

Minimum Requirements
For the recognition of

Bachelor
in
Optometry

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

Preface

The Nepal Health Professional Council was established under the Nepal Health Professional Council Act 2053 Bikram Era. Nepal Health Professional Council Act has paved the way to regulate the health Professionals except doctors and nurses. Its primary purpose is to protect the public by providing quality health service.

The Nepal Health Professional Council is the regulatory body for the professionals. As the statutory authority, Nepal Health Professional Council Act 2053 Bikram Era sets out condition for the registration of all health Professionals except doctors (eligible to register in Medical Council) and nurses. The Act prohibits any health profession practice without being registered with Nepal Health Professional Council. The Health Professional Council maintains register and those who are registered are granted with practicing certificate. The other important function of this Council is to prepare minimum requirements for the recognition of all level Health Professional Education programme.

NHPC has issued this minimum requirement for Bachelor in Optometry program which will be called “Minimum Requirement for Bachelor of Optometry – 2076 BS. With implementation of the revised minimum requirements, NHPC expects that the Bachelor level education in Optometry will have uniformity in education standard in this discipline from Universities in country and abroad.

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Bhandari

Ram Prasad
Chairman

Table of Contents

Preface	2
Table of Contents	3
Introduction	4
Student	4
Entry Requirement for Students	4
Admission Policies	4
Duration of Study	4
Attendance Requirements	4
Course Coverage	4
Student's Evaluation	5
Teaching Faculty	5
Number of Faculties	5
Teacher student ratio in teaching learning	5
Qualification of Teacher	6
Work Load	6
Institution	6
Organizational Structure of the Constitutional or Affiliated Academic Institution	6
Principal or Campus Chief or Chief of Central Department or Director	6
Head of the Department (HoD) and/or Coordinator	7
Administrative Staffs	7
Teaching Facilities	7
Facilities for Other Activities	8
Facilities in Hospital Laboratory and Equipment	9
Registration for Foreign Degree	11

Introduction

Nepal Health Professional Council has approved this requirement according to clause of 9 (Kha) of the Nepal Health Professional Council Act 2053. This requirement shall be called Minimum requirement for the recognition of Bachelor of Optometry 2076 (2019).

An institution that plans to start or conduct Bachelor of Optometry (BOptom) shall ensure the standard as specified in this minimum requirement in order to qualify for granting accreditation.

Student

Entry Requirement for Students

The entry requirement for a student in Bachelor of Optometry will be Intermediate in Science (ISc) or Higher Secondary Level (10+2 Science streams) in biology stream or equivalent Proficiency Certificate level in ophthalmic science(registered in NHPC)as recognized by concern University with at least 50% marks or equivalent. Besides the basic academic requirement, an entrance examination will be held for all applicants and should secure 50% marks to be eligible for admission.

Admission Policies

- Intake of student should be annual
- The maximum number for intake of students is 20 per academic year.
- The selection of the student should be in merit basis

Duration of Study

Duration for the completion of all the requirements for the Bachelor of Optometry program as a full-time student is **4 academic years**in annual system and 48 months (8 Semesters) in semester system.

Attendance Requirements

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

Course Coverage

The core subjects should be binocular vision, contact lens, low vision, ocular diseases, dispensing, optics, research methodology, ocular prosthesis, vision therapy. The curriculum should include clinical posting in all academic years.

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.
- Laboratory work, project work, Practical and internship will be evaluated by external examiner through practical, demonstration, presentation and oral exam.

Requirement for final practical examination

- There must be a provision for conducting practical examination by external and internal optometry examiner with post graduate degree and registered in Nepal Health Professional Council (NHPC).
- One examiner should examine not more than 10 students per day for the practical skill
- There should be an external examiner of relevant subject appointed by the affiliating University/Institute.
- The student log-book should be submitted before registration.

Teaching Faculty

Number of Faculties

- Number of faculties per section should be maintained as follows:

- Professor/Associate Professor 1 Full time
- Assistant Professor/Lecturer 2 Full time
- Lecturer/Teaching Assistant 4 Full time

There should be at least 3 optometry clinical instructors (full time) in the hospital for practical purpose.

This number is for the full phased program. There should be at least one full time Professor/ Assoc. Professor, two Assistant Professors and one lecturer at the beginning and the number should be increased before the new batch is enrolled.

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.
- Full time teachers should be from core subjects (binocular vision, contact lens, low vision, ocular diseases, dispensing, optics, research methodology, ocular prosthesis, vision therapy).

Teacher Student Ratio in Teaching Learning

There should be sufficient teachers to teach as per curriculum in a ratio as follows:

- Overall ratio of student and teacher must be 1:4 excluding Principal
- One teacher to all students for classroom teaching (1:20)
- One classroom should not be more than 20 students
- One teacher is to 5 students for bench work teaching in the hospital (1:5)
- One teacher is to 10 students for practical demonstration (1:10)

Qualification of Teacher

- Minimum academic qualification should be at least Master Degree in relevant subject. Experience and other requirements for the academic positions shall be as per the requirement of concerned University.
- Instructors must have B Optometry degree with NHPC registration for practical purpose.

Note: Faculties working as full timer at one institution can NOT be full timer at another institute.

Work Load

For taking the theory and practical classes as well as field practices

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

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

One research supervisor can supervise only **5 students** maximum per academic year.

Institution

Organizational Structure of the Constitutional or Affiliated Academic Institution

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

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

A separate organizational financial system should include:

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

One eye hospital/center can take only one university affiliation.

University can't distribute the students to more than one eye hospitals/centers

Council recommends residential placement to the students for practical exposure. If the residential placement is not available, distance between Institutes and Hospital should be less than 20 kilometers (travel duration not exceeding 30 minutes). Council will follow the rule according to MOU with nominated hospital by respective institutes according to NHPC rules and regulations.

Principal or Campus Chief or Chief of Central Department or Director

- Sole Optometry College: S/He should have at least B Optom and M Optom and 7 years of academic/teaching learning 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 learning experience. S/He should be registered in concern council.

Head of the Department (HoD) and/or Coordinator

- S/He should have at least M Optom and 5 years of teaching learning experience.
- S/He should be registered in NHPC.

Administrative Staffs

Administrative staff should 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:

- a. Building

Training building should have adequate area for teaching, practical as well as extra-curricular activities for required session.

- b. Hospital
 - A well-equipped owneye centre or eye hospital running for at least 3 years with average OPD of 80-100 or above patients per day with following clinics/units- Vision and refraction unit, General optometry clinic, Orthoptics clinic, Low vision clinic, Contact lens clinic, Ophthalmic imaging unit, Ophthalmic dispensing unit, Pediatric optometry clinic
 - Optometrist must be working in the units/clinics.
- c. Classroom
 - Well ventilated/well lighted.
 - 1 sq.m./student for practical classes and 0.75 sq.m./student for theory classes.
 - A maximum of 20 students in one classroom for theory class with adequate furniture.
- d. Principal office room
 - Enough space for administrative purposes.
- e. Office room
 - Enough space for administrative and financial work.
- f. Demonstration room:
 - For 5 students at a time on the basis of 1:5 teacher student ratio for demonstration.
 - There should be separate demonstration/practical room for Anatomy.
 - There should be separate well-equipped Laboratories for each branch of basic sciences and clinical sciences and a common Tutorial Laboratory for Special procedures.
- g. Library:
 - Should have enough space for book keeping & student study.
 - 50% of course books must be available. Reference books should be available at the ratio of 1:5 students.
 - Professional journals of respective subjects must be available.
 - Adequate number of reference books for each subject for teacher should be available.
 - Other related books, magazines and newspapers should be available.
 - Programme course curriculum must be available.
 - Tables, chairs, open racks must be available in library and other offices as per need.
- h. Computer/ Type room with necessary equipment for student learning.
- i. Room for general store and Audio-visual aid equipment.
- j. Toilet at 1:10 ratio (male/female separate).

Facilities for Other Activities

- An outdoors athletic ground
- Indoor games

- Provision of vehicles for field activities
- Space for student welfare with counseling services
- Canteen with safe drinking water, hygienic kitchen and dining hall

Facilities in Hospital Laboratory and Equipment

Basic sciences lab

1. Basic science I and II Lab

- Normal histological slides of various epithelial tissues,
- Materials for peripheral blood film: identification of RBC, WBC, platelets, gram stain, giemsa stain
- Materials for AFB stain, KOH preparation
- Culture media, identification media and antimicrobial sensitivity tests
- Conjunctival swab
- Equipment for sterilization and disinfection

2. Physical, geometrical, visual optics Lab

- Interference (Interferometer/visiometer)
- Polarization (Tourmaline crystal, Birefringence)
- Reflection and refraction at plane/curved surfaces (Concave/convex mirror)
- Cardinal Points (Lens gauge, Lens clock)
- Aberrations (Aberrometer)
- Photometry (Photometer)
- Ocular dimensions measurement (Vernier callipers)

3. Dispensing lab

- Single vision lens, Multifocal lens bifocal lens, cylindrical lens, trial box
- Prisms
- Lens edging machine set
- Lens tinting set
- Manual lensometer

4. Eye health promotion / health education unit

- Facility for eye health education, health promotion
- Facility of health education materials

5. Anatomy Lab

- Axial and appendicular bone
- Cranial bones
- Orbital bones
- cranial nerves and extraocular muscles
- Skin layers
- Parts of brain
- Spinal cord and spinal nerves

- Gastrointestinal tissue slides

6. Ocular Prosthesis unit/lab

- Materials and equipment's for preparing ocular prosthesis

7. Biostatistics and computer science lab

Books, computers
Statistical software

Clinical lab (in clinical setting/hospital/eye centre)

1. Optometry consultation and refraction room

- Slit lamp, direct ophthalmoscope, indirect ophthalmoscope (20D, 78D, 90D),
retinoscope, autorefractometer, vision chart & lensometer (digital and non
digital)

2. Ophthalmic investigation room and equipment

- Fundusphoto machines
- OCT, ERG, VEP, EOG, Visual field analyser (Latest version / latest software,
Corneal topographer .
- Manual keratometer, A-B scan with pachymetry

3. Binocular vision (Ortho optics)

Instruments for binocular vision assessment

(Prisms bar and loose prism, fixation sticks) accommodative and Vergence facility
testing lenses/ prism flippers, Synoptophore, Maddox wing, Maddox rod,
Stereoacuity testing instruments, worth four dot testing instruments, Hess chart.
Vision therapy tools and instruments (office based/ home based),
Exophthalmometer, retinoscope

4. Contact lens clinic

Various designs and materials of the soft contact lenses, toric lenses
Slit lamp, retinoscope

5. Low vision clinic

Instruments and arrangement for

- Visual performance measurement and refraction
- Slit lamp
- Calculation of magnification
- Telescopes and distance aids

- Spectacle mounted, handheld and stand magnifiers
- Non-optical aids

Registration for Foreign Degree

- Must have Bachelor Degree in Optometry.
- Duration must be at least **four years or 240 ECTS** equivalent.
- Should submit a valid supporting document to prove a regular student (College letter of regular student, passport, visa, immigration documents).
- **Must submit permission letter issued by NHPC.**
- Should have equivalence from concern authority of Nepal.
- Should have passed the entrance of a University of Nepal before enrollment in foreign university.
- A valid log book by authorized person should be submitted at the time of registration.