



MGM Institute of Health Sciences

MGM Educational Campus, Plot No. 1 and 2, Sector 1, Kamothe, Navi Mumbai

Curriculum

M.Sc Nursing

(Nurse Practitioner in Critical Care)

Based on Indian Nursing Council Syllabus 2017



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PROGRAM DESCRIPTION

The Nurse Practitioner (NP) program is a Nursing residency program with a main focus on Competency based training. The duration is of two years with the curriculum consisting of theory that includes core courses, advanced practice courses and clinical courses besides clinical practicum which is a major component (Refer Curricular framework).

AIM

The critical care NP program prepares registered B.Sc nurses for advanced practice roles as clinical experts, managers, educators and consultants leading to M.Sc degree in critical care NP

OBJECTIVES

On completion of the program, the NP will be able to;

1. assume responsibility and accountability to provide competent care to critically ill patients and appropriate family care in tertiary carecentre
2. demonstrate clinical competence / expertise in providing critical care which includes diagnostic reasoning, complex monitoring and therapies
3. apply theoretical, patho-physiological and pharmacological principles and evidence base in implementing therapies / interventions in criticalcare
4. identify the critical conditions using differential diagnosis and carry out treatment/interventions to stabilize and restore patient's health and minimize or manage complications independently or collaboratively as a part of critical care team
5. collaborate with other health care professionals in the critical care team, across the continuum of critical care



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EXAMINATION REGULATIONS –

- Attendance minimum is 80% in theory and practical before appearing for final university examination but must complete 100% in practical before the award of degree.
- OSCE type of examination will be followed alongside viva (oral examination)
- The team of practical examiners will include one internal examiner (M.Sc. faculty with two years of experience in teaching the NPCC program/M.Sc. faculty (Medical Surgical Nursing preferable) with 5 years of Post PG experience], one external examiner (same as above) and one medical internal examiner who should be preceptor for NPCC program.
- Maximum period to complete the programme is 4 years. Number of attempts is not regulated.
- Pass marks are 60% in aggregate of internal and external both in theory and practical in every course/ subject.
- If a candidate fails in theory or practical, he/she has to appear for the paper in which he/she has failed be it theory or practical.
- Declaration of pass - 60% and above is pass in all courses and < 60% is fail. For calculating the rank, the aggregate of the two years marks will be considered.

DISSERTATION

- Research guides: Main guide – M.Sc Nursing faculty with 3years post PG experience teaching NPCC program
- Co guide: Shall be Medical preceptor (Medical PG / Intensivist)
- Guide student ratio- 1:5
- Ethical clearance should be obtained by the hospital ethics committee
- There should be a separate research committee in the college/hospital to guide and oversee the progress of the research (minimum of 5 members with Principal or CNO-M.Sc).
- Topic Selection – The topic should be relevant to critical care nursing that will add knowledge or evidence for nursing intervention. The research should be conducted in any of the critical care settings.
- Submission of research proposal – between 6 to 9 months after the date of admission in the first year.
- Data collection – 7 weeks are allotted for data collection, which can be integrated during clinical experience after 6 months in first year and before 6 months in second year.
- Writing the research report – 6-9 months in second year.
- Submission of dissertation final – 9 months before completion of second year.
- Dissertation Examination - Internal assessment – Viva & dissertation report – 50 marks
- University Examination - Viva & dissertation report – 50 marks



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ASSESSMENT (FORMATIVE AND SUMMATIVE)

- Seminar
- Written assignments/Term papers
- Case/Clinical presentation
- Nursing process report/Care studyreport
- Clinical performance evaluation
- Log book-(Competency list and clinical requirements) counter signed by the medical/nursing faculty preceptor
- Objective Structured Clinical Examination(OSCE)/OSPE
- Test papers
- Final examination

TEACHING METHODS

Teaching theoretical, skill lab & Clinical can be done in the following methods and integrated during clinical posting

- Clinical conference
- Case/clinical presentation
- In depth drug study, presentation and report
- Nursing rounds
- Clinical seminars
- Journal clubs
- Case study/Nursing process
- Advanced health assessment
- Faculty lecture in the clinical area
- Directed reading
- Assignments
- Case study analysis
- Workshops

PROCEDURES/LOG BOOK

At the end of each clinical posting, clinical log book (Specific competencies/Clinical skills & clinical requirements) has to be signed by the preceptor every fortnight.



