

In the Name of God

Islamic Republic of Iran Ministry of Health and Medical Education Deputy Ministry for Education

Pharmaceutical Control Degree: Doctorate of Philosophy (PhD)

Total Course Credits:

Core: 21

Non-core: 6 out of 11

Thesis: 21

Total: 48

Program Description

With regard to the variety of pharmaceuticals including biopharmaceuticals, nutraceuticals, cosmeceuticals, herbal and hygienic products, specialized education in the fields of quality control and quality management of the mentioned products seems crucial. The program is a combination of course studies and research activities in the area of quality control of pharmaceuticals. The graduates will be qualified to teach at the university level and/or conduct research activities at the universities, research centers and pharmaceutical industry.

Aims and Objectives:

PhD program in pharmaceutical control aims at developing broad range of knowledge and skills in the students so that they become qualified to conduct quality control tests of pharmaceuticals and be involved in the area of quality management of pharmaceutical industries.

Admission Requirements

Candidates having Doctor of Pharmacy (PharmD) or MSc in the related fields awarded by one of the domestic or overseas universities approved by the Ministry of Health and Medical Education are considered eligible to sit for the written entrance examination.

Candidates must pass both written and oral entrance exam. They should also demonstrate proficiency in verbal and written English. Successful candidates will enter the program according to the PhD educational rules and regulations.*

*Important note: These general conditions do not necessarily exclude specific conditions of each institute or university.

Expected Competencies at the End of the Program

Expected General Competencies:*

Expected Specific Competencies (Skills & Performances):

- Being able to contribute to the production of higher quality pharmaceuticals and promotion of health care.
- Being qualified to interpret the test results.
- Being qualified to design new tests and conduct experiments.

Educational Strategies, Methods and Techniques*

Student Assessment

Methods of Assessment

Students will be evaluated by the following methods:

- Written; Verbal; Logbook-based assessment

Types of Assessment

- Periodic, Comprehensive (final), board exam, monitoring the progress and completion of the thesis

Ethical Considerations*

*Note: The related document(s) can be found at <http://hcmeq.behdasht.gov.ir/>

Tables of the Courses

Table 1: Compensatory courses

Code of the course	Title of the course	Number of credits			Total hours of the course			Prerequisite or concurrent courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
01	Medical Informatics Systems	0.5	0.5	1	9	17	26	-
02	Research Methodology in Medical Sciences	2	1	3	34	34	68	-
03	Educational Processes in Medical Sciences	1	1	2	17	34	51	-

Table 2. Core courses

Code of the course	Title of the course	Number of credits			Total hours of the course			Prerequisite or concurrent courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
04	Pharmaceutical Microbial Control	2	1	3	34	34	68	-
05	Quality Control of Biopharmaceuticals(1)	3	-	3	51	-	51	-
06	Quality Control of Biopharmaceuticals(2)	-	2	2	-	68	68	0.5
07	Pharmaceutical Safety and Efficacy	1	1	2	17	34	51	-
08	Pharmaceutical Process Validation	1	-	1	17	-	17	-
09	Advanced Physicochemical Control of Pharmaceuticals	2	1	3	34	34	68	-
10	Analytical Method Validation	2	-	2	34	-	34	-
11	Chemical Kinetic and Stability of Pharmaceuticals	2	-	2	34	-	34	-
12	Quality Control and Quality Assurance of Pharmaceuticals	3	-	3	51	-	51	-
13	Thesis	-	-	21	-	-	-	-

Table 3. Non-core courses

Code of the course	Title of the course	Number of credits			Total hours of the course			Prerequisite or concurrent courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
14	Advanced Statistical Methods (1)	2	1	3	34	34	68	-
15	Advanced Statistical Methods (2)	2	-	2	34	-	34	14
16	Quality Control of Vaccines	1	-	1	17	-	17	-
17	Quality Control of Hygienic and Cosmetic Products	1	-	1	17	-	17	-
18	Quality Control of Disinfectants	1	1	2	17	34	51	-
19	Pharmaceutical Organizations: Structures and Regulations	2	-	2	34	-	34	-

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