Course Syllabus

Code - Course Title	**İST256 - Probability**
Course Type	IV. SEMESTER
Laboratory + Practice	3+0
ECTS	**4.0**
Language of Instruction	Türkçe
Course Type	Required Courses

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	None.
Work Placement	N/A

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Basic principal of counting, the concept of permutation and its applications, the concept of combination and its applications, binomial theorem	
Week - 2		Basic concepts about probability and probability axioms	
Week - 3		Conditional probability and Bayes's theorem, geometric probability problems	
Week - 4		The concept of random variable, probability function, probability density function	
Week - 5		Distribution function	
Week - 6		Expected value and moments, expected value of random variable and its variance, moment generating function and moments	
Week - 7		Bernoulli distribution, binomial distribution	
Week - 8		Hipergeometric distribution, geometric distribution	
Week - 9		Poisson distribution	
Week - 10		Uniform distribution, exponential distribution	
Week - 11		Relationship between Poisson distribution and exponential distribution	
Week - 12		Normal distribution and its features - I	
Week - 13		Normal distribution and its features - II	
Week - 14		Normal distribution and its features - III	

Learning Outcomes

#	Learning Outcome
1	define the principal concepts about probability.
2	express the concept of probability and its features.
3	explain the concept of a random variable and the probability distributions.
4	calculate the expected value and the moments.
5	explain major distributions of random variables.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.