



**ESOGÜ Mathematics and Computer Sciences Department**  
**COURSE INFORMATION FORM**

<b>SEMESTER</b>	Fall
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<b>COURSE CODE</b>	821617015	<b>COURSE NAME</b>	Geometric Transformations I
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SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAG E
7	2	2	0	3	5	COMPULSORY (x) ELECTIVE ( )	Turkish

**COURSE CATAGORY**

<b>Mathematics</b>	<b>Computer</b>		<b>Social Science</b>
x			

**ASSESSMENT CRITERIA**

	Evaluation Type	Quantity	%
	<b>MID-TERM</b>	Mid-Term	1
Quiz			
Homework			
Project			
Report			
Others (.....)			
<b>FINAL EXAM</b>		1	60

<b>PREREQUIEITE(S)</b>	None.
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<b>COURSE DESCRIPTION</b>	Geometrical transformations
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<b>COURSE OBJECTIVES</b>	To introduce Geometrical transformations
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<b>ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION</b>	To obtain information about geometrical transformations
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<b>COURSE OUTCOMES</b>	
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<b>TEXTBOOK</b>	Dönüşümler ve Geometriler Prof. Dr. H. Hilmi Hacısalihoğlu Transformation Geometry George E.Martin
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<b>OTHER REFERENCES</b>	1 Dönüşümler ve Geometriler Prof. Dr. H. Hilmi Hacısalihoğlu 2)Transformation Geometry George E.Martin
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<b>TOOLS AND EQUIPMENTS REQUIRED</b>	
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## COURSE SYLLABUS

WEEK	TOPICS
1	Introduction to transformations
2	Properties of transformations
3	Translations
4	Halfturns
5	Reflections
6	Glad reflections
7	Transformations of Similarity
8	Midterm
9	Classification of Similarities
10	Midterm
11	Equations for Similarities
12	Affine properties
13	Affine spaces
14,15	Isometries
16,17	Final

NO	PROGRAM OUTCOMES	3	2	1
1	The ability to apply knowledges of Mathematics and Computer Sciences,	x		
2	To have sufficient theoretical and practical knowledge of Mathematics at international level,	x		
3	The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects,	x		
4	The skill to solve and design a problem process in accordance with a defined target,	x		
5	Skills to analyze data, interpret and apply to other datum and using these data on computer,	x		
6	The skill to use the modern techniques and computational tools needed for mathematical applications,		x	
7	The skill to make team work within the discipline and interdisciplinary,	x		
8	The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics and Computer Sciences,	x		
9	The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking,	x		
10	The skill to have professional and ethical responsibility,	x		
11	The skill to have consciousness for quality issues and scientific research,	x		
12	The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations,	x		
13	Ability to solve problems in the working life faced to find an appropriate algorithms via mathematical modeling and to write computer programs,		x	
14	The skill to developed design of software systems at different complex levels,		x	
15	The credence of necessity of life-long learning and ability to apply the formation long-life learning.	x		

1:None. 2:Partially contribution. 3: Completely contribution.

**Instructor(s):** Prof. Dr. Ayşe BAYAR

**Signature:**

**Date:**