

EE216-2: Electrical Installations

Course code and name	EE216-2: Electrical Installations
Credits units	2 Credit units
Contact hours	4 Contact hours: 1 lecture, 1 tutorial and 2 practical
Instructor name	Dr. Sami Alotaibi
Textbook	Trevor Linsly, Basic Electrical installation Work, 4th ed. 2005 ISBN 0750666242.
Other supplemental materials	Electrical Installations Guide, Schneider Co. 2016 Edition.
Specific course information	
a. Course description	This course will be devoted to the study of electrical installation design. Different parts will be developed: Domestic Installation; Illumination; Control and monitoring; Determining conductor cross-sections area; Installation testing; Outdoor installations.
b. Prerequisite	EE213-2
c. Required / Elective	Required
Course Learning Outcomes	
<u>CLO of the Lecture Activities:</u>	
CL01: Recognize Rules and Statutory Regulations of Modern Electrical Installation Design Technology.	
CL02: Demonstrate Deferent Solutions Used in Wiring Diagram Design of Domestic and Industrial lighting Circuits.	
CL03: Explain Power and Control Circuits for Electrical Industrial Installations Using Single Line and Wiring Diagrams.	
CL04: Calculate Electrical Cable Cross Sectional Area With Checking of Voltage Drop and Short Circuit Conditions.	
CL05: Evaluate the Quality of an Electrical Installation Design by Applying the Standards of Checking and Testing Arrangements.	

CLO of the Laboratory Activities:

CL01: Verify theory and to improve knowledge learned in class.

CL02: Formulate and solve problems related to theory.

CL03: Design and safety conducts an experimental procedure.

CL04: Independently perform accurate quantitative measurements, interpret experimental results, perform calculations on these results and draw a reasonable, accurate conclusion.

CL05: Communicate critical analysis of scientific information through written reports.

CL06: Be integrated inside a group of work and respect the team working.

Brief list of topics to be covered

- General Regulation of Electrical Installations.
- Domestic Power and Lighting Circuits.
- Design and Control of Inductions motors Circuits (Power and Control)
- Cables Cross Sections Calculations.
- Checking of Electrical Installations.

Mapping Course Learning Outcomes to Student Outcomes

	Lecture Activities						
	S01	S02	S03	S04	S05	S06	S07
CL01							
CL02							
CL03							
CL04							
CL05							
	Laboratory Activities						
	S01	S02	S03	S04	S05	S06	S07
CL01							

CL02							
CL03							
CL04							
CL05							
CL06							