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MSc NURSING (NPCC) PROGRAMME

Scheme of Examination

Title	Theory %			Practical %		
	Hours	Internal	External	Hours	Internal	External
First Year						
Core Courses						
1. Theoretical Basis for Advanced Practice Nursing	3 hrs	50				
2. Research Application and Evidence Based Practice in Critical Care	3 hrs	30	70			
3. Advanced skills in Leadership	3 hrs	30	70			
Advanced Practice Courses						
4. Advanced Pathophysiology & Advanced Pharmacology relevant to Critical Care	3 hrs	30	70			
5. Advanced Health/physical Assessment	3 hrs	30	70		50	50

Title	Theory %			Practical %		
	Hours	Internal	External	Hours	Internal	External
Second Year						
Speciality Courses						
1. Foundation of Critical Care Nursing Practice	3 hrs	30	70		100	100
2. Critical Care Nursing I	3 hrs	30	70		100	100
3. Critical Care Nursing II	3 hrs	30	70		100	100
4. Dissertation and Viva	3 hrs				50	50



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MSc NURSING (NPCC) PROGRAMME

Courses of Instruction

First Year

Sl. No		Hours		
		Theory	Lab/ Skill Lab	Clinical
I	Core Courses			
1	Theoretical Basis for Advanced Practice Nursing	40		
2	Research Application and Evidence Based Practice in Critical Care	56	24	336 (7weeks)
3	Advanced skills in Leadership, Management and Teaching Skills	56	24	192 (4weeks)
II	Advanced Practice Courses			
1	Advanced Pathophysiology applied to Critical Care.	60		336 (7weeks)
2	Advanced Pharmacology applied to Critical Care.	54		336 (7weeks)
3	Advanced Health/physical Assessment	70	48	576 (12weeks)
	Total – 2208 Hours	336 (7weeks)	96 (2weeks)	1776 (37weeks)

Second Year

Sl. No		Hours		
		Theory	Lab/ Skill Lab	Clinical
III	Speciality Courses			
1	Foundation of Critical Care Practice	96	48	576 (12 weeks)
2	Critical Care Nursing I	96	48	576 (12 weeks)
3	Critical Care Nursing II	96	48	624 (13 weeks)
	Total Hours - 2208	288 (6weeks)	144 (4weeks)	1776 (37 weeks)



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MASTER PLAN

(As per Indian Nursing Council norms)

CLINICAL PRACTICE

- A. Clinical Residency experience - Minimum of 48 hrs/ week, however, it is flexible with different shifts and off followed by on call duty.
- B. 8 hours duty with one day off in a week and on call duty one per week

CLINICAL PLACEMENTS

Sl. No.	Area	Placement in Weeks	
		First Year	Second Year
1	Medical ICU	12	12
2	Surgical ICU	12	12
3	Cardio / Cardiothoracic (CT) ICU	8	8
4	Emergency Department	6	8
5	Other: Neurology, Burns, Dialysis unit	6	5
	Total weeks	42	45

Sr. No.	Particulars	Weeks/hours
1.	Total available weeks in a year	52 weeks
2.	Annual Leave, Casual Leave, Sick leave	06 weeks
3.	Available weeks	46 weeks
4.	Hours per week	48 hours
5.	Instructional hours (theory)	624 hours
6.	Skill Lab	240 hours
7.	Clinical	3552 hours
8.	Total hours in two years	4416 hours



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Critical Care Competencies (Adapted from ICN, 2005)

1. Uses advanced comprehensive assessment, diagnostic, treatment planning, implementation and evaluation skills
2. Applies and adapts advanced skills in complex and / or unstable environments
3. Applies sound advanced clinical reasoning and decision making to inform, guide and teach in practice
4. Documents assessment, diagnosis, management and monitors treatment and follow-up care in partnership with the patient
5. Administer drugs and treatments according to institutional protocols
6. Uses applicable communication, counseling, advocacy and interpersonal skills to initiate, develop and discontinue therapeutic relationships
7. Refers to and accepts referrals from other health care professionals to maintain continuity of care
8. Practices independently where authorizes and the regulatory framework allows in the interest of the patients, families and communities
9. Consults with and is consulted by other health care professionals and others
10. Works in collaboration with health team members in the interest of the patient
11. Develops a practice that is based on current scientific evidence and incorporated into the health management of patients, families and communities
12. Introduces, tests, evaluates and manages evidence based practice
13. Uses research to produce evidence based practice to improve the safety, efficiency and effectiveness of care through independent and inter-professional research
14. Engages in ethical practice in all aspects of the APN role responsibility
15. Accepts accountability and responsibility for own advanced professional judgment, actions, and continued competence
16. Creates and maintains a safe therapeutic environment through the use of risk management strategies and quality improvement
17. Assumes leadership and management responsibilities in the delivery of efficient advanced practice nursing services in a changing health care system
18. Acts as an advocate for patients in the health care systems and the development of health policies that promote and protect the individual patient, family and community
19. Adapts practice to the contextual and cultural milieu



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FIRST YEAR

Sl. No.	Courses	Prescribed hours (Theory + Skill Lab)	Introductory Classes	Workshop	Theory integrated in clinical practicum	Methods of teaching
1	Theoretical Basis for Advanced Practice Nursing	40	8 hrs	-	1 x 32 = 32 hrs	<ul style="list-style-type: none"> • Seminar/ Theory application • Lecture (by faculty)
2	Research Application and Evidence Based Practice in Critical Care	56 +24	8 hrs	46 hrs (5days x 8hrs 1 day x 6 hrs)	1 x 26 = 26hrs.	<ul style="list-style-type: none"> • Research Study analysis • Exercise/ Assignment (lab)
3	Advanced skills in Leadership, Management and Teaching Skills	56 +24	12hrs	2 hrs (Block classes)	1x 26 = 26 hrs 2.5x 16 = 40 hrs	<ul style="list-style-type: none"> • Clinical conference • Seminar • Exercise /Assignments (Lab)
4	Advanced pathophysiology applied to Critical Care	60	04		1.5x 37 = 56 hrs	<ul style="list-style-type: none"> • Case Presentation • Seminar • Clinical Conference • Lecture (by faculty)
5	Advanced Pharmacology applied to Critical Care	54	10		1 x 44 = 44 hrs	<ul style="list-style-type: none"> • Nursing Rounds • Drug Study Presentation • Standing orders/ presentations • Lecture (by faculty)
6	Advanced Health/physical Assessment	70 +48	9 hrs		2x26 = 52 hrs. 1.5 x 18 = 27 hrs 1.0 x 12 = 12 hrs 2.0 x 7 = 14 hrs 2.0 x 2 = 4 hrs	<ul style="list-style-type: none"> • Clinical Demonstration (by faculty) • Return Demonstration • Nursing Rounds • Physical Assessment (All systems) • Case Study • Lecture (by faculty)
	TOTAL	432 hrs	51 hrs	48 hrs	333 hrs	

- Introductory Classes – 1 week
- Workshop - 1 week
- Total 44 weeks = 7.5 hrs/week



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SECOND YEAR

Sl. No.	Courses	Prescribed hours (Theory + Skill Lab)	Theory integrated in clinical practicum	Methods of teaching
1	Foundation of Critical Care Practice	96+48 =144 Hrs.	9 hrs x11 weeks = 99 hrs	<ul style="list-style-type: none"> • Demonstration (Lab) • Return demonstration (Lab) • Clinical Teaching • Case Study • Seminar • Clinical Conference • Lecture by faculty
2	Critical Care Nursing -I	96+48=144 Hrs.	9 hrs x16 weeks = 144 hrs	<ul style="list-style-type: none"> • Demonstration (Lab) • Return demonstration (Lab) • Clinical conference/ Journal Club • Seminar • Case Presentation • Drug Study (including drug interactions) • Nursing Rounds • Lecture by faculty
3	Critical Care Nursing II	96+48=144 Hrs.	9 hrs x16 weeks = 144 hrs	<ul style="list-style-type: none"> • Demonstration (Lab) • Return demonstration • Nursing Rounds • Clinical conference/ Journal Club • Seminar • Lecture by faculty
		432		

Total 45 weeks = 8.5/ 9 hrs/week

Block classes-1wk, 45 wks – 8.5/9hrs/wk



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M.Sc. NURSING (NURSE PRACTITIONER IN CRITICAL CARE)

PROGRAMME OUTCOME

After completing M.Sc Nursing (Nurse Practitioner in Critical Care) Programme the graduate will be able to;

1. Assume responsibility and accountability to provide competent care to critically ill patients and appropriate family care in tertiary care centre
2. Demonstrate clinical competence / expertise in providing critical care which includes diagnostic reasoning, complex monitoring and therapies
3. Apply theoretical, patho-physiological and pharmacological principles and evidence base knowledge in implementing therapies / interventions in critical care
4. Identify critical conditions using differential diagnosis and carry out treatment / interventions to stabilize and restore patient's health.
5. Manage or minimize complications independently or collaboratively as a part of critical care team
6. Collaborate with other health care professionals in the critical care team, across the continuum of critical care



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M.Sc. NURSING (NURSE PRACTITIONER IN CRITICAL CARE)

COURSE OUTCOME

Research Application And Evidence Based Practice In Critical Care

- CO1 :** Applies sound research knowledge and skills in conducting independent research in critical care setting.
- CO2 :** Participates in collaborative research to improve patient care quality 3. Interprets and uses research findings in advanced practice to produce EBP
- CO3 :** Tests/Evaluates current practice to develop best practices and health outcomes
- CO4 :** Evaluate quality care in advanced practice
- CO5 :** Analyses the evidence for nursing interventions carried out in critical care nursing practice to promote safety and effectiveness of care
- CO6 :** Develops skills in writing scientific research reports

Advanced skills in Leadership, Management and Teaching

- CO7 :** Applies principles of leadership and management in critical care units
- CO8 :** Manages stress and conflicts effectively in a critical care setting using sound knowledge of principles.
- CO9 :** Applies problem solving and decision making skills effectively.
- CO10:** Uses critical thinking and communication skills in providing leadership and managing patient care in ICU.
- CO11 :** Builds teams and motivates others in ICU setting. 6. Develops unit budget, manages supplies and staffing effectively.
- CO12 :** Participates appropriately in times of innovation and change.
- CO13:** Uses effective teaching methods, media and evaluation based on sound principles of teaching.
- CO14:** Develops advocacy role in patient care, maintaining quality and ethics in ICU environment.
- CO15:** Provides counselling to families and patients in crisis situations particularly end of life care.



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Advanced Pathophysiology Applied To Critical Care Nursing

- CO16 :** Integrates the knowledge of pathophysiological process in critical conditions in developing diagnosis and plan of care
- CO17 :** Applies the pathophysiological principles in symptom management and secondary prevention of critical illnesses
- CO18 :** Analyses the pathophysiological changes relevant to each critical illness recognizing the value of diagnosis, treatment, care and prognosis

Advanced Pharmacology Relevant To Critical Care Nursing

- CO19 :** Applies the pharmacological principles in providing care to critically ill patients and families
- CO20 :** Analyses Pharmacotherapeutics and pharmacodynamics relevant to drugs used in treatment of critical care conditions
- CO21 :** Performs safe drug administration based on principles and institutional protocols
- CO22 :** Documents accurately and provides follow up care
- CO23 :** Applies sound knowledge of drug interactions in administration of drugs to critically ill patients in the critical care setting and guiding their families in self- care management

Advanced Health / Physical Assessment in Critical Care Nursing

- CO24 :** Applies the physical assessment principles in developing appropriate system wise examination skills
- CO25 :** Uses advanced health assessment skills to differentiate between variations of normal and abnormal findings
- CO26 :** Orders screening and diagnostic tests based on the examination findings
- CO27 :** Analyses the results of various investigations and works collaboratively for development of diagnoses
- CO28 :** Documents assessment, diagnosis, and management and monitors follow up care in partnership with health care team members, patients, and families



MGM INSTITUTE OF HEALTH SCIENCES

(Deemed to be University) Grade 'A' Accredited by NAAC

MGM NEW BOMBAY COLLEGE OF NURSING

5th Floor, MGM Educational Campus, Plot No. 1 & 2,
Sector-1, Kamothe, Navi Mumbai – 410 209.

Programme Outcome for M.Sc. Nursing (Nurse Practitioner) Programme

Second Year

Critical Care Speciality Courses

Foundations of Critical Care Nursing Practice

PO: At the end of this course the student needs to appraise the diagnostic and monitoring. Requirements and management necessary to maintain homeostasis of critically ill Patients and communicate their significance and possible consequences to relevant Members of the multidisciplinary team and demonstrate skilled, safe effective and Sensitive practice in the care of critically ill patients

CO: At the end of the course student acquires following competencies:

- Applies advanced concepts of critical care nursing based on sound knowledge of these concepts.
- Use invasive and noninvasive technology and interventions to assess, monitor and promote physiologic stability.
- Works in collaboration with other health team members.
- Consults with and is consulted by other health care professional.
- Provides nursing care related to health protection, disease prevention, anticipatory guidance, Counselling, management of critical illness, palliative care and end of life care.
- Practices Principles of Infection control relevant to critical care.
- Develops practice that is based on scientific evidence.
- Uses applicable communication, counselling, advocacy and interpersonal skills to initiate, develop and discontinue therapeutic relationships.
- Adapts practice to the social, cultural and contextual families.
- Creates and maintains a safe therapeutic environment using risk management strategies and quality improvement.



MGM INSTITUTE OF HEALTH SCIENCES

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MGM NEW BOMBAY COLLEGE OF NURSING

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Sector-1, Kamothe, Navi Mumbai – 410 209.

Critical Care Nursing I and Critical Care Nursing II

PO: At the end of this course the student needs to appraise the diagnostic and monitoring Requirements and management necessary to maintain homeostasis of critically ill Patients and communicate their significance and possible consequences to relevant Members of the multidisciplinary team and demonstrate skilled, safe effective and Sensitive practice in the care of critically ill patients

CO: At the end of the course student acquires following competencies:

- Applies advanced concepts of critical care nursing based on sound knowledge of these concepts.
- Use invasive and noninvasive technology and interventions to assess, monitor and promote physiologic stability.
- Works in collaboration with other health team members.
- Consults with and is consulted by other health care professional.
- Provides nursing care related to health protection, disease prevention, anticipatory guidance, Counselling, management of critical illness, palliative care and end of life care.
- Practices Principles of Infection control relevant to critical care.
- Develops practice that is based on scientific evidence.
- Uses applicable communication, counselling, advocacy and interpersonal skills to initiate, develop and discontinue therapeutic relationships.
- Adapts practice to the social, cultural and contextual families.

Creates and maintains a safe therapeutic environment using risk management strategies and quality improvement