

STATISTICS FOR ENVIRONMENTAL ENGINEERS

1	Course Title:	STATISTICS FOR ENVIRONMENTAL ENGINEERS	
2	Course Code:	CEV5302	
3	Type of Course:	Compulsory	
4	Level of Course:	Second Cycle	
5	Year of Study:	1	
6	Semester:	2	
7	ECTS Credits Allocated:	6.00	
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:	Doç. Dr. SELİM TÜZÜNTÜRK	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	E-mail : selimtuzunturk@uludag.edu.tr Phone: 0 224 29 41152 Address: Bursa Uludağ Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, Ekonometri Bölümü, 16059, Görükle/Bursa.	
17	Website:		
18	Objective of the Course:	To provide the knowledge and skills required to perform statistical analyzes in engineering applications.	
19	Contribution of the Course to Professional Development:	Acquiring the knowledge and skills required to perform statistical analyzes in engineering applications.	
20	Learning Outcomes:		
		1	Mastering statistical research design.
		2	Ability to use sampling steps and methods.
		3	Ability to calculate the appropriate sample size.
		4	Ability to apply statistical analysis methods and interpret the obtained findings.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Statistical Research Design		
2	Sampling Theory and Basic Concepts		
3	Sampling steps and Methods		
4	Sample Size		
5	Statistical Estimation Theory		

6	Hypothesis Testing and Steps	
7	Parametric Hypothesis Tests	
8	Parametric Hypothesis Tests	
9	Parametric Hypothesis Tests	
10	Non-Parametric Hypothesis Tests	
11	Non-Parametric Hypothesis Tests	
12	Correlation and Covariance Analysis	
13	Simple Linear Regression Analysis	
14	Multiple Linear Regression Analysis	

22	Textbooks, References and/or Other Materials:	Tüzüntürk, S. İstatistiksel Araştırmanın Temelleri: MINITAB ve SPSS Uygulamalı, Medyay, 2022.
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	0	0.00
Quiz	0	0.00
Home work-project	1	40.00
Final Exam	1	60.00
Total	2	100.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Total	100.00		
Practicals/Labs	0	0.00	0.00
Self-study and preparation	14	4.00	56.00
Homeworks	1	30.00	30.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	52.00	52.00
Total Work Load			180.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

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	1	5	3	5	3	2	2	2	2	3	2	2	3	3	0	0
ÖK2	3	1	2	5	2	3	3	1	2	2	3	3	3	2	0	0
ÖK3	3	2	1	5	2	2	2	2	2	3	2	3	2	3	0	0
ÖK4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0

LO: Learning Objectives PQ: Program Qualifications

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