

## Engineering Program

Specialization	Medical Equipment Technology
Course Number	020406281
Course Title	Medical equipment troubleshooting and repair
Credit Hours	3
Theoretical Hours	1
Practical Hours	6

**Brief Course Description:**

- Students should acquire a theoretical and practical knowledge about reading electronic schematics and how to perform basic troubleshooting methods for medical equipment including: Hemodialysis, Anesthesia, Ventilator, Sterilizer, Infant Incubator, and electrosurgical unit ...etc.

Detailed Course Description:

Unit Number	Unit Name	Unit Content	Time Needed
1	Hemodialysis	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
2	Anesthesia	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
3	Ventilator	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
4	Sterilizer	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
5	Infant Incubator	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
6	Electrosurgical units and operating tables	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
7	ECG and patient monitors	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
8	Dental Equipment	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
9	Defibrillator	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
10	Surgical Laser	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	
11	Physiotherapy Equipment	<ul style="list-style-type: none"> <li>reading electronic schematics and how to perform basic troubleshooting and repair</li> </ul>	

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12	Routine X-Ray and Ultrasound machines	<ul style="list-style-type: none"><li>reading electronic schematics and how to perform basic troubleshooting and repair</li></ul>	
13	Laboratory	<ul style="list-style-type: none"><li>reading electronic schematics and how to perform basic troubleshooting methods</li></ul>	

Evaluation Strategies:

Exams		Percentage	Date
Exams	Med-Term Exam	.%	--/--/----
	Final Exam	.%	--/--/----
			--/--/----
Homework and Projects		.%	
Discussions and lecture presentations			

Teaching Methodology:

- ❖ Lectures
- ❖ Video Lectures

Text Books & References: