

Minimum Standard Requirement (MSR)

Bachelor in Optometry program

All existing OPTOMETRY colleges/ institute or A new Optometry college will impart Optometry education is suggested the following conditions are fulfilled:-

- 1) Infrastructural, Functional & Equipment and human resource Requirements

The establishment of an Optometry college – No person shall establish a Optometry college/institute except after obtaining prior permission from the National commission (NCAHP). Optometry education prepares a person for independent practice and involves extensive clinical training in almost every speciality & super speciality of ocular health care.

The following organizations shall be eligible to apply for permission to set up a Optometry college, namely: -

1. A State Government/Union territory;
2. A University and Deemed to be University,
3. An autonomous body promoted by Central and State Government by or under a Statute for the purpose of medical education;
4. A society registered under the Societies Registration Act, 1860 (21 of 1860) or corresponding Acts in States; or
5. A public religious or charitable trust registered under the Trust Act, 1882 (2 of 1882) or the WAKFS Act, 1954 (29 of 1954).
6. Companies registered under Company Act may also be allowed to open Optometry colleges.

2) LAND AND BUILDING –

- i. If the college is in the premises of NMC permitted/ recognized medical college, no separate land is required. Existing norms of land for medical college will suffice. Besides that the constructed area/Building norms for Optometry College must be fulfilled as per the requirement mentioned below. In all other cases, the applicant must provide the land details on which the institution will be established for providing Optometry education. It should be in the name of society/ Trust/company applying for the same (sale deed/lease/gift deed etc.).
- ii. That the applicant Institution / Trust should have an independent building for Optometry College and facilities for clinical training as per the curriculum as prescribed by the commission from time to time.
- iii. Such a building should be constructed in such a way that there is adequate parking space and recreational area or open space for students as prescribed by the commission.
- iv. Such a building should have adequate space and should have out-patient Optometry department, various laboratories as needed, office space, class rooms, hostel and other ancillary facilities. Optometry OPD and the college can be placed in different buildings within 50 KM (or as per the NCAHP regulations) distance in the same state of India.
- v. Minimum exclusive built up area for such a college should be 26675 sq.ft for an intake of 30 students per batch and 35750sq.ft for the intake of 60 students per batch.
- vi. Building should be barrier free accessible to persons with disability and as per NBCI guidelines (National Building Code of India).
- vii. Building must be recorded on the appellate institute name or if the land is under lease agreement, it must be for at least 10 years
- viii. Building must have requisite clearances from the respective civic and administrative authorities' like - Fire NOC, structural stability certificate, land use certificates etc.

ix. Building must have CCTV camera for CCTV surveillance for every area of common use as can be prescribed.

x. Biometric facility for students and staff, faculty attendance record/documentation

