

**EDUCATION PROGRAM
PHARMACY
BACHELOR'S DEGREE**

Name of program : **Pharmacy education
program**

Education level : **Formal university education**

Major : **Pharmacy**

Program code : **7720201**

Training form : **Formal**

1. EDUCATION PROGRAM DESCRIPTION

The Pharmacy education program trains university pharmacists to have enough knowledge, skills, political qualities, ethics, professional behavior and good health to be able to work effectively in fields related to the pharmaceutical field.

2. DURATION: 5 years

3. CREDITS IN TOTAL:

Credits for total course: 165 credits (excluding Physical Education and National Defense - Security Education modules), distributed as follows:

Program structure	Credits
General education knowledge	48
Professional education knowledge	117
- Major base knowledge	32
- Major and specialization knowledge	73
- Internship, thesis, graduation essay	12
Total	165

4. PROGRAM CONTENT

4.1. General education knowledge:

No.	Course ID	Course name	Credits	Credit distribution		Cate gory
				Theo -ry	Pra-c tice	
A	Political Theory		11			
1	0102000889	Philosophy	3	3	0	
2	0102000641	Political economy	2	2	0	
3	0102000890	Scientific socialism	2	2	0	
4	0102000900	Ho Chi Minh's Ideology	2	2	0	
5	0102000869	History of the Communist Party of Vietnam	2	2	0	
B	Social Sciences and Humanities		4			
6	0102000891	General law	2	2	0	
7	0102000460	Pharmacy ethics	2	2	0	
C	Foreign language		9			
8	0102000861	Basic English 1	3	3	0	
9	0102000862	Basic English 2	3	3	0	
10	0102000422	English in Pharmacy	3	3	0	
D	Mathematics, Informatics, Natural Sciences		24			
11	0102001145	Medical Probability and statistics	3	3	0	
12	0102000896	Basic Informatics	3	2	1	
13	0102000543	Applied informatics (Pharmacy)	3	2	1	
14	0102000902	General physics	2	2	0	
15	0102000960	General Physics - Practice	1	0	1	
16	0102000275	General inorganic chemistry	2	2	0	
17	0102000277	General inorganic chemistry - Practice	1	0	1	
18	0102000892	General biology	2	2	0	

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-ctice	
19	0102000957	General Biology-Practice	1	0	1	
20	0102000262	Organic chemistry 1	2	2	0	
21	0102000953	Organic Chemistry 1-Practice	1	0	1	
22	0102000264	Organic chemistry 2	2	2	0	
23	0102000954	Organic Chemistry 2-Practice	1	0	1	
E	Physical education		3			
24	0102000872	Physical education 1 (*)	1	0	1	
25	0102000873	Physical education 2 (*)	1	0	1	
26	0102000874	Physical education 3 (*)	1	0	1	
F	National Defense Education		8			
27	0102000871	National Defense and Security Education (*)	8	5	3	

(*) For prerequisite courses, cumulative GPA is not calculated

4.2. Volume of professional education knowledge:

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-c tice	
Basic major knowledge section			30+2			
1	0102000434	Pathology	3	3	0	
2	0102000471	Physical chemistry	2	2	0	
3	0102000939	Physical chemistry - Practice	1	0	1	
4	0102000271	Analytical chemistry 1	2	2	0	
5	0102000950	Analytical chemistry 1-Practice	1	0	1	
6	0102000908	Analytical chemistry 2	2	2	0	
7	0102000951	Analytical chemistry 2-Practice	1	0	1	
8	0102000485	Biochemistry	2	2	0	

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-ctice	
9	0102000940	Biochemistry -Practice	1	0	1	
10	0102000496	Parasitology	1	1	0	
11	0102000955	Parasitology -Practice	1	0	1	
12	0102000524	Pharmaceutical scientific research methods	2	2	0	
13	0102000535	Physiologic	2	2	0	
14	0102000956	Physiologic - Practice	1	0	1	
15	0102000555	Pharmaceutical practice Pharmacognosy	1	0	1	
16	0102000556	Pharmaceutical practice Pharmaceutics	1	0	1	
17	0102000564	Botany	2	2	0	
18	0102000565	Botany - Practice	1	0	1	
19	0102000567	Microbiology	2	2	0	
20	0102000942	Microbiology - Practice	1	0	1	
21	0102000467	Anatomy	2	2	0	
22	0102000536	Pathophysiology - Immunology	2	2	0	
23	0102001702	Radiopharmaceuticals	2	2	0	
24	0102001703	Vaccines and medical biological products	2	2	0	
25	0102001704	Clinical Biochemistry	2	2	0	
26	0102001694	Clinical testing	2	2	0	
27	0102001695	Using medicine in treatment	2	2	0	
Specialized Knowledge Section			69+4			
28	0102000429	Pharmaceutics & Biopharmaceutics 1	2	2	0	
29	0102000948	(Pharmaceutics & Biopharmaceutics 1 -Practice	1	0	1	
30	0102000430	Pharmaceutics & Biopharmaceutics 2	3	2	1	

