



Philadelphia University

Faculty of Engineering - Department of Renewable Energy
Engineering
Second Semester 2016/2017

Course Information

Title: Engineering Statistics (611301)
Prerequisite: Differentiation and integration (250102)
Credit Hours: 3 credit hours (16 weeks per semester, approximately 44 contact hours)
Textbook: Engineering Statistics 4th Edition Douglas C. Montgomery, George C. Runger, Norma F. Hubele,

References:

Catalog Description: engineering statistics are covered, including statistical test and confidence intervals for one and two samples, building regression models, designing and analyzing engineering experiments, and statistical process control.
descriptive statistics, probability and probability distributions, Data processing, probability theory random variables, Theory of modeling, Statistical Hypothesis, Hypotheses of tests, statistical analysis

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Office hours: Sun, Tues, Thurs: 11:10-13:10 and Mon, Wed: 10:00 -12:00

Course Topics

Week	Topic
1&2	Statistical test
3,4	Confidence intervals for one and two samples
5	Building regression models,,
6, 7	Designing and analyzing engineering experiments
8,9	Statistical process control.
10,11	Descriptive statistics
12,	Probability and probability distributions
13, 14	Probability theory random variables.
15	Theory of modeling
16	Review, and final exam

Course Learning Outcomes and Relation to ABET Student Outcomes:

Upon successful completion of this course, a student should:

1.	Understand Statistical test.	[a, h]
2.	Building regression models	[a, h]
3.	Designing and analyzing engineering experiments	[c, h]
4.	Deals with statistical process control.	[c, h]
5.	illustrates how Probability and probability distributions	[e, h]

Assessment Instruments:

Evaluation of students' performance (final grade) will be based on the following categories:

Exams: Two written exams will be given. Each will cover about 3-weeks of lectures

Quizzes: 10-minute quizzes will be given to the students during the semester. These quizzes will cover material discussed during the previous lecture(s).

Homework: Problem sets will be given to students. Homework should be solved individually and submitted before the due date.

Copying homework is forbidden, any student caught copying the homework or any part of the homework will receive zero mark for that homework

Participation: Questions will be asked during lecture and the student is assessed based on his/her response

Final Exam: The final exam will cover all the class material.

Grading policy:

First Exam	20%
Second Exam	20%
Homeworks	5%
Quizzes	15%
Final Exam	40%
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Total:	100%

Attendance policy:

Absence from classes and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse, acceptable to and approved by the Dean of the relevant college/faculty, shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

February, 2017