Faculty of Engineering & Technology

Applied Statistics

Information :

Course Code :	MTH 214	**Level**	: Undergraduate	**Course Hours :**	2.00- Hours

Department :	Department of Structural Engineering & Construction Management

Instructor Information :

Title	Name	Office hours
Lecturer	Basma Magdy Ahmed Mohamed	
Teaching Assistant	Salma Motaz Fouad Ali El Sherif	

Area Of Study :

Bearing in mind modern computing systems and concentrating on the different civil engineering applications, the course will address: Reviewing methods of data presentation and analysis and the important statistical measures, Probability distributions and their applications, Sampling methods, Sample and population measures (point estimate), Tests of hypothesis and confidence limits, Correlation and regression analysis.

Description :

Bearing in mind modern computing systems and concentrating on the different civil engineering applications, the course will address: Reviewing methods of data presentation and analysis and the important statistical measures, Probability distributions and their applications, Sampling methods, Sample and population measures (point estimate), Tests of hypothesis and confidence limits, Correlation and regression analysis.

Course outcomes :

a.Knowledge and Understanding: :

1 -	a4- Describe the main concept of sampling methods
2 -	a3- List the main items of probability distributions
3 -	a2- Define the main terms of statistical measures
4 -	a1- Explain the principals of data resentation & analysis

b.Intellectual Skills: :

1 -	b7- Calculate the values of correlation and regression
2 -	b6- Analyze the system of tests of hypothesis & confidence limits
3 -	b5- Calculate the values of Sample & population measures
4 -	b4- Solve problems regarding sampling methods
5 -	b3- Assess issues of probability distributions
6 -	b2- Calculate the values of statistical measures
7 -	b1- Analyze the system of data resentation & analysis

c.Professional and Practical Skills: :

1 -	c1- Prepare technical reports for correlation and regression

d.General and Transferable Skills: :

1 -	d1- Cooperate and communicate effectively

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
statistical measures	8	4	4
probability distributions	8	4	4
sampling methods	8	4	4
Sample & population measures	8	4	4
tests of hypothesis & confidence limits	8	4	4
correlation and regression	8	4	4
Revision	4	2	2
data resentation & analysis	8	4	4

Teaching And Learning Methodologies :

Interactive Lec.
Discussion
Problem Solving
Lab Exper.
Project
Report / Present

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Assignments and quizzes	15.00	1	
Attendance and Participation	15.00	1	
Final-term Exam	40.00	15	
First Exam	15.00	6	
Second Exam	15.00	12	

Course Notes :

Course notes & Handouts

http://www.fue.edu.eg