



# Philadelphia University

Faculty of Engineering - Department of Electrical Engineering

## Course Details:

**Title:** Engineering Project (3) (610559)

**Prerequisite:** Engineering Project (2) (610459)

**Credit Hours:** 2 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

**Course Description:** The course is a requirement for level 5 for all electrical engineering students. It introduces the student to conduct some aspects of scientific research which include, objective statement, design steps, scheduling, prototyping, testing, verifying and final product.

## Course Outlines:

Week	Topic
1,2	Research problem definition
3,4	Literature review
4,5,6	Write schedule plan
7,8	Design of an engineering prototype model
9	Implementation of the engineering prototype model
10	Test and modify the model
11	Document the final design
12	Implementation of final product
14	Write the technical report of the engineering project
15, 16	Presentation and final examination

## Course Learning Outcomes with reference to ABET Student Outcomes:

Upon successful completion of this course, student should:

1.	Learn to search literature for relevant information	[g, k]
2.	Learn scheduling of engineering project	[g]
3	Conduct design procedures	[b, c, d, e]
4	Learn prototyping	[b, c, d, e]
5.	Conduct testing and fault identification	[b, c, d, e]
6.	Final product production	[d, g, k]
7.	Technical report writing	[g]

## Assessment Guidance:

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

<b>Midterm Exams:</b>	Held during the 8 <sup>th</sup> week of semester. In this exam the students shall demonstrate the progress in project's implementation. <u>Cheating by copying of others works or solutions is strictly forbidden and punishable by awarding the work with zero mark.</u>
<b>Report:</b>	Technical writing and literature review shall be submitted by the week 14 <sup>th</sup> of the semester.
<b>Final Exam:</b>	Conducted during the week 15 <sup>th</sup> of the semester. Students shall be ready to defend, demonstrate the scheme modules of the project or both. The achieved results by the project's team and recommendation for further enhancement on the project for future works, also shall be introduced After the Exam, the supervisor shall fill the Evaluation Form of the Engineering Graduation Project (III), duly signed by both the supervisor and the reviewer. Result shall be confirmed by the Department council during the 15 <sup>th</sup> week and entered to the students' registration system.

## Grading policy:

Presentation	20%
Report	20%
Final Exam	60%

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Total: 100%

## Attendance Regulation:

The semester has in total 30 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.

May, 2018