

In the Name of God

**Islamic Republic of Iran
Ministry of Health and Medical Education
Deputy Minister of Education**

**Bachelor's/Master's Combined Degree
In Critical care Nursing Department**

Total Course Credits:

General Courses: 12
Basic Courses:12
Elective Courses:2
Core Courses:30
Clinical practice:8.5
Clinical internship:4
Thesis: 4
Total: 32

Course duration:

Maximum 3 years

Program Description:

Critical care nursing is a subspecialty of nursing program, which deals with life-threatening conditions and advanced interventions. Critical care nurses as professional nurses are responsible for delivering high quality care to critically ill patients and their families.

The graduates of this program will be working in one of the following positions:

- Critical care units in hospitals such as ICU, CCU hemodialysis unit, emergency unit, transplant unit, etc.
- Critical care unit in hospice
- Acute palliative care centers
- Research centers and knowledge-based companies, and technology developing centers
- Other fields that require critical care nursing
- Provision of critical care nursing as home care

Introduction:

The current program has been developed in accordance with recent scientific advances and in line with the needs of society. In developing this program, an effort has been made to maintain

the generality of nursing care and develop professional ethics, while educating students who will provide competent and quality services to society in the field of nursing activities.

Admission Requirements:

- A. Having a Bachelor's degree in nursing, anesthetic, operating room technician from national or international universities approved by Ministry of Health and Medical Education.
- B. Having two years of work experience in clinical setting with BSc certificate on hospital wards or operating room.

Roles of Graduates in Society:

Graduates of this field can play a role in society in the following positions:

- Hospitals
- Home nursing care and counseling centers
- Palliative care centers
- Pre-hospital emergency rooms
- Adult care centers and nursing homes

The Aims of the Course:

Provide specialized nursing care based on the nursing process.

- Collaborate and participate in research programs.
- In an educational role, they are responsible for planning, implementing, and evaluating the - education of learners (colleagues, clients, and families).
- Participate in the development of policies related to the promotion of adult health.

Expected Competencies at the End of the Program:

General Competencies¹:

- Teaching and education skills
- Cognitive skills
- Communication and negotiation skills
- Managerial skills
- Research skills
- Using care models
- Team working and inter-professional skills
- Critical thinking and problem-solving skills
- Evidence-based performance skills
- Professionalism

Specific Competencies and Skills:

Graduates of this program have several roles such as caring, educational, research, supportive, counseling and management roles.

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

1. Caring role

- Providing nursing care and implementing necessary nursing interventions for critically ill patients.
- Performing necessary assessments (non-invasive) and helping invasive assessment for patients in critical care units.
- Interpreting and analyzing collected data on patients who require critical care.
- Applying professional behaviors and regulations in interaction with colleagues, patients, their family and companions.

2. Educational role

- Continues updating of knowledge and skills of colleagues by using conventional teaching methods
- Train other staff how to care for critically ill patients
- Provide necessary trainings to patient and his/her companion and family in critical care units

3. Research role

- Designing and conducting practical research on existing problems and challenges in critical care units.
- Producing evidence and articles in valid sources regarding the care of critically ill patients.
- Conducting joint research projects with other research institutions and providing evidence that can be generalized to the whole country.
- Contacting the existing research centers in the country and abroad that work in the field of caring for critically ill patients.

Management role:

- Analyzing the system of nursing care delivered to critically ill patients in critical care units.
- Promoting the delivery of nursing care to critically ill patients through design and implementation of interventions.
- Using managerial methods and tools to promote factors affecting nursing care and reduction of mortality, morbidity and complications of critically ill patients.

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

This program is based on the following strategies:

- Task-based education
- Problem-based education
- Subject-based education
- Evidence-based education

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.

- Professional competence-based education
- Service delivery-based education
- Learning with holistic approach
- Self-guided learning
- Community-oriented education
- Hospital based education
- Systematic education

Teaching methods and techniques:

In this program, following teaching methods and techniques are mainly used:

- Types of intra-sectoral, inter-sectoral, hospital, inter-programs, and inter-university conferences
- Small group discussion, educational workshops, journal club, book reading, and case presentation
- Morning report, educational and occupational rounds, out-patient teaching, operating room teaching, lab room
- Use of simulation techniques and distance teaching depending on facilities
- Participation in the teaching of junior students
- Self-guided education / study
- Other methods and techniques according to the needs and programs objectives

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

Formative Assessment:

A) Assessment method:

Students will be assessed by following methods:

- Written
- Orally
- Interactive computer assessment
- 360° exam
- OSCE (objective structured clinical examination)
- DOPS (direct observation of procedural skills)
- Project based assessment

B) Portfolio and logbook assessment, exams result, articles, encouragements, notices (warnings)

Summative Assessment:

