OSTİM TECHNICAL UNIVERSITY
ENGINEERING FACULTY

IENG 204 – PROBABILITY AND STATISTICS 2
COURSE CURRICULUM
2022-2023

IENG 204 – Probability and Statistics II							
Course Name	**Course Code**	**Period**	**Hour**	**Application Time**	**Lab Time**	**Credit**	**ECTS**
Probability and Statistics II	IENG 204	4	3	1	0	3	5

Precondition	No
Language of the Course	English
Type of the Course	Compulsory
Course Level	Bachelor Degree
Method of Teaching	Face to face, Online
Course Learning and Teaching Techniques	Lecture, Question and Answer, Application

The Aim of Course

To teach the student advanced (multivariate) applied statistics.

Course Content

To gain the ability to meet, formulate and solve problems related to statistics.

Weekly Topics and Related Preparation Studies

Week	Topics	Preliminary
1	Regression Analysis	
2	Linear Regression	
3	Multivariate Regression and Correlation	
4	Analysis of Variance	
5	ANOVA table for Linear Regression	
6	ANOVA table for multivariate regression	
7	F test- Partial and Multiple-Partial F tests	
8	**Midterm Exam**	
9	Multivariate, Partial, Multipartite Correlation	
10	Statistical Process Control	
11	Statistical Process Control	
12	Quality control diagrams	
13	Quality control diagrams	
14	Time series	
15	Time series	
16	**Final Exam**	

Resources (Textbook and Supplementary Books)
Turkish Resources 1. ÖZDAMAR ,K. Paket Programlar ile İstatistik Veri Analizi

Evaluation System		
Studies	**Number**	**Contribution Margin**
Continue		
Laboratory		
Application		
Field Study		
Course Specific Internship (if applicable)		
Quizzes/Studio/Critical		
Homework		
Presentation		
Projects		
Report		
Seminar		
Midterm Exams/Midterm Jury	1	% 40
General Exam/Final Jury	1	% 60
	Total	**% 100**
Contribution to the Success Grade of Mid-Semester Studies		% 40
Contribution of End of Semester Studies to Success Grade		% 60
	Total	**% 100**

Course Category	
Basic Vocational Courses	X
Specialization/Field Courses	
Support Lessons	
Communication and Management Skills Lessons	
Transferable Skills Lessons	

Relation of Course Learning Outcomes and Program Qualification						
No	**Program Qualifications / Outcomes**	**Contribution Level**				
		1	**2**	**3**	**4**	**5**
1	Ability to design, conduct experiments, collect data, evaluate and interpret results for the analysis and solution of Industrial Engineering problems.					x
2	To be able to use course information in solving industrial engineering problems.					x
3	Acquisition of analytical thinking skills				x	
4	Ability to use information technologies required for Industrial Engineering applications.			x		
5	Having an up-to-date and sufficient background in engineering, mathematics, science and social sciences related to industrial engineering; To be able to use the theoretical and applied knowledge in these fields together in solving industrial engineering problems.					x

ECTS/Workload Table			
Activities	**Number**	**Duration (Hours)**	**Total Workload**
Lesson hours (Including the exam week: 16 x total lesson hours)	16	3	48
Laboratory			
Application	16	1	16
Course Specific Internship			
Field Study			
Out of Class Study Time	16	3	48
Presentation/Seminar Preparation			
Projects			
Reports			
Homeworks			
Quizzes/Studio Critic			
Preparation Time for Midterm Exams/Midterm Jury	1	16	16
Preparation Time for the General Exam/General Jury	1	16	16
Total Workload	**(128/30 = 5)**		**144**