Heinemann. CARDARELLI F., 2008, 'Materials Handbook: A Concise Desktop Reference', Springer. LEFTERI C., 2008, 'The Plastics Handbook', RotoVision. LEFTERI C., 2006, 'Materials for Inspirational Design', RotoVision. LEFTERI C., 2005, 'Wood: Materials for Inspirational Design', RotoVision. LEFTERI C., 2004, 'Metals: Materials for Inspirational Design', RotoVision.
Course Grading	**Grade Points**
Attendance	40
Laboratory	
Applications	
Field Study	
Tasks	
Presentations	
Projects	
Seminars	
Midterms	
Quiz	
Final	60
Total	100
Weekly Outline	**Topics**
1	Introduction to the course, Methods of Material Selection, Science, Technology and Market
2	Plastics and Elastomers
3	Plastics and Elastomers
4	Plastics and Elastomers
5	Plastics and Elastomers
6	Plastics and Elastomers - Excursion
7	Metals
8	Metals
9	Metals
10	Metals
11	Metals - Excursion
12	Metals - Excursion