

Module (Engineering Installations) Catalogue 2022-2023

College/ Institute	Shaqlawata technical College	
Department	Engineering drawing - Evening	
Module Name	Engineering Installations	
Module Code	ENI304	
Degree	Technical Diploma <input type="checkbox"/> *	Bachelor <input type="checkbox"/>
	High Diploma <input type="checkbox"/>	Master <input type="checkbox"/> PhD <input type="checkbox"/>
Semester	Third	
Qualification	MSc	
Scientific Title	Lecturer	
ECTS (Credits)	8	
Module type	Prerequisite <input type="checkbox"/>	Core <input type="checkbox"/> * Assist. <input type="checkbox"/>
Weekly hours	6	
Weekly hours (Theory)	(2) hr Class	(1) Total hrs Workload
Weekly hours (Practical)	(4) hr Class	(1.5) Total hrs Workload
Number of Weeks	12	
Lecturer (Theory)	Mohamed Moafak Aziz	
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Lecturer (Practical)	Mohamed Moafak Aziz	
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Course Book

Course Description	<p>Details of engineering installations with Sanitary, irrigation, and various electrical, screw, training, welding, welding-symbol, and gear drawings that are utilized in buildings are drawn to an appropriate scale and in accordance with technical specifications.</p> <p>starting with the building's footing, blueprints, and cross section. Drawings must be accurate, scaled appropriately, completed quickly, and adhere to engineering criteria. The student will learn about irrigation projects, sanitary engineering projects, and road engineering projects in this course, as well as all the required drawings.</p>				
Course objectives	<p>This course's goal is to provide the student with a strong understanding of the maps required for sanitary, irrigation, and electrical projects.</p> <p>This course the students will learn the fundamentals of sanitary, irrigation, and electrical drawing design for buildings. Students then practice drawing all the components and units of these buildings' sanitary, irrigation, and electrical systems to a suitable scale and with good accuracy using drawing tools.</p>				
Student's obligation	<p>The student in this course is required to complete one semester, should draw the examples of drawing-on-drawing sheet every week and attend and to take the final exam.</p>				
Required Learning Materials	<ul style="list-style-type: none"> ▶ Projector ▶ White board ▶ Power Point Presentation ▶ Scientific Debate ▶ Work Group 				
Evaluation	Task		Weight (Marks)	Due Week	Relevant Learning Outcome
	Assignments	Homework	20		
		Class Activity			
		Report			
		Seminar			
		Essay			
		Projects			
	Quiz		4		
	Class work		20		
	Midterm Exam		16		
	Final Exam		40		
	Total		100		

Specific learning outcome:	✓ By using drawing tools students will be able to draw all sorts of sanitary, irrigation, and electrical drawing sheets.
Course References:	Key references: <ul style="list-style-type: none"> ▶ Building construction handbook by Roy Chudley ▶ Sanitary Engineering by William Paul Gerhard ▶ Architectural Utilities 1 plumbing and sanitary by George Salvan

Course topics (Theory)	Week	Learning Outcome
Retaining walls.	1	
Culverts.	1	
SANITARY ENGINEERING: The Sanitary Installations in Buildings.	1	
Types of Joints Between Pipes and Fitting. Plumbing Appliances.	1	
Waste Water (Sewerage) Network in Cities and Buildings.	1	
Types of Waste Water Drain Tools and pipes. Manholes, Septic Tanks and Cesspools.	1	
Water Supply Network in Buildings (Clear water). Water supply systems in buildings.	1	
Types of irrigation projects.	1	
Irrigation and drainage Canals.	1	
Joints definition, kinds, rivets, types of rivets, symbols of rivets, drawing connections by rivets.	1	
Screw, type of screw, nuts, threads and its types, threads drawing steps.	1	
Electrical and electronically symbols, types of cables and conductors, reading different electrical sheets.	1	

Questions Example Design

Extra notes:

all lectures should mostly focus on practical session because students will better learn practically, and rather than exam paper should lectures give higher mark for practical exam or practical work such as projects or practical homework.

External Evaluator