

# Program Engineering

<b>Specialization</b>	Electrical Installations and Equipment
<b>Course Number</b>	020303142
<b>Course Title</b>	Domestic electrical wiring workshop
<b>Credit Hours</b>	2
<b>Theoretical Hours</b>	0
<b>Practical Hours</b>	6

**Brief Course Description:**

- ❖ Controlling electrical bulbs lighting, Wiring electrical bells. Wiring interphone. Wiring street lightings. Security doors wiring opening and closing control methods. Traffic lights systems. Earthing.

**Course Objectives:**

Upon the completion of the course, the student will be able to:

1. Detect the electrical faults.
2. Fix electrical circuits.
3. Make various connections for domestic installations

**Detailed Course Description:**

Unit Number	Unit Name	Unit Content	Time Needed
1	<b>Control Lamp From Two Positions</b>	<ul style="list-style-type: none"> <li>- Construction.</li> <li>- Operation.</li> <li>▪ Troubleshooting</li> </ul>	
2	<b>Fluorescent Lamp Lighting Connection</b>	<ul style="list-style-type: none"> <li>- Construction.</li> <li>- Operation.</li> <li>○ Troubleshootin.</li> </ul>	
3	<b>Connection Electrical Bell</b>	<ul style="list-style-type: none"> <li>- Construction.</li> <li>- Operation.</li> </ul> Troubleshooting.	
4	<b>Connection Electrical Socket</b>	<ul style="list-style-type: none"> <li>- Construction.</li> <li>- Operation.</li> <li>- Troubleshooting</li> </ul>	
5	<b>Detect the Electrical Faults in Electrical Circuit &amp; Fixing it</b>	<ul style="list-style-type: none"> <li>- Short Circuit.</li> <li>- Open Circuit.</li> <li>- Short to ground</li> </ul>	

**Evaluation Strategies:**

Exams		Percentage	Date
Exams	midterm Exam	20%	--/--/----
	Final Exam	50%	--/--/----
Reports and Projects		30%	

**Teaching Methodology:**

- ❖ .Laboratory

**References:**

1. H.P. Richter and W. Creighton. Schwan. Practical electrical wiring, residential, farm and industrial , MCGROW-HILL Book Company , 19<sup>th</sup> edition 2005. ( ISBN#0971977917)
2. John E. Traister. Security / Fire alarm systems,
3. Trimmer, understanding and servicing alarm systems , 3<sup>rd</sup> edition.
4. Power Distribution and Illumination system, electrical 1999.
5. Basic Electrical Installation work 2005 by Trevor Linsley.
6. Guide to low voltage and limited energy systems. Mike Holt 1