

**In the Name of God**

**National Nutrition and Food Technology Research Institute**

**Faculty of Nutrition Sciences and Food Technology**

**Food Science & Technology (Quality Control), MSc Degree**

**Total Course Credits:**

- Core: 17**
- Non-core (Electives):14**
- Thesis (MSc):6**

**Program Description**

Food science and technology is a branch of applied science in which the graduates get familiar with the latest scientific and applied achievements in food safety and quality control. They can play an effective role in producing safe food products with better quality and the least wastes.

This field of study benefits from many disciplines such as chemistry, biochemistry, biology, and engineering to better understand food properties and processes conditions .Its ultimate goal is improving food products quality, developing safe and nutritious foods and introducing innovative packaging. The graduates will be able to conduct researches in various scientific fields including food safety and hygiene, food microbiology and biochemistry, dairy products, cereals, fats and oils, meats and sea foods.

**Admission Requirements**

Holding a bachelor's degree in Food Science and Technology (different branches), Agricultural Engineering (the branch of Food Science and Technology), nutritional sciences, Chemistry, Chemistry Engineering, Doctor of Medicine, Pharm-D or Doctor of Veterinary Medicine

- Being eligible for entering the program according to the MSc educational rules and regulations.

**Table A: Compensatory courses in Food Science and Technology (Food Quality Control & Hygiene)**

CODE	UNIT NAME	NO. OF UNITS	NO. OF HRS			Prerequisite
			Theoretical	Practical	Total	
1	Principles of medical communication and computer applications	1	9	17	26	-

**Table B: Basic courses in Food Science and Technology (Food Quality Control & Hygiene)**

<b>CODE</b>	<b>UNIT NAME</b>	<b>NO. OF UNITS</b>	<b>NO. OF HRS</b>			<b>Prerequisite</b>
			<b>Theoretical</b>	<b>Practical</b>	<b>Total</b>	
<b>02</b>	Advanced Food Chemistry	2	34	-	34	-
<b>03</b>	Advanced Food Microbiology	3	34	34	64	-
<b>04</b>	Advanced Food Science and technology engineering	2	34	-	34	-
<b>05</b>	Advanced mechanical engineering	2	17	34	51	-
<b>Total</b>			<b>9</b>			

**Table C: Core courses in Food Science and Technology (Food Quality Control & Hygiene)**

<b>CODE</b>	<b>UNIT NAME</b>	<b>NO. OF UNITS</b>	<b>NO. OF HRS</b>			<b>Prerequisite</b>
			<b>Theoretical</b>	<b>Practical</b>	<b>Total</b>	
<b>06</b>	Advanced Food Processing	3	51	-	51	-
<b>07</b>	Laboratory quality assurance plan	3	51	-	51	-
<b>08</b>	Advanced Food Biotechnology	2	34	-	34	-
<b>09</b>	Seminar	1	17	-	17	-
<b>10</b>	The application of enzymes in food preparation	2	34	-	34	-
<b>11</b>	Thesis	6	-	-	-	-
<b>Total</b>			<b>17</b>			

**Table D: Non-Core courses in Food Science and Technology (Food Quality Control & Hygiene)**

<b>CODE</b>	<b>UNIT NAME</b>	<b>NO. OF UNITS</b>	<b>NO. OF HRS</b>			<b>Prerequisite</b>
			<b>Theoretical</b>	<b>Practical</b>	<b>Total</b>	
<b>12</b>	Advanced Grain Science and cereal technology	2	34	-	34	-
<b>13</b>	Advance Milk and dairy technology	2	34	-	34	-
<b>14</b>	Advanced Technology of meat, fish and poultry products	2	34	-	34	-
<b>15</b>	Advanced Oil and oilseed technology	2	34	-	34	-
<b>16</b>	Advanced canning and conservation technology	2	34	-	34	-
<b>17</b>	Food quality and safety management	2	34	-	34	-
<b>18</b>	Professional topics in food science and technology	1	34	-	34	-
<b>Total</b>			<b>14</b>			