

Name of Module:	Statistic	Code:	0804427	Semester:	2	Prerequisite Modules :	-	Tech	2	Prac	2	Credit	3	ECTS	4
		Language:	Turkish	Type:	Comp.										
Aim of Module:	To make statistical reviews, commentary. To make, basic accounts and formulations, to use their skills to obtain statistical results, statistical reasoning developments.														
Learning Outcome:	In the content of the learned topics. The student expected to answer a problem or an application with satisfactory Professional manner, use computer software, risk analysis and other statistical parameters, adaptation and problem solving ability is considered to be the output of the basic learning.														
Content of Module:	Importance of statistics in engineering: principles of probability theory. Random variable and random event. The concept of probability. Random variables, distributions, distribution parameters. Statistical moments. The mean, variance, frequency analysis. Estimation of parameters. Important functions of probability distributions and. Sampling distributions. Statistical hypothesis control. Simple linear regression analysis. Correlation coefficient. Multivariate linear and nonlinear regression analysis.														
Weekly Titles of Subjects	1)	The importance of statistics in engineering: principles of probability theory.													
	2)	Random variable and random event. The concept of probability.													
	3)	Random variables, distributions, parameters.													
	4)	Statistical moments. The mean, variance, frequency analysis.													
	5)	Estimation of parameters.													
	6)	Important probability distributions and functions, sampling distributions.													
	7)	Mid-Term Exam													
	8)	Control of Statistics hypotheses													
	9)	Simple linear regression analysis.													
	10)	Correlation coefficient.													
	11)	Multivariate linear and nonlinear regression analysis.													
	12)	Applications,													
	13)	Project Works. The use of statistics in civilBiyology.													
	14)	Review													
General Proficiency:	Sufficient to implement the student to answer or a problem with statistics, use of computer software, statistical parameters and adequate use of the calculations of other risk analysis, problem-solving skills to adapt and win the general competence will be considered.														
References	1)	Bayazit, M., Oğuz B., Mühendisler İçin İstatistik, Birsen Yayınevi, 1985.													
	2)	Miller, I., Freund, J. E., Probability and Statistics for Engineers, Prentice Hall, 1965													
	3)	Mode, E. B., Elements of Probability and Statistics, Prentice Hall, 1967													
	4)	Freund, J. E., Modern Elementary Statistics, Prentice Hall, 1967.													
	5)	Benjamin, J. R., Cornell, C. A., Probability, Stat. and Decision for Civil Eng., McGraw-Hill, 1970.													
	6)	Yevjevich, V., Probability and Statistics in Hydrology, Water Resources Publication, 1972.													
	7)	Ang, A.H. S, Tang, W.H., Prob. Concepts in Eng. Plan. and Design, C1, J. Wiley and Sons, 1975													
	8)	Helsel, D. R., Hirsch, R. M. , Statistical Methods in Water Resources, Elsevier, 1992													
	9)	Bulu, A., İstatistik Problemleri, Teknik Kitaplar Yayınevi, 1986.													
Assessment:	Midterm Exam: %40, Final Exam: %60, Projects and assignment might be conducted by announcement.														