In the Name of God

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

Food Safety and Hygiene

Degree: Master of Science (M.Sc.)

Total Course Credits

• Core: 20

• Non-core (Electives): 4-6

• Thesis (MSc): 6

Program Description

The field of Food Hygiene and Safety is intended to provide safe and healthy food, from production to consumption, for community members, and prevent complications caused by food additives and industrial materials.

The overall goal of Food Safety and Hygiene is to enable the graduates to perform necessary tests, interpret their results, identify food hazards, and implement appropriate methods to prevent food borne illnesses; the graduates are armed with the knowledge and skills of adopting new effective methods to enhance the quality of food.

Admission Requirements

- Meeting the general requirements for admission to master program, introduced by Iran's Ministry of Health and Medical Education
- Taking part in the Entrance Exam for a master degree, administered by the Ministry of Health and Medical Education
- Holding a bachelor degree in one of the fields of food science (nutritional science, food technology, with a focus on food quality control and hygiene), environmental health, public health, microbiology, and laboratory sciences; or having a general doctorate in medicine (MD), or a master degree in laboratory sciences

The subjects that are included in the Entrance Exam are indicated in the box below.

Examination Subjects

| Type of Subject | Weight |
|---------------------------------------|--------|
| Food microbiology | 2 |
| Essentials of food preservation | 2 |
| Food biochemistry | 2 |
| Essentials of food safety and hygiene | 2 |
| General English | 10 |

Expected Competencies at the End of the Program

General Competencies*

Specific Competencies and Skills

At the end of the program learners will be competent in the following skills:

- Instructing students of food science at bachelor level
- Dealing with issues and questions related to food safety hygiene
- Imparting scientific knowledge about the significance of food and hazards of unhealthy food to the society
- Performing applied research on food safety and hygiene
- Developing research projects to elevate nutrition standards
- Cooperating with food quality control centers
- Cooperating with national and international bodies to administer programs on food safety and hygiene

Educational Strategies, Methods and Techniques*

Student Assessment (Methods and Types)

- Formative (Quizzes and Midterm Exam)
- Summative (Final Exam)

Ethical Considerations*

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

Tables of the Courses

Table 1. Core Courses

| Code of the | Title of the Course | Credits | | | Teaching Hours | | |
|-------------|--|-------------|-----------|-------|----------------|-----------|-------|
| Course | | Theoretical | Practical | Total | Theoretical | Practical | Total |
| 1 | Microbiological Safety and Quality of Food | 2 | 1 | 3 | 34 | 34 | 68 |
| 2 | Chemical Safety of Food | 2 | 1 | 3 | 34 | 34 | 68 |
| 3 | Health and Safety of Milk and Milk Products | 1 | 1 | 2 | 17 | 34 | 51 |
| 4 | Safety and Quality of Meat and Milk Products | 2 | - | 2 | 34 | - | 34 |
| 5 | Cereal, Fruits and Vegetables Safety | 2 | - | 2 | 34 | - | 34 |
| 6 | Environmental Contamination of Food | 1 | 1 | 2 | 17 | 34 | 51 |
| 7 | Food Safety Management Systems | 1 | 1 | 2 | 17 | 34 | 51 |
| 8 | Food Sampling Methods | 2 | - | 2 | 34 | - | 34 |
| 9 | Seminar | - | 1 | 1 | - | 34 | 34 |
| 10 | Project | - | 1 | 1 | - | 34 | 34 |
| 11 | Thesis | - | - | 6 | - | - | - |
| 12 | Total | 13 | 7 | 26 | 221 | 238 | 459 |

Table 2. Non-Core Courses

| Code of the | Title of the Course | Credits | | | Teaching Hours | | |
|-------------|--|-------------|-----------|-------|----------------|-----------|-------|
| Course | | Theoretical | Practical | Total | Theoretical | Practical | Total |
| 1 | Epidemiology and Risk Assessment Methods | 2 | - | 2 | 34 | - | 34 |
| 2 | Health and Food Safety in an Emergency | 2 | - | 2 | 34 | - | 34 |
| 3 | Food Standards and Regulations | 2 | - | 2 | 34 | - | 34 |
| 4 | Food Hazards Informing | 2 | - | 2 | 34 | - | 34 |
| 5 | Environmental Health in Good | 2 | - | 2 | 34 | - | 34 |
| 6 | Safety and Quality of Drinking Water | 2 | - | 2 | 34 | - | 34 |
| 7 | Total | 12 | - | 12 | 204 | - | 204 |

Students must successfully complete 4 to 6 credits of the non-core courses above, depending on the subject of their thesis that should be endorsed by the supervisor and approved by the Postgraduate Education Council

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