# Course of Study

in order to graduate from the Medical Devices Technology Dep. the student has to complete 184 studying units distributed on four stages according to the tables below.

# First Stage:

No	Subject	No. of hours			Unite	Type of	
		Theoretical	Practical	Total	Units	Subject	
1	Human Rights	2	-	2	4	General	
2	Mathematical 1	3	-	3	6	Auxiliary	
3	Factories	-	4	4	3	Specialty	
4	Basis of electrical	2	3	5	7	Specialty	
4	engineering						
5	Engineering drawing	-	4	4	3	Auxiliary	
6	Medical Physics	2	2	4	6	Auxiliary	
7	Medical Chemistry	2	-	2	4	Auxiliary	
8	Mechanics	2	-	4	4	Auxiliary	
9	Computer	1	1	2	3	4	Auvilianu
9	Applications	1	2	3	4	Auxiliary	
Total		14	17	31	43		

# Second Stage:

No	Subject	No. of hours			Units	Type of
NO	Subject	Theoretical	Practical	Total	Units	Subject
1	Democracy	2	1	2	4	General
2	Mathematical 2	3	ı	3	6	Auxiliary
3	Anatomy & Physiology	2	2	4	6	Auxiliary
4	Techniques and clinical Medical Devices	2	2	4	6	Specialty
5	Contents and Electronic circuits	2	3	5	7	Specialty
6	Digital Technique	2	2	4	6	Specialty
7	Measurements and medical transducers	2	3	5	7	Specialty
8	Medical devices 1	2	3	5	7	Specialty
9	Computer Applications	1	2	3	4	Auxiliary
10	systematic training	-	6	6	4	Specialty
	Total	18	23	41	57	

# Third Stage:

No	Subject	No. of hours			Unite	Type of
No Subject	Subject	Theoretical	Practical	Total	Units	Subject
1	Medical Electronic Systems	2	2	4	6	Specialty
2	Signal processer	2	2	4	6	Specialty
3	Medical Communication systems	2	2	4	6	Specialty
4	Medical Devices	2	3	5	7	Specialty
5	Microprocessor and Microcontroller	2	2	4	6	Specialty
6	Power electronics	2	2	4	6	Specialty
7	Electrical Technology	2	2	4	6	Specialty
8	Computer Applications	1	2	3	4	Auxiliary
9	systematic training	-	6	6	4	Specialty
	Total	15	23	38	51	

# Fourth Stage:

No	Subject	No. of hours			Unite	Type of	
		Theoretical	Practical	Total	Units	Subject	
1	Medical devices 3	2	3	5	7	Specialty	
2	Control systems	2	2	4	6	Specialty	
3	Radiology devices	2	2	4	6	Specialty	
3	engineering						
4	Medical Laser systems	2	2	4	6	Specialty	
5	Optional Subject	2	2	4	6	Specialty	
6	Management	2	-	2	4	General	
7	Computer	1	1	2	3	4	Auxiliary
	Applications			2	0	4	Auxilialy
8	The Project	-	6	6	4	Specialty	
	Total	13	19	32	43		

#### The Laboratories:

#### First Stage

No. of Practical Hours	Name of the Laboratory
2	Medical Physics
3	Electrical Circuits
2	Medical Chemistry
4	Engineering Drawing
2	Computer Applications
4	Workshops (Electrical, Electronic, Mechanical)

# Second Stage

No. of Practical Hours	Name of the Laboratory
2	Anatomy and Physiology
2	Clinical Chemistry
3	Medical Instrumentation 1
3	Electronic Circuits
2	Digital Techniques
3	Measurements and Medical transducers
2	Computer Applications

# Third Stage

No. of Practical Hours	Name of the Laboratory
2	( Microprocessor and Microcontroller
2	Power Electronics
3	Medical Instrumentation II
2	Medical Communication Systems
2	Medical Electronic Systems
2	Computer Applications
2	Electrical Technology
2	Signal Processing

# Fourth Stage

No. of Practical Hours	Name of the Laboratory
3	(Medical Instrumentation III
2	Control Systems
2	Medical Laser System
2	Radiation Instruments
2	Computer Applications
2	Advanced Logic Design

#### Students Assessment Mechanism and Graduation Requirements

during the period of four years at the college, the students has to succeed in all units of one stage to pass to the other one until graduate with BSC in Medical Devices Technology. The student will be assessed through:

#### 1- Monthly and daily examinations

the performance of the students will be evaluated through conducting monthly and daily examinations, extracurricular activities and homework to determine the student annual pursuit, then a final exam will be conducted. The final degree for subjects that have Theoretical and Practical parts, will be divided into %50 for the Annual Pursuit and %50 for the final exam. whereas for theoretical subjects the annual pursuit will form only %40 and the Final exam will form %60 of the final degree. the teachers are authorized to repeat the termly exams in case of poor answers of some students as another opportunity to improve their annual pursuits. besides having the final exams in two rounds and in some cases in three rounds as per the Ministry authority

#### 2- Final Examinations

The final exam will form %60 of the final degree for the theoretical subjects and %50 for subjects that contain practical aspects. They will be conducted in accordance with time-tables to be performed by consulting the students according to the schedule disclosed at the beginning of the academic year (University Calendar) by the Ministry of Higher Education and Scientific Research. The exams are conducted using especial notebooks stamped by the Examination committee and in prepared halls. The Examination committee will hide the student name from the notebooks and labeling them with secret numbers before turning them over to the teachers for correction. the Committee will then audit the notebooks and fix the final degree.

#### 3- Summer Training:

The Summer Training is one of the important requirements to be accomplished by the student to be granted BSC Certificate. It is very important to have an actual practical life to improve the student ability in applying the theoretical subjects. a scientific supervisor will be assigned to follow up the attendance and performance of the student.

#### The Graduation Project:

The Final Year Project is one of the requirements that the student ought to pass at the final stage. the student got to complete the graduation research with the scientific supervisor who is assigned by the Department and has to discuss it. In case of failure to complete it during first and second round, the student is considered failure in the research and has to repeat the whole academic year to graduate

#### **Electronic Learning:**

Due to the current circumferences which witnessed by the whole world because of Corona Pandemic, the e-learning becomes necessary. therefore electronic classrooms were opened for the students via CLASSROOM program. The Students were registered to those classes

by the following up committee which is formed by the Department Director who follows up the classes together with Department rapporteur and quality assurance official