

Minimum Requirements
For the recognition of
Master
in
Clinical/Medical Laboratory Sciences

Nepal Health Professional Council
Bansbari, Kathmandu, Nepal
2076 (2019)

Preface

Nepal Health Professional Council (NHPC) has been striving to fulfill its responsibilities mandated by the nation through Nepal Health Professional Council Act 2053 and Nepal Health Professional Council Regulation 2056. Since its establishment, NHPC has been registering health professionals graduated in country and abroad, implement a code of ethics for different level of health professionals, and monitor to ensure that health professionals are practicing according to their professional ethics. In order to ensure minimum standard in different level of professional education, NHPC has also promulgated minimum requirements for different level and disciplines of health professional courses.

NHPC issued minimum requirements for Master of Science in Medical Microbiology program in 2063 BS. This minimum requirement for Masters Level in Medical Laboratory Sciences is the revision of earlier Minimum requirement. Since its promulgation, considerable changes in this discipline and also the education system have been observed. Our own national experiences in running medical laboratory courses and also a wide variation in the degree obtained by Nepali laboratory professionals from different Universities abroad have demanded revision in the earlier requirement. With implementation of the revised minimum requirements, NHPC expects that the Masters level education in Clinical/Medical Laboratory Sciences in country and abroad shall have uniformity in educational standard.

Some of the notable changes in this minimum requirement are in admission criteria for enrollment in course, number and eligibility of faculty, curricular requirements, and course duration. This revised edition has also specified requirements for students graduated from foreign universities.

Series of consultative meetings and workshop were held with public health professionals during the revision process. I would like to thank Mr Basant Adhikari, Registrar for initiation and coordination of the development process of this minimum requirement. I would like to acknowledge Mr Pushpa Raj Khanal and Mr Narayan Karki for their contribution in preparing draft, organizing workshops and conducting series of meetings with subject experts. I also thank Mr Rajan Paudel for incorporating feedbacks from different group and bringing the document in this shape. I would also like to acknowledge Subject committee members Mr Kari Kattel and Dr Binod Yadav; experts Prof Bharatmani Pokhrel, Prof Bishnu Raj Tiwari and members of Medical Laboratory Associations for their professional inputs.

I also extend my sincere thanks to NHPC board members Hari Kunwar, Mukesh Kumar Jha, Sashikant Chaudhary, Shantalal Shrestha, Dr Dilip Sharma for their contribution. Last but not the least; thanks go to Deepa Paudel, Menuka Prasai, Shital Basnet and other staff of NHPC for their effort.

Ram Prasad Bhandari
Chairman

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Introduction

Nepal Health Professional Council has approved this requirement according to clause of 9 (2) of the Nepal Health Professional Council Act 2053. This requirement shall be called Minimum requirement for the recognition of Master in Clinical/Medical Laboratory Sciences which include Clinical/Medical Microbiology, Clinical/Medical Bacteriology, Clinical/Medical Virology, Clinical/Medical Parasitology, Clinical/Medical Immunology, Clinical/Medical Biochemistry, Clinical/Medical Histopathology, Clinical/Medical Haematology and Clinical/Medical Cytopathology)2076 (2019).

An institution that plans to start or conduct Master's degree of Medical/Clinical Program shall ensure the standard as specified in this minimum requirement in order to qualify for granting accreditation.

Student

Entry Requirement for Students

- Bachelor degree in Medical Lab Technology(BMLT)/BSc.MLT/Medical Lab Science/Medical Microbiology/MBBS/BDS with equivalence from legally authorized concerned organization recognized by Government of Nepal.
- Registered in professional council
- Passed entrance examination organized by a University in Nepal.
Selection of the student shall be done on the basis of merit obtained in the written entrance examination. The candidate to get admission in the course, student must score at least 50% marks in the selection test/exam conducted by the University.

Admission Policies

- Intake of student should be annual
- The maximum number for intake of students is 5 per academic year per specialized subject.

Duration of Study

Duration for the completion of all the requirements for the masters program in clinical/medical lab sciences as a full time student is **2 Years** in annual system and 24 months (4 Semesters) in semester system.

Attendance Requirements

A student must attend every scheduled lecture, tutorial, practical classes, journal club, seminar, field visit and internship. However, to accommodate for late registration, sickness and other contingencies, the attendance requirements will be a minimum of **80%** of the classes actually held.

Student's Evaluation

A student's academic performance in a course is evaluated in two phases as:

- Internally by the concerned faculty member through quizzes, tutorials, lab works, home assignments, class tests, class participation, term papers, internal exam etc.
- Externally by the Office of the Controller of Examinations of concern University through year/semester-end examinations.
- Practical, field practice and internship will be evaluated by external examiner through practical, demonstration, presentation and oral exam.

Teaching Faculty

Number of Faculties

For each additional specialized program, the following faculties in addition to the number of bachelor's programme should be maintained;

- Professor or Associate Professor 1 Full time
- Assistant Professor/Lecturer 2 Full time

For example:

B.Sc MLT program – 12 faculties (See minimum requirement of B.ScMLT) +

One Master in Biochemistry– 12 + 3 faculties

Next Master in Microbiology – 12+3+3 faculties and so on

Council will recognize the minimum qualification of a faculty as per the concerned university service commission eligibility.

- As per the curricular needs additional part time teachers or teachers in course contract should be managed by Institution.

Qualification of Teacher

Minimum academic qualification should be at least Bachelor's Degree and Master's Degree in Medical Lab Sciences with at least 3 years of academic/teaching experience and other requirements for the academic positions shall be as per the requirement of concern University.

Work Load

For taking the theory and practical classes

- Principal: **8 hours/week** (maximum)
- Professor: **12 hours/week** (maximum)
- Associate professor: **14 hours/week** (maximum)
- Assistant Professor: **16 hours/week** (maximum)
- Teaching Assistant: **18 hours/week** (maximum)

One theory class equivalent to three hours practical classes and six hours field practices

Colleges where bachelors and master's programs are running, one hour of theory class in masters is equivalent to 1.33 hours of work load (ratio of bachelor to master workload shall be 1:1.33hours)

One main thesis supervisor can supervise maximum following numbers of **students** per academic year.

- Professor- 3 (can supervise 4 if he/she has already supervised 15)
- Associate Professor -2 (can supervise 3 if he/she has already supervised 10)
- Assistant Professor/Lecturer-1, if he/she has already co-supervised 3 (can supervise 2 if he/she has already supervised 5)

One thesis supervision equivalent to one and half hour workload per week

Co-supervisor's workload is calculated as half of main supervisor's workload

One is to two (1:2) ratio (masters to bachelors) should be maintained to calculate total students for thesis supervision by each faculty where both master's and bachelor's programs exit.

Thesis supervisor may be from outside the college/institute if he/she is registered in council for bachelors and masters in medical lab sciences.

Institution

Organizational Structure of the Constitutional or Affiliated Academic Institution

Concern constitutional or affiliated academic institution should established the following committees/sections

- Departments/Instruction committee
- Examination section
- Student welfare committee
- Student counseling section
- Research Management Committee (RMC)
- Institutional Review Committee (IRC)

A separate organizational financial system should include:

- Financial viability plan
- Annual budget for program
- Source of income
- Audit system

Principal or Campus Chief or Chief of Central Department or Director

- Sole Medical Lab Science College: S/He should have at least Bachelor degree in Medical Lab or Health Sciences with Master's Degree in Medical Lab Sciences and 7 years of academic/teaching experience. S/He should be registered in NHPC.
- Multidisciplinary Health Science College: S/He should have at least Master's Degree in any related subjects teaching in the college and 7 years of academic/teaching experience. S/He should be registered in concern council.

Head of the Department (HoD) and/or Coordinator

- S/He should have at least Bachelor degree and Master's Degree in Medical Lab Science and 5 years of academic/teaching experience.
- S/He should be registered in NHPC.

Administrative Staffs

Administrative staff should be sufficient in number to facilitate the educational/ administrative works. The required staffs are as follows:

- Administrative Officer: S/He should have passed minimum Bachelor degree or equivalent in any subject.
- Finance Officer: S/He should have passed minimum Bachelor degree in Commerce/ Business Studies/Administration or equivalent.
- Account/Administrative Assistants: Accountant and Administrative Assistants should have passed 10+2 or equivalent.
- Librarian: The Head of the Library should have University Degree and must have sufficient training in library science.
- Computer Technician: S/He should have passed minimum Diploma/ Bachelor in computer sciences and should be command both in English and Nepali languages writings and reporting.
- Laboratory Assistant: S/He should have passed University Degree in Laboratory Science or 10+2 (science) with training and or demonstrating laboratory work of Laboratory Assistant in concerning Faculty or Department of particular organization.
- Any Office Assistants (helper/peon/cleaner/driver) should be a Nepali citizen and should be literate in Nepali (Command in both Nepali and English languages is preferable).

Teaching Facilities

Building and physical facilities requirements are as follows:

- Building: Building with adequate floor space
- There should be minimum of three rooms for routine classes, and three rooms for group discussion purposes. Number of classrooms should be increased with the number of section.
- The class rooms should have:

- Well ventilated with adequate light
- 0.75 sq meter space per student
- Appropriate desk and bench
- White board
- Multi-media
- The theory classroom should accommodate of at least 40 students.
- Principal's office room should have enough space for visitors/ faculties and for small meeting.
- Administration office rooms should have enough space for administrative and financial work.
- Demonstration room for 15 students at a time on the basis of 1:15 teacher -student Ratio for demonstration.
- Teachers' room with sufficient numbers of computers and printers.
- A Library should have enough space for book and students study
 - 1 course book per 5 students must be available in library.
 - Reference book in each subject should be available at ratio of 1:10 students in library.
 - Access to HINARI and other related free journals with a internet 15 mbps capacity.
 - At least 10 professional journals should be available in the library.
 - Adequate number of reference books on each subject for teacher should also be available in library.
 - Other related books/dictionaries magazines, newspapers should be made available.
 - Curriculum of the program must be available at office and at the library. Furniture like table, chair, open rack, must be available in the library as per required standard and quantity.
 - Sufficient Computer, printer, photocopy machine, emails - Internet facilities should be made available.
- For Classroom one computer per class should be available.
- Audio-visual aid equipment should be available for class room.
- Toilet at a ratio of 1:10 for working staff and student. (male/ female separate)
- Multipurpose hall (at least 50persons accommodation with essential facilities) should be available.

Facilities for Other Activities

- An outdoors athletic ground
- Indoor games
- Provision of vehicles for field activities
- Space for student welfare with counseling services.
- Students' hostel (Male and Female separate) is preferable
- Canteen with safe drinking water, hygienic kitchen and dining hall.

Hospital, Laboratory and Equipment

- The teaching Institute/Organization must have own teaching hospital (at least 200 bedded) with department of relevant subjects. Different hospitals will not be counted for this purpose.
- There must be a practical/demonstration laboratory with a capacity of accommodating whole batch of student (1 sq m /1 student). In addition, there must be a well-equipped microbiology laboratory (with separate sections) for the post-graduate research works. These laboratories must have the provision of enough light, ventilation and continuous water supply.
- Laboratories built for bachelor level programme can be used for master level programme

Registration for Foreign Degree

- Must have Bachelor Degree in Medical Laboratory Technology (BMLT) or (BScMLT).
- Duration must be at least **two years or 120 ECTS** equivalent.
- Should have passed the entrance of a University Nepal
- Should have equivalence from concern authority of Nepal
- Should submit a valid supporting document to prove a regular student (College letter of regular student, passport, visa, immigration documents).
- **Must submit permission letter by NHPC.**
- Must submit the copy of approval sheet of thesis/dissertation.