Radiotherapy Technologist Curriculum

Course name: B.Sc. of radiation therapy technology

Duration: 3 years (theoretical: 2 years, Practical:1 year)

Number of courses

- **General Education Courses:** According to the units of Damascus University
- **Dedicated Education courses:** 68
- **Clinical Practicum:** 24

  Total credits: 92

The B.Sc. in Radiation Therapy semester program

Course number	Course name	Credits	hour			Prerequisite
			Theory	practical	sum	
01	Computer	2	17	34	51	-
02	Mathematics	2	34	-	34	-
03	Physiology	3	34	34	68	-
04	Ethics and medical rules	2	34	-	34	-
05	Radiation physics	3	51	-	51	-
06	Radiotherapy equipment (external beam RT (EBRT), brachytherapy (BT), proton therapy (PT))	3	34	34	68	05
07	Anatomy of human body systems	3	34	34	68	-
08	Histology	4	34	68	102	-
09	Radiation protection	2	34	-	34	05
10	Radiobiology	3	51	-	51	05
11	Principles of calculations and treatment planning in radiation therapy	3	34	34	68	-
12	Medical terminology	2	34	-	34	-
13	Superficial and deep anatomy	2	17	34	51	07
14	General pathology	2	34	-	34	-
15	Basic and clinical dosimetry	3	34	34	68	-
16	Basics of Oncology	2	34	-	34	14
17	Pathology of malignant diseases	2	34	-	34	15

The B.Sc. in Radiation Therapy semester program

Course number	Course name	Credits	hour			Prerequisite
			Theory	practical	sum	
18	Cross-Sectional Anatomy	2	34	-	34	13
19	Medical imaging procedures (MRI, CT, Radiology)	3	34	34	68	-
20	Special procedures and techniques in radiotherapy	2	34	-	34	-
21	Treatment planning of new methods in radiotherapy	2	17	34	51	11
22	Simulation and localization	3	34	34	68	15
23	Clinical applications of radiation therapy 1	2	34	-	34	16
24	Clinical applications of radiation therapy 2	2	34	-	34	23
25	Brachytherapy techniques	1	17	-	17	23
26	Patient Care in Radiation Oncology	2	34	-	34	16
27	Psychology of cancer patients	2	34	-	34	-
28	Molding and Fixation	2	17	34	51	-
29	Quality control and quality assurance in radiation therapy	2	34	-	34	-
Total Credits		68				

The B.Sc. in Radiation Therapy semester program

First Semester		
Course number	**Course name**	**Credits**
01	Computer	2
02	Mathematics	2
03	Physiology	3
04	Ethics and medical rules	2
05	Radiation physics	3
06	Radiotherapy equipment (external beam RT (EBRT), brachytherapy (BT), proton therapy (PT))	3
07	Anatomy of human body systems	3
Total credits	**18**	

second semester		
Course number	**Course name**	**Credits**
08	Histology	4
09	Radiation protection	2
10	Radiobiology	3
11	Principles of calculations and treatment planning in radiation therapy	3
12	Medical terminology	2
13	Superficial and deep anatomy	2
14	General pathology	2
Sum of units	**18**	

The B.Sc. in Radiation Therapy semester program

Third semester		
Course number	**Course name**	**Credits**
15	Basic and clinical dosimetry	3
16	Basics of Oncology	2
17	Pathology of malignant diseases	2
18	Cross-Sectional Anatomy	2
19	medical imaging procedures (MRI, CT, Radiology)	3
20	Special procedures and techniques in radiotherapy	2
21	Treatment planning of new methods in radiotherapy	2
Total credits	**16**	

Fourth semester		
Course number	**Course name**	**Credits**
22	Simulation and localization	3
23	Clinical applications of radiation therapy 1	2
24	Clinical applications of radiation therapy 2	2
25	Brachytherapy techniques	1
26	Patient Care in Radiation Oncology	2
27	Psychology of cancer patients	2
28	Fixation and molding	2
29	Quality control and quality assurance in radiation therapy	2
Total credits	**16**	

The B.Sc. in Radiation Therapy semester program

Fifth semester		
Course number	**Course name**	**Credits**
30	Clinical Practicum I	12
Total credits	**12**	

Sixth semester		
Course number	**Course name**	**Credits**
31	Clinical Practicum II	12
Total credits	**12**	