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-ctice	
31	0102000949	Pharmaceutics & Biopharmaceutics 2 - Practice	1	0	1	
32	0102000464	Toxicology	2	1	1	
33	0102000936	Toxicology - Practice	1	0	1	
34	0102000445	Pharmacokinetics	2	2	0	
35	0102000446	Traditional medicine	2	2	0	
36	0102000530	Traditional medicine- Practice	1	0	1	
37	0102000448	Clinical Pharmacy 1	2	2	0	
38	0102000449	Clinical Pharmacy 2	2	2	0	
39	0102000932	Clinical Pharmacy 2 -Practice	1	0	1	
40	0102000447	Clinical Pharmacy 3	2	2	0	
41	0102000931	Clinical Pharmacy 3- Practice	1	0	1	
42	0102000452	Pharmacognosy 1	2	2	0	
43	0102000933	Pharmacognosy 1-Practice	1	0	1	
44	0102000453	Pharmacognosy 2	3	3	0	
45	0102000934	Pharmacognosy 2-Practice	1	0	1	
46	0102000454	Pharmacology 1	2	2	0	
47	0102001163	Pharmacology 1- Practice	1	0	1	
48	0102000457	Pharmacology 2	3	3	0	
49	0102000935	Pharmacology 2-Practice	1	0	1	
50	0102000478	Pharmaceutical Chemistry 1	2	2	0	
51	0102000937	Pharmaceutical Chemistry 1-Practice	1	0	1	
52	0102000479	Pharmaceutical Chemistry 2	4	3	1	
53	0102000938	Pharmaceutical Chemistry 2-Practice	1	0	1	

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-ctice	
54	0102000489	Drugs quality control 1	2	2	0	
55	0102000943	Drugs quality control 1-Practice	1	0	1	
56	0102000490	Drugs quality control 2	2	2	0	
57	0102000944	Drugs quality control 2-Practice	1	0	1	
58	0102000518	Pharmaceutical law	3	3	0	
59	0102000529	Pharmaceutical production 1	5	3	2	
60	0102001528	Pharmaceutical production 1-Practice	2	0	2	
61	0102000530	Pharmaceutical production 2 -Practice	2	2	0	
62	0102000522	Research Methods in Pharmacognosy	2	2	0	
63	0102000946	Research Methods in Pharmacognosy -Practice	2	0	2	
64	0102001688	Cosmetics and functional foods	2	2	0	
65	0102001697	Nutrition in treatment	2	2	0	
66	0102001692	Pharmaceutical Packaging	2	2	0	
67	0102001696	Drug administration	2	2	0	
68	0102001689	Apply Nanotechnology in pharmaceutical production	2	2	0	
69	0102001691	Research and Development Methods for New Drugs	2	2	0	
70	0102001693	Hospital-acquired infections and antibiotic prophylaxis	2	2	0	
71	0102000441	New therapeutic systems	2	2	0	
72	0102000458	Sociopharmacology	2	2	0	
73	0102000492	Pharmaceutical economics	2	2	0	
74	0102000504	Marketing and pharmaceutical market	2	2	0	
75	0102000516	GPs group (GMP, GLP, GSP, GDP, GPP)	2	2	0	
Graduation internship			6			

No.	Course ID	Course name	Credits	Credit distribution		Category
				Theo-ry	Pra-ctice	
76	0102000527	Graduation practice 1: Medicine management and supply	2	0	2	
77	0102000532	Graduation practice 2: Medicine production	2	0	2	
78	0102001527	Graduation practice 3: Testing center	2	0	2	
Graduation thesis / Alternative subjects			6			
79	0102000497	Graduation thesis	6	6	0	
80	0102001460	Pharmaceutical care	2	2	0	
81	0102000463	Drug stability	2	2	0	
82	0102000533	Medicine Production from Pharmacognosy	2	2	0	
83	0102001690	Some instrumental analysis methods applied in drugs control	2	2	0	
84	0102001698	Cancer treatment medicine	2	2	0	
85	0102001699	Some diseases caused by drugs	2	2	0	
86	0102001700	Medicinal extraction techniques	2	2	0	
87	0102001701	Personalized medicine usage	2	2	0	
88	0102001705	Pharmacognosy quality control	2	2	0	

Rector

Faculty of Pharmacy