Philadelphia University

Faculty of Engineering - Department of Electrical Engineering

Course Details:

Title:	Engineering Project (2) (610459)
Prerequisite:	Engineering Project (1) (610359) + 120 C.Hs
Credit Hours:	1 credit hours (16 weeks per semester)
Textbook:	Guide to Research Projects for Engineering Students: Planning, writing, and presenting by Choon Leong, Carmel L. Heah and Kenneth K. W. Ong, CRC Press
References:	Research Methods for Engineers by David V. Thiel, Cambridge University Press, First Edition
Course Description:	The course is a requirement for level 4 of electrical engineering students. It introduces the basic principles and analysis of scientific research and technical report writing.

Course Outlines:

Week	Topic
1	Format of engineering projects in the engineering faculty
2, 3	Definition of scientific research
4, 5	Types of scientific research and the outcomes of each type.
6, 7	Features of scientific research (Originality, Creativity, and added values), fundamentals of literature survey
8, 9	Basic concepts of engineering design and analysis, prototyping
10, 12	Format of technical report (dissertation) and contents
13	Technical English engineering vocabularies and technical writing exercises
14	Submission Project to the Supervisor for Revision
15	Project Discussion
16	Final Representation and Evaluation

Course Learning Outcomes with reference to ABET Student Outcomes:

Upon successful completion of this course, student should:

1.	Understand the concept and objectives of scientific research.	[a, h, k]
2.	Know the various types of research	[j, k]
3.	Good awareness of the features of literature survey	[j, k]
4.	Know the basic fundamentals of engineering design and analysis and prototyping	[b, c, e]
5.	Understand the format of technical report	[g]
6.	Practice technical English writing	[g]
7	Be able to deliver presentation using power point	[g]

Assessment Guidance:

Evaluation of the student performance during the semester (total final mark) will be conducted according to the following activities:

Sub-Exams:	The students will be subjected to one scheduled written exam. during the semester. The exam will cover materials given in lectures in the previous 8weeks.
Homework , exercises and presentation::	The students will be assigned no less than 4-5 technical writing exercises. The student present the progress of the project. Cheating by copying homework from others is strictly forbidden and punishable by awarding the work with zero mark
Final Evaluation:	The students will undergo a scheduled final evaluation at the end of the semester by specialized committee.

Grading policy:

Presentation	20%
Report	20%
Final Exam	60%
Total:	100%

Attendance Regulation:

The semester has in total 16 credit hours. Total absence hours from classes and tutorials must not exceed 15% of the total credit hours. Exceeding this limit without a medical or emergency excuse approved by the deanship will prohibit the student from sitting the final exam and a zero mark will be recorded for the course. If the excuse is approved by the deanship the student will be considered withdrawn from the course.

January, 2018