

RADIOWAVE PROPAGATION

1	Course Title:	RADIOWAVE PROPAGATION	
2	Course Code:	EEM4212	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	8	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Öğr. Gör. Dr. SEVİM KURTULDU	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	0 224 2942021 kurtuldu@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Investigation of radiowave propagation over ground. Investigation of Electromagnetic spectrum. Investigation of the radio propagation frequency bands. Radio wave propagation analysis of the international standards.	
19	Contribution of the Course to Professional Development:	1Ability to use radio wave propagation analyze in advanced research 2. Ability to analyze radio wave propagation	
20	Learning Outcomes:		
		1	Ability to use radio wave propagation analyze in advanced research.
		2	Ability to analyze radio wave propagation.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Electromagnetic spectrum.		
2	International and national regulatory agencies and organizations engaged in radio wave propagation.		
3	ULF, ELF bands.		
4	VLF, LF bands.		

5	MF, HF bands.	
6	VHF, UHF bands.	
7	SHF, EHF bands.	
8	IR, visible bands.	
9	UF, X and gamma bands.	
10	Modelling of radio waves propagation.	
11	Communication systems and applications.	
12	Communication systems and applications.	
13	Communication systems and applications.	
14	Communication systems and applications.	

22	Textbooks, References and/or Other Materials:	<p>1. "Radiowave Propagation and Antennas for Personal Communications", Kazimierz Siwiak, Artech House Antennas and Propagation Library, April, 1998.</p> <p>2. "Introduction to RF Propagation", John S. Seybold, John Wiley&Sons Inc., 2005.</p>
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23	Assesment
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TERM LEARNING ACTIVITIES	NUMBER	WEIGHT		
Midterm Exam	1	20.00		
Quiz	0	0.00		
Home work-project	1	20.00		
Activites		Number	Duration (hour)	Total Work Load (hour)
Contribution of Term (Year) Learning Activities to Success Grade	40.00	14	3.00	42.00
Practicals/Labs	0	0.00	0.00	0.00
Contribution of Final Exam to Success Grade	60.00	14	3.00	42.00
Self study and preperation	140.00			
Homeworks	1	14.00	14.00	14.00
Measurement and Evaluation Techniques Used in the Projects	0	0.00	0.00	0.00
Field Studies	0	0.00	0.00	0.00
Midterm Exams	1	2.00	2.00	2.00
Others	0	0.00	0.00	0.00
Final Exams	1	6.00	6.00	6.00
Total Work Load				120.00
Total work load/ 30 hr				4.00
ECTS Credit of the Course				4.00

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	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contrib ution Level:	1 very low		2 low		3 Medium		4 High		5 Very High							