- OSCE/ OSPE/ OSFE
- 360-degree feedback
- Port Folio
- Log book

The overall structure of the course:

Deficiency or Compensatory Courses (12 Credits)

Code	Course Title	Course Credits			Credit Hours			Prerequisite
		Total	Theoretical	Practical	Total	Theoretical	Practical	
01	Information technology systems in medicine	1	0.5	0.5	26	9	17	-
02	Advanced research methodology	1.5	1		34	17	17	-
03	Statistics	1.5	1	0.5	34	17	17	-
04	Diagnostic Evaluations	1	1	-	17	17	-	-
05*	Basic concepts in nursing	2	2	-	34	34	-	-
06*	Medical-surgical	3	3	-	51	51	-	-
07*	Medical-surgical practicum	2	-	2	102	-	102	04, 08
Total		12						

Completion of modules in the lines 1 to 4 (for 5 units) is compulsory for all students as compensatory modules.
 (*): Completion of these modules is compulsory for non-nursing students (BSc in anesthetic or operating room) as compensatory modules based on the educational description of MSc program for critical care nursing.

Core Courses (26 Credits)

Co de	Course Title	Course Credits			Credit Hours			Prerequisite
		Total	Theoretical	Practical	Total	Theoretical	Practical	

08	Nursing ethics, law and professional relationships	1	1	-	17	17	-	-
09	Theories, models and concepts of critical care nursing	1.5	1.5	-	26	26	-	-
10	Methods of patient and family education	1	0.5	0.5	26	9	17	-
11	Pharmacology in Intensive care	1	1	-	17	17	-	-
12	Principles of critical care nursing	2	2	-	34	34	-	-
13	Critical care of respiratory system	1.5	1.5	-	26	26	-	04,11,12
14	Practicum for critical care of respiratory system	1	-	1	51	-	51	04,11,12, 13
15	Critical care for cardiovascular system	1.5	1.5	-	26	26	-	04, 11, 12
16	Practicum of critical care for cardiovascular system	1	-	1	51	-	51	04, 11, 12, 17
17	Neurological/psychological care	1.5	1.5	-	26	-	26	04, 11, 12
18	Practicum of Neurological /psychological care	1	-	1	51	-	51	04, 11, 12, 17
19	Critical care for gastrointestinal system and abdominal surgery	1	1	-	-	17	17	04, 11, 12
20	Critical care for kidneys, urologic system and dialysis	1	1	-	-	17	17	04, 11, 12
21	Practicum of Critical care for kidney, urinary tract and dialysis	0.5	-	0.5	26	-	26	04, 11, 12, 20

22	Critical care of endocrine system	0.9	0.9	-	9	9	-	04, 11, 12
23	Critical care of multi organ failures and patients with specific needs	2	2	-	34	-	34	04, 11, 12
24	Critical care of multi organ failures practicum	1	-	1	51	-	51	
25	Internship	6	-	6	408	-	408	All modules
26	Dissertation	4	4	-	-	-	-	All modules
Total		30						

Elective Courses/ none-core Courses (2 Credits)

Code	Course Title	Course Credits			Credit Hours			Prerequisite
		Total	Theoretical	Practical	Total	Theoretical	Practical	
27	Specialized care in open heart ICU	2	-	2	102	-	102	All modules
28	Specialized care in neurosurgery ICU	2	-	2	102	-	102	All modules
29	Specialized care in surgical ICU	2	-	2	102	-	102	All modules
30	Specialized care in trauma ICU	2	-	2	102	-	102	All modules
31	Specialized care in medical ICU	2	-	2	102	-	102	All modules
32	Specialized care in CCU	2	-	2	102	-	102	All modules
33	Specialized care in hemodialysis unit	2	-	2	102	-	102	All modules
34	Specialized care in emergency ward	2	-	2	102	-	102	All modules
35	Management of critical care unit	2	-	2	102	-	102	All modules
36	Specialized care in	2	-	2	102	-	102	All modules

	respiratory ICU							
37	Specialized care in obstetric wards	2	-	2	102	-	102	All modules
38	Specialized care in burn ICU	2	-	2	102	-	102	All modules
Total		24						

* Students must complete two units of above modules according to their subject of dissertation, agreement of their supervisor and confirmation of higher education council.

Title of educational workshops needed

Educational term	Title of workshop	Hour/s
Workshops of term 1	Documentation in critical care units	6
	Infection control and patient safety	12
Workshops of term 2	ACLS	12
	Management of critical care units	12
Workshops of term 3	Service quality and accreditation	6
	Evidence-based nursing	6

Notice

- Completion of above workshops is mandatory and producing certificate of continuing education from the universities is accepted
- The above workshops are designed and implemented by the educational group with the collaboration of experts and other educational groups