Medical Nanotechnology
Degree: Master of Science (M.Sc.)

Table 1. Introductory Courses

Course Code	Title of the Course	Credits			Teaching Hours			Prerequisite courses
		Theoretical Credit	Practical Credit	Total Credits	Theoretical Hours	Practical Hours	Total Hours	
01	Medical Biochemistry	2	-	2	34	-	34	-
02	Quantum Physics	2	-	2	34	-	34	-
03	Molecular and Cell Biology	1.5	0.5	2	26	17	43	-
04	Instrumental analysis	1.5	0.5	2	26	17	43	-
05	Polymer	2	-	2	34	-	34	-
06	Introduction to Nanotechnology	2	-	3	51	-	51	-
07	Medical Information Systems	0.5	0.5	1	9	17	26	-
08	Chemistry	1.5	0.5	2	26	17	43	-
09	Biophysics	2	-	2	34	-	34	-
10	Basics of Microbiology and Immunology	3	-	3	51	-	51	-
11	Physiology	2	-	2	34	-	34	-
12	Fundamentals of Physiopathology	2	-	2	34	-	34	-
13	Pharmacology and Toxicology	2	-	2	34	-	34	-
Total				26				

*This course is compulsory to take for all students who had not taken the course previously.

Students should select up to a maximum of 24 credits from Table 1 in accordance with the regulations set by the supervisor and the post-graduate committee of the university.

Table 2. Core Courses

Course Code	Title of the Course	Credits			Teaching Hours			Prerequisite courses
		Theoretical Credit	Practical Credit	Total Credits	Theoretical Hours	Practical Hours	Total Hours	
14	Nanomaterials and Nanostructures	2	-	2	34	-	34	-
15	Methods of Nanostructure Fabrication	1	1	2	17	34	51	14
16	Characterization and Analysis	1.5	0.5	2	26	17	43	14
17	Nanobiotechnology	1.5	0.5	2	26	17	43	-
18	Nanomedicine 1	2	-	2	34	-	34	-
19	Nanomedicine 2	2	-	2	34	-	34	18
20	Nanosafety	2	-	2	34	-	34	18
21	Modeling at Nanoscale	1	1	2	17	34	51	-
22	Business Basics in Nanotechnology	1	1	2	17	34	51	-
23	Seminar	1	-	1	17	-	-	-
24	Thesis	-	-	6	-	-	-	-

Table 3. Non-core (Electives) Courses*

Course Code	Title of the Course	Credits			Teaching Hours			Prerequisite courses
		Theoretical Credit	Practical Credit	Total Credits	Theoretical Hours	Practical Hours	Total Hours	
25	Applications of Nanotechnology in Food Industries	2	-	2	34	-	34	-
26	Colloid and Interface Sciences	2	-	2	34	-	34	-
27	Advanced Biostatistics	2	-	2	34	-	34	-
28	Fundamentals of Animal Handling	0.5	0.5	1	9	17	26	-
29	Industrial Internship	-	2	2	-	102	102	
30	Drug Delivery Systems	1	-	1	17	17	17	-

Students should select 3 credits from table 3 in accordance to the regulations posed by the supervisor and post-graduate committee of the university.