3) Optometry Departments

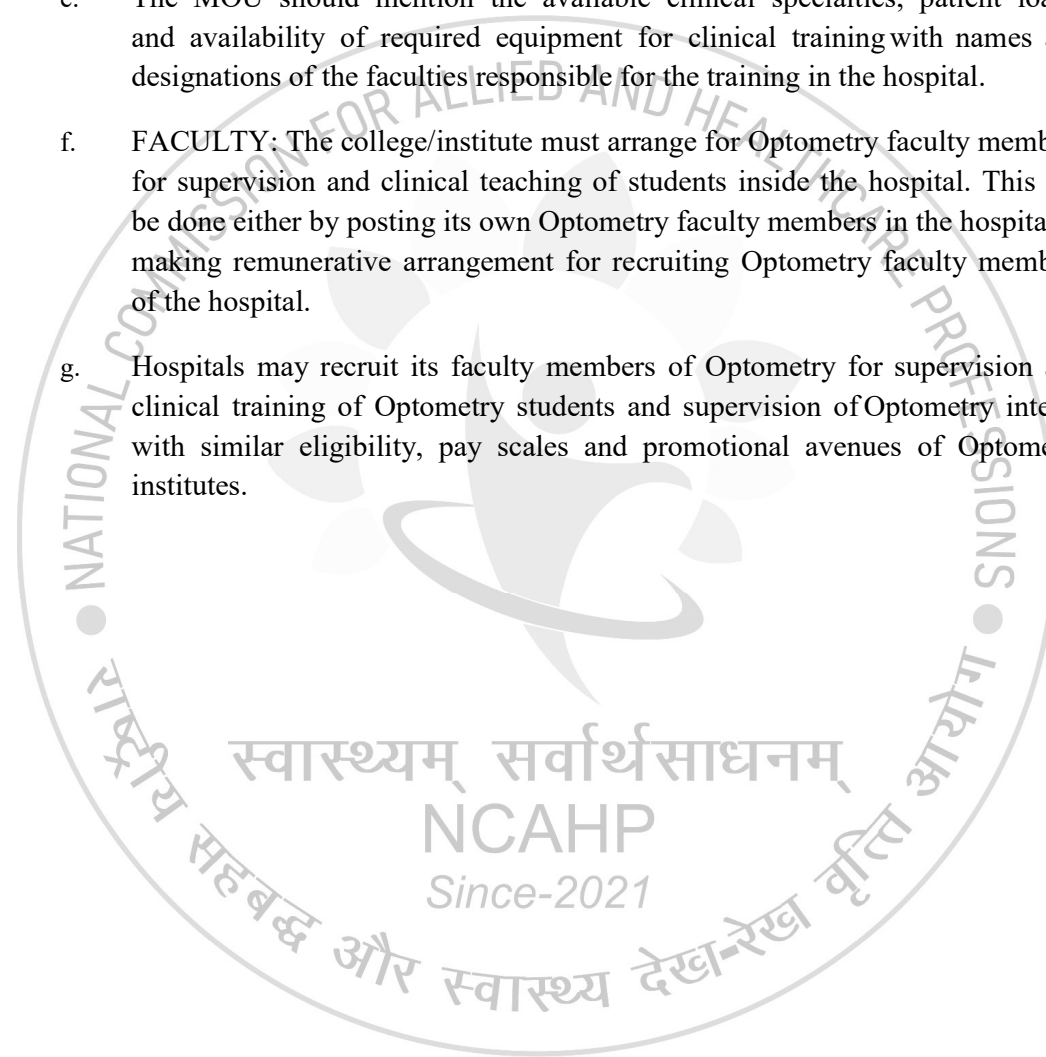
A well-equipped OPD facility in Optometry department with instruments of all specialties like Contact Lenses clinic, Low Vision clinic, Binocular vision/Vision Therapy clinic, Ocularist Myopia clinic, Sports vision clinic etc should be available at the college premises. A student/ patient ratio of 1:5 should be maintained. That means a hospital with 100 OPD can have a maximum intake of 20 students per year. In addition to the own Optometry OPD in the college building (in case of the existing institutions) if required, the College can get attachment (through signed MOUs) to maximum 5 Optometry departments/ OPDs in various hospitals with minimum 50 patients OPD workload per day. An out-patient Optometry department at the tie-up facility cannot be considered as an independent Optometry OPD/ unit of the college. Besides the Optometry OPD at the campus, the institute should also start a community / extension centre in nearby rural /semi urban area.

4) HOSPITAL / HOSPITAL ATTACHMENT –

If the college is in the premises of MCI/NMC permitted/recognized Medical College as constituent college, then, there is no requirement for attachment of any other hospital.

- a. In all other cases Proof of availability of own/attached hospital (Government/Private) for clinical training of 30 students shall be furnished (student: OPD ratio of 1:5). The hospital must be within 20 km radius of the College. College must provide mandatory bus service to the students if the hospital is located more than 1 km away from the College. Within 5 years of application of these Rules, the colleges must have Own Prescribed Hospital in the college Premises.
- b. College can be affiliated to maximum five (05) hospitals having indoor and outdoor facility in the above mentioned specialty clinics.

- c. Tie up hospitals cannot get attached to more than two colleges. If the affiliated hospital is attached with two colleges, the OPD strength must be adequately divided amongst the colleges as per the prