

Prerequisite(s)

None

# Меѓународен Универзитет Визион - International Vision University Universiteti Ndërkombëtar Vizion - Uluslararası Vizyon Üniversitesi

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## **SYLLABUS**

COURSE NAME	COURSE CODE	SEMESTER	COURSE LOAD	ECTS
PROBABILITY AND STATISTICS	4016	3	180	6

G T	m 1:1
Course Language	Turkish
Course Type	Elective
Course Level	First Cycle
Course Lecturer	
<b>Course Assistants</b>	
Classroom	
Extra-Curricular	Meeting:
Office Hours and	Consultancy:
Location	
Course Objectives	The objectives of the course are to introduce the computer engineering students the basic concepts of probability and statistics and teach them the probability models and statistical methods that will be needed in their advanced field of engineering.
Course Learning Outcomes	The students who successfully complete this course, will be able to;
	<ul> <li>Understanding the following statistical inferences presented as a mathematical approach to the recognition of mathematical topics.</li> <li>Mathematical understanding to show the important statistical concepts and literally.</li> <li>Understanding the concept of probability, analyze to one or more different strategies for the condition expressed by the mathematical functions.</li> <li>In the case of multiple data groups, such as the mass, population, community of any change in circumstances affecting to establish connection between the general audience.</li> <li>Understanding random concepts and mathematical effects of randomness.</li> <li>Parametric approach to characterize to create overall structure of a system.</li> <li>Statistically expressions show in different forms and shapes.</li> <li>Depending on the conditions of the experimental data required to reveal the mathematical expressions.</li> <li>Experience as an engineer with statistical approaches to analyze problems.</li> <li>Applications in different areas of engineering, including any assumptions about the system to gain the ability to create solutions and approaches</li> </ul>
<b>Course Contents</b>	In the Introduction to Statistics and Probability course, the definition of the statistical methods and data analysis, probability and probability distributions, random, sampling distributions, hypothesis testing, regression models, correlation, factorial experiments and fractions, statistical quality control issues provides basic information.

# WEEKLY SUBJECTS AND RELATED PREPARATION STUDIES

Week	Subjects	Related Preparation
1	Introduction to Statistics, Data Analysis and Probability Concepts	Related Chapters of Course Sources
2	Probability	Related Chapters of Course Sources
3	Conditional and Independence Probability	Related Chapters of Course Sources
4	Random Variables and Probability Distributions	Related Chapters of Course Sources
5	Mathematical Probability	Related Chapters of Course Sources
6	Discrete Probability Distributions	Related Chapters of Course Sources
7	Mid-term Exam	Related Chapters of Course Sources
8	Continuous Probability Distributions	Related Chapters of Course Sources
9	Continuous Probability Distributions	Related Chapters of Course Sources
10	Fundamental Sampling Distributions and Data Descriptions	Related Chapters of Course Sources
11	Fundamental Sampling Distributions and Data Descriptions	Related Chapters of Course Sources
12	Estimation Theorems	Related Chapters of Course Sources
13	Estimation Theorems	Related Chapters of Course Sources
14	Hypotheses Tests	Related Chapters of Course Sources
15	Final Exam	Related Chapters of Course Sources

#### ECTS / WORKLOAD TABLE

Presentation / Seminar			
Hours for off-the-classroom study (Pre-study, practice)	14	3	42
Midterm Exam	1	12	12
Final examination	1	14	14
Total Work Load			
ECTS	6		

#### GENERAL PRINCIPLE RELATED WITH COURSE

Dear students,

In order to be included, learn and achieve full success that you deserve in the courses you need to come well prepared by reading the basic and secondary textbooks. We are expecting from you carefully to obey to the course hours, not to interrupt the lessons unless is very indispensable, to be an active participant on the courses, easily to communicate with the other professor and classmates, and to be interactive by participating to the class discussions. In case of unethical behavior both in courses or on exams, will be acting in framework of the relevant regulations. The attendance of the students will be checked in the beginning, in the middle or at the end of the lessons. Throughout the semester the students who attend to all lectures will be given 15 activity-attendance points in addition to their exam grades.

#### **SOURCES**

	COMPULSORY LITERATURE			
No	Name of the book	Author's Name, Publishing House, Publication Year		
1	Olasılık ve İstatistik	Fikri Akdeniz, Akademisyen Kitabevi Akademik Kitaplar Dizisi		
2	Probability&Statistic for Engineers and Scientists	Walpole R.E., Myers R.H., Myers S.L., Ye K., Prentice Hall, 2012-2007-2002		
3				

	COMPULSORY LITERATURE			
No	Name of the book	Author's Name, Publishing House, Publication Year		
1				
2				
3				

#### **EVALUATION SYSTEM**

Underlying the Assessment Studies	NUMBER	PERCENTAGE OF GRADE
Attendance/Participation	15	%10
Project / Event	1	%20
Mid-Term Exam	1	%35
Final Exam	1	%35
TOTAL	17	%100

### ETHICAL CODE OF THE UNIVERSITY

In case of the students are cheating or attempt to cheat on exams, and in the case of not to reference the sources used in seminar studies, assignments, projects and presentations, in accordance to the legislations of the Ministry of Education and Science of Republic of Macedonia and International Vision University, will be applied the relevant disciplinary rules. International Vision University students are expected never to attempt to this kind of behavior.