

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
INF211	Introduction to Probability and Statistics for computer engineering	4	3	0	0	3	4

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	Give to students the principals of probability and statistics and provide them the capacity of using the relevant methods. In this scope, the objectives are listed: principal concepts and random variables, important probability functions, preparing reports and performing scientific studies using probability and statistics, doing estimations by samples, comparing samples and populations
Content	Introduction to probability Axioms, conditional probability, Bayes theorem Random variable Probability functions Expected value, variance, standard deviation Discret distributions and their applications Continuous distributions and their applications Midterm Sample selection, organisation and analyse of data Building reports and charts Measures of central tendancy and dispersion Sample distributions ans estimations Test of hypotheses Regression and correlation
References	• Soong, T.T., Fundamentals of Probability and Statistics for Engineers, John Wiley & Sons, 2004. • Akdeniz, F., Olasılık ve İstatistik, Baki Kitapevi, Eylül 1998. • Sheldon M., Ross, M., Introduction to probability models, Academic Press, 2003, 8th Ed. • Olasılık – Osman Kara • Course notes

Theory Topics

Week	Weekly Contents
1	Introduction to probability
2	Axioms, conditional probability, Bayes theorem
3	Random variable
4	Probability functions
5	Expected value, variance, standard deviation
6	Discret distributions and their applications
7	Continuous distributions and their applications
8	Midterm
9	Sample selection, organisation and analyse of data
10	Building reports and charts
11	Measures of central tendency and dispersion
12	Sample distributions and estimations
13	Test of hypotheses
14	Regression and correlation