

In the Name of God

**Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy Minister of Education
Master's Degree
In Neonatal Intensive Care Nursing**

Total Course Credits:

Basic Courses: 4

Elective Courses: 2

Core Courses: 28 (8.5 credits of Clinical internship and 1 credits clinical practice)

Thesis: 4

Total: 36

Course duration:

It is in accordance with the regulations of the non-continuous master's degree program approved by the Supreme Council for Medical Sciences Planning.

Program Description

Introduction: In neonatal intensive care units, the doctors and nurses and health care professionals in general are responsible for maintaining and improving the health of infants and their families not just treating their diseases. Therefore, health professionals, especially nurses who spend most of their time in the neonatal intensive care units, should not only make an effort to improve their knowledge and skills, but pay attention to all aspects of the patients' health and wellbeing including mental and social.

Definition of the Field: Neonatal intensive care nurse is a knowledgeable and skillful professional who, as an active member of multidisciplinary team, is responsible for the delivery of high quality holistic care to premature/ critically ill infants. Neonatal intensive care nurse uses his/her knowledge and skills to; prevent premature birth complications, promote health, support infants and their families, help rehabilitation process and provide safe and comfortable environment for infants who need intensive care. NICU nurses offer automated and cooperative infant management in neonatal intensive care unit (NICU) and take charge of care delivery for infants under their care. Providing health care requires experience in; clinical assessment, study of prenatal history of each infant, laboratory results and coordination of diagnosis and treatment interventions. NICU nurses maintain and improve their skills and knowledge by continues education (theory and practical) and research in the field of neonatal intensive care units. They are also able to educate and support families of infants at risk in an emergency and normal situation

Values: The philosophy of the Nursing Management field is to uphold high human values in the path of enhancing the quality of nursing care and meeting the physical, psychological, social, and spiritual needs of clients. In this regard, optimizing the nursing process to improve service quality, reduce healthcare system costs, enhance nurses' competencies, improve the quality of life of nursing

staff, and increase client satisfaction is achieved through the application of professional judgment in planning, organizing, leading, and controlling nursing services in a safe and comprehensive manner.

This program emphasizes the following values:

- Adherence to justice and social, ethical, religious, and Islamic values.
- efficiency in clinical practice (clinical proficiency)
- Providing quality care to infants and families.
- Providing developmental care to infants.
- Adherence to ethical and legal principles consistent with the dignity and status of the profession.
- Professionalism in nursing.
- Teamwork and professional collaboration.
- Lifelong learning.
- Professional accountability.
- Transparency and honesty in performing duties.
- Ensuring the health and safety of infants, families, and colleagues.
- Achieving independence and advanced skills in care.
- Community-oriented and holistic view.

Vision: It is expected that with the expansion of neonatal intensive care units, in the next 10 years in the country, at least 10% of nurses in neonatal and neonatal intensive care units will be graduates with a master's degree in neonatal intensive care nursing. The knowledge and skills of neonatal intensive care nurses will reach an acceptable level across the country based on global standards. Through the implementation of managerial, educational, and research measures in caring for critically ill newborns, by minimizing neonatal mortality, we aim to achieve a superior level of care in the region.

Mission: Training professional nurses who are aware of practical daily issues and efficient in implementing clinical care, capable, responsible, and sensitive to the health of individuals and society in the field of care and their families based on family-centered care. Also, education and research in this field is to provide their expertise in care areas to the community and ultimately reduce mortality and complications from diseases in hospitalized infants in neonatal intensive care units according to higher standards will be the mission of this course.

Admission Requirements:

Admission to this field is subject to the regulations and policies of the Ministry of Health, Treatment, and Medical Education. Candidates applying for the Master's (Non-Continuous) Program in Nursing Management must meet the general eligibility criteria in addition to the following specific requirements:

- Holding a Bachelor's degree in Nursing (continuous program) obtained from domestic or international institutions recognized by the Ministry of Health, Treatment, and Medical Education.
- Successfully passing the entrance exam for the Master's (Non-Continuous) Program.

For the latest updates regarding accepted academic degrees, exam subjects, and entrance exam weightings for each academic year, applicants should refer to the official Master's Entrance Exam Guide for Medical Sciences Programs of the respective year.

Roles of Graduates in Society:

Graduates of this field will serve in the following roles within society:

- Neonatal and neonatal intensive care units in public and private hospitals
- Emergency centers and private and public ambulance services (including neonatal transfer teams).
- Developmental clinics and follow-up centers
- Educator
- Researcher
- Counseling centers and providing home nursing care.
- Producer (Entrepreneur)

The Aims of the Course:

The main aim of the program is to train and educate nurses who have required knowledge, vision and ability in the care of critically-ill infants, as well as abilities including; professional behavior, communication skills, information technology, continuous self-learning, research, management, promote quality control, problem solving, and commendation, etc.

Expected Competencies at the End of the Program:

General Competencies¹:

Communication skills, interviewing, reporting, critical thinking, professionalism as well as

- Concepts and theories in nursing
- Evidence-based practice
- Research methodology in nursing
- Statistics for nursing research

Specific Competencies and Skills:

- To deliver skilled and evidenced-based nursing care and intervention for patients who need intensive care.
- To assess patients non-invasively and help invasive assessment of patients in neonatal intensive care units.
- To interpret and analyze clinical data
- Acquiring qualifications for conducting applied researches and employing the findings to solve nursing problems in the care of patients.

1. General competencies expected of the graduates such as communication skills, critical thinking & problem-solving skills, professionalism

Educational Strategies¹, Teaching & Learning Methods² (aligned with the expected competencies):

This program is based on the following strategies:

- Task-based education / Learning by doing
- Blended learning (attendance and DLN)
- Student-centered learning
- Problem-based learning
- Community-oriented learning
- Subject-directed learning
- Evidence-based learning
- Portfolio development-based learning
- Holistic learning
- Competency-based professional learning
- Participative learning

Educational Methods and Techniques:

This course will primarily utilize the following educational methods and techniques:

- Seminars and conferences at intra-departmental, interdisciplinary, and inter-university levels
- Small group discussions, workshops, journal clubs, and case presentations
- In-person training at hospitals, comprehensive health service centers/bases, and other nursing management service settings
- Virtual training using educational videos, scenarios, and demonstrations
- Use of distance learning and simulation techniques as available
- Participation in training lower levels of nursing staff
- Self-education (self-education, self-study)
- Scientific visits to healthcare centers with unique programs and successful managers
- Practical and clinical training (workshops on operational projects in the healthcare sector (HSR) in hospitals, nursing decision-making centers, and other healthcare, educational, and research institutions)
- Scientific visits and analysis of the structures of professional nursing organizations and institutions
- Other educational methods and techniques as needed and based on educational objectives

Student Assessment Types and Methods (aligned with the expected competencies):

A - Assessment Methods:

Students will be assessed using the following methods:

- Written Tests
- Oral Tests
- Computer Interaction Tests
- 360-Degree Feedback

1. Educational Strategies such as Problem-Based Education, Discipline-Based Education, Hospital- Based Education, Community-Based Education, Electives, Student-Centered Education, etc.

2. Teaching & Learning Methods such as Interactive Lecture (questions and answers, group discussions, etc.), Small Group Discussion, Role Play, Guided Discovery Learning, Team-Based Learning (TBL), Problem-Based Learning (PBL), Case-Based Learning, Peer Education, etc.

- Portfolio Assessment
- Anecdotal Evaluation
- Objective Structured Clinical Examinations (OSCE)
- Direct Observation of Procedural Skills (DOPS)
- Mini Clinical Evaluation Exercise (Mini-CEX)
- Project-Based Assessment
- Workshop-Related Documentation

Portfolio Assessment includes the evaluation of the Logbook, results of conducted tests, published articles, commendations and warnings, work completion certificates, and other related documents.

B - Frequency of Assessment:

Assessments will be conducted continuously, periodically, and at the final stage, as follows:

- Intra-group assessments will be managed by the educational group.
- Assessments based on specific and case-specific needs will also be conducted.

The overall structure of the course:

Basic Courses/ Compensatory Courses (4 Credits)

Code	Course Title	Course Credits			Credit Hours			Prerequisite
		Total	Theoretical	Practical	Total	Theoretical	Practical	
01	Medical Information Systems ¹	1	0.5	0.5	26	9	17	-
02	Advanced Statistics and Research Methodology	3	2	1	68	34	34	-
Total		4						
<p>¹. Taking this course is mandatory as a remedial or deficiency course only for students who did not complete it at the undergraduate level.</p>								

Core Courses (26 Credits)

Code	Course Title	Course Credits					Credit Hours					Prerequisite
		Total	Theoretical	Practical	Clinical practice	Internship Courses	Total	Theoretical	Practical	Clinical practice	Internship Courses	
03	An introduction to neonatal intensive care nursing	2	2	-	-	-	34	34	-	-	-	-
04	General overview of family and infant assessment	1	-	-	-	1	51	-	-	-	51	-

05	Embryology and genetics	1	1	-	-	-	17	17	-	-	-	-
06	Principles of neonatal intensive care 1	2.5	1,0	-	-	1	77	26	-	-	51	03
07	Developmental support and family-centered care	1	1	-	-	-	17	17	-	-	-	-
08	Theories in Neonatal nursing	1	1	-	-	-	17	17	-	-	-	-
09	Ethics and Law in neonatal Nursing	1	1	-	-	-	17	17	-	-	-	-
10	Neonatal pharmacology	1.5	1	-	-	0.5	43	17	-	-	26	-
11	Review of Common procedures	1	-	-	1	-	34	-	-	34	-	-
12	Principles of neonatal intensive care 2	3	2	-	-	1	85	34	-	-	51	03, 06
13	Principles of Management and Leadership Theories	1	1	-	-	-	17	17	-	-	-	-
14	Advanced Management and care of neonates 1	3	2	-	-	1	85	34	-	-	51	06, 12
15	Advanced Management and care of neonates 2	4	2	-	-	2	136	34	-	-	102	14
16	Advanced	5	2	-	-	3	187	34	-	-	153	15

Management and care of neonates 3												
Total	28											

Clinical practice:

Code of the Course	Name of the Course	Credits	Teaching Hours
11	Review of Common procedures	1	34

Internship Courses:

Code of the Course	Name of the Course	Credits	Teaching Hours
04	General overview of family and infant assessment	1	51
10	Neonatal pharmacology	0.5	26
06	Principles of neonatal intensive care 1	1	51
12	Principles of neonatal intensive care 2	1	51
14	Advanced Management and care of neonates 1	1	51
15	Advanced Management and care of neonates 2	2	102
16	Advanced Management and care of neonates 3	3	153