

Zarqa University

Faculty of Engineering
Department: Electrical Engineering
Course title: Electrical wirings and
electrical Installations
0904425



Prerequisite: 0904321 Electrical machine
Instructor: dr wasif al saluos
Lecture's time: S, Tu, TH 12-13
Semester: 2
Office Hours:1-2

Course description:

Electrical system design for residential; commercial and industrial plants: lighting system and power distribution; motor load calculation. Main and branch feeders and control fire alarm and security system switchboards unit. Substation; earthing; light; electrical lighting systems, light sources; electrical lamps; testing and maintenance; codes and standards; project design.

Aims of the course:

1. Introduce the students to design for residential; commercial and industrial plants: lighting and power.
2. To study power distribution; motor branch feeders and controllers elements.
3. To study load calculation and design.
4. To study testing and maintenance; codes and standards systems.
- 5- To design whole project.

Intended Learning Outcomes (ILOs): Electrical wirings and electrical Installations

- 1- Ability to apply knowledge of mathematics, science, and engineering .
- 2- Ability to design and analysis a model system .
- 3- Ability to use the techniques, skills, and modern engineering tools
Necessary for engineering practice.
- 4- Understand design for residential; commercial and industrial plants:
- 5- Understand load calculations, balanced three- phase calculations and power.
- 6- Ability to identify, formulates, and test electrical engineering devices
And maintenance.



Course structures:

Week	C. Hrs	ILOs	Topics	Teaching Procedure	Assessment methods
1	3	1	Introduction to Basic principles	Power point	board
2	3	1	Basic equipment in electrical installations	Power point	Board
3	3	1	Basic equipment in electrical installations	Power point	board
4	3	,2,3	electrical loads estimation	Power point	board
5	3	2,3	electrical loads estimation	Power point	board
6	3	2,3	circuit line calculations	Example solution	board
7	3	3,5,4	panel and distribution network design	Power point	Board
8		3,4,5	panel and distribution network design		
9	3	3,4	Earthing systems and lightning	Power point	board
10	3	1,3,4	Design Theory calculation	Power point	board
11	3		Exam II	Power point	board
12	3	,3,4,5	Design Theory calculation	Power point	board
13	3	2,4	lighting and electrical lighting systems	Power point	board
14	3	2,4	lighting and electrical lighting systems	Example solution	board
15	3	6	final electrical works and operation testing	Example solution	
16			Final Exam		

References:**References in electrical installation design****Prof. Mahmud jelanee****Assessment Methods:**

Methods	Grade	Date
First exam	20	
Secend exam	20	
homwork	5	
Quiz exam and	5	
Final exam	50	

