

**In the Name of God
Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy for Education**

**Nutritional Sciences
Degree: Bachelor of Science (BSc)**

Program Description

Nutrition, a sub-discipline of biomedical sciences that focuses on food and nutrition and its effect on health and overall wellbeing. A BSc in nutrition sciences is expected to identify nutritional problems and their causes at the individual and community levels and be able to plan and act to improve food and nutrition system through nutritional care services. This degree program includes a range of subjects, from physiology, biomedicine, food and nutrient metabolism up to physical, cultural, as well as socio-economical factors affecting food choice, access and consumption and the epidemiology of malnutrition.

Nutritional science examines the connections between diet and health, with an emphasis on optimizing eating habits to meet an individual's nutritional needs. Bachelor's programs in nutritional sciences synthesize biology, chemistry, and social science, and trains students to analyze how food and medicine affect the body.

The main purpose of training a Bachelor of Science in nutrition is to prepare professionals with theoretical and practical skills to maintain and improve nutritional status of the community members in health and diseases.

Admission Requirements

Holding a high school diploma is the minimum requirement for admission.

Opportunities for nutritional sciences Bachelors:

Nutritionists in different departments, including Health, Education, Agriculture, etc.

Dietitians in health care centers and hospitals

Fitness Trainers and Instructors

Food service managements

Total Course Credits

- Basic
- Compensatory
- Core/specialized
- Practicum

BSc. In Nutritional Sciences, curriculum

Fundamental modules

CODE	UNIT NAME	NO. OF UNITS			NO. OF HRS			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
12	Study research and applications	1	0	1	17	0	17	-
13	Basic biochemistry	2	1	3	34	34	68	-
14	Physiology I	2	0	2	34	0	34	-
15	Physiology II	2	0	2	34	0	34	-
16	Anatomy	1	0	1	17	0	17	-
17	Introduction to Statistics	2	0	2	34	0	34	-
18	General psychology	2	0	2	34	0	34	-
19	Introduction to applied sociology	2	0	2	34	0	34	-
20	Principles of Epidemiology	2	0	2	34	0	34	-
21	Principle of Public Health	2	0	2	34	0	34	-
22	Medical parasitology	1	0	1	17	0	17	-
23	Medical Microbiology	1	1	2	17	34	51	-
Total		22						

BSc. In Nutritional Sciences, curriculum

Core modules

CODE	UNIT NAME	NO. OF UNITS			NO. OF HRS			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
24	Food chemistry	1	1	2	17	34	51	13
25	Food microbiology	1	1	2	17	34	51	23
26	Food safety	2	0	2	34	0	34	22, 23
27	Food preservation	1	0	1	17	0	17	24, 25
28	Food processing and preservation	1	0	1	17	0	17	24
29	Biochemistry of Metabolism	3	1	4	34	51	85	13
30	An Introduction to Immunology	1	0	1	17	0	17	-
31	Medical terminology	1	0	1	17	0	17	07
32	Nutrition terminology	2	0	2	34	0	34	-
33	Pathophysiology I	2	0	2	34	0	34	31
34	Pathophysiology II	1	0	1	17	0	17	33
35	Basic nutrition I	2	0	2	34	0	34	29
36	Basic nutrition II	3	0	3	51	0	51	29
37	Nutritional physiology	2	0	2	34	0	34	35, 36
38	An Introduction to diet planning	1	0	1	17	0	17	35, 36
39	Pharmacology	2	0	2	34	0	34	29, 31
40	Food and drug interactions	1	0	1	17	0	17	39
41	Dietary supplements	1	0	1	17	0	17	39
42	Food service systems management	1	1	2	34	17	51	35, 36

43	Computer application in nutrition	0	1	1	0	34	34	38
44	Ecology of food and nutrition	1	0	1	17	0	17	35, 36
45	Nutrition and genetics	1	0	1	17	0	17	35, 36
46	Nutritional assessment methods	2	1	3	34	34	68	35, 36
47	Disease related malnutrition	2	0	2	34	0	34	35, 36, 46
48	Nutrition through the lifecycle	3	0	3	51	0	51	35, 36, 38
49	Nutrition for vulnerable groups	2	0	2	34	0	34	38, 46
50	Nutrition education and counseling skills	1	1	2	17	34	51	18, 19, 48
51	Planning Community Nutrition programs	2	0	2	34	0	34	20, 50
52	Nutrition and primary health care services	2	0	2	34	0	34	46
53	Nutrition research techniques	1	0	1	17	0	17	17, 20
54	Diet therapy I	2	0	2	34	0	34	38
55	Diet therapy II	2	0	2	34	0	34	38
56	Diet therapy III	2	0	2	34	0	34	54, 55
57	Diet therapy IV	2	0	2	34	0	34	54, 55
58	An Introduction to interpretation of paraclinical data	1	0	1	17	0	17	46
59	Seminar	0	1	1	0	34	34	35, 36, 46
60	Project dissertation	0	2	2	0	68	68	53
Total		66						

BSc. In Nutritional Sciences, curriculum

Internships in industrial and clinical setting

CODE	INTERNSHIP	UNIT NAME				NO. OF HRS				Prerequisite
		Theoretical	Practical	Internship	Total	Theoretical	Practical	Internship	Total	
61	Food industries									
	Meat and Oil industries	0	0	3	3	0	0	153	153	-
	Cereal and Dairy products industries	0	0	3	3	0	0	153	153	-
	Soft drinks and canning industries	0	0	3	3	0	0	153	153	-
	Food and Drug Administration(FDA)-Iranian Standard Organization(ISO)	0	0	3	3	0	0	153	153	-
62	Applied Nutrition in PHC and community health centers									
	PHC in rural setting	0	0	2	2	0	0	102	102	-
	PHC in urban setting	0	0	2	2	0	0	102	102	-
	Municipal health centers	0	0	2	2	0	0	102	102	-
63	Clinical nutrition in hospitals									
	Food management system	0	0	1	1	0	0	51	51	-
	Paraclinical lab	0	0	1	1	0	0	51	51	-
	Pediatric Unit	0	0	1	1	0	0	51	51	-
	Outpatient counseling services	0	0	1	1	0	0	51	51	
	Gastrointestinal Unit	0	0	1	1	0	0	51	51	
	Cardiovascular & CCU Unit	0	0	1	1	0	0	51	51	
	Endocrine & Diabetes Unit	0	0	1	1	0	0	51	51	
	Surgery and ICU Unit	0	0	1	1	0	0	51	51	
	Renal Unit	0	0	1	1	0	0	51	51	
	Total	18								