EARTHQUAKE RESISTANT BUILDING DESIGN

1	Course Title:	EARTHQUAKE RESISTANT BUILDING DESIGN
2	Course Code:	MIM3011
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	5
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. MURAT TAŞ
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	murattas@uludag.edu.tr 0224 2942137 U.Ü. Mühendislik Mimarlık Fakültesi Mimarlık Bölümü Nilüfer/ Bursa
17	Website:	
18	Objective of the Course:	The aim is to work out students' information level which will be used for analysis, synthesis and commenting about principles of earthquake resistant buildings for architectural education in building production process.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	

		1	Types, formation, definition, general information about the properties of the earthquake
		2	Understand the concept of earthquake resistant and learn the basic principles of earthquake resistant building
		3	Understand the importance of architecture in the earthquake resistance, by learning the principles of earthquake-resistant building, architectural planning, architectural design to carry this information
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21	Course Content:	

Course Content:		
Week	Theoretical	Practice
1	General information about earthquakes and earthquake	

2	Definition of the earthquake, types and characteristics of earthquakes		
3	Seismic characteristics in Turkey, socio-economic dimensions of the earthquake, earthquake awareness about		
4	Earthquake-soil interaction, soil-structure interaction, seismic isolation		
5	The concept of earthquake resistant building, the basic principles in earthquake resistant building		
6	The importance of earthquake resistance of architecture, architectural planning principles of earthquake resistant buildings		
7	Architectural design and relation of structural system-earthquake		
8	Regulation of non-structural elements in the building		
9	Repeating courses and midterm exam		
10	Legislation relating to the earthquake and building		
11	Post-earthquake building damage, repair damage caused by earthquakes building		
12	Analysis of earthquake resistance of existing buildings		
13	The basic principles in strengthening of existing buildings		

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	13	3.00	39.00
Homeworks	1	21.00	21.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	2.00	2.00
Others	0	0.00	0.00
Final Exams	1	2.00	2.00
Total Work Load			92.00
Total work load/ 30 hr			3.07
ECTS Credit of the Course			3.00

22 Textbooks, References and/or Other Materials:
Bayülke, N., "Depreme Dayanıklı Betonarme ve Yığma Yapı Tasarımı" İzmir, 1998
-Canlıbel, N., "Depreme Dayanıklı Yapıların Tasarım İlkeleri" İstanbul, 1981
Edition, By John Wiley & Sons Ltd., 1987
-Lagorio, J., H., "Earthquakes" By John Wiley & Sons Ltd,
Seyir Defteri" İstanbul, 1990

23 Assessment

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	25.00
Quiz	0	0.00
Home work-project	1	25.00
Final Exam	1	50.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to Success Grade	50.00	
Contribution of Final Exam to Success Grade	50.00	
Total	100.00	
Measurement and Evaluation Techniques Used in the Course		

24	**ECTS / WORK LOAD TABLE**

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	5	1	3	1	2	1	1	1	1	1	0	0	0	0	0
ÖK2	5	4	3	4	4	4	1	2	1	4	2	0	0	0	0	0
ÖK3	4	4	5	4	3	3	1	2	2	4	3	0	0	0	0	0

LO: Learning Objectives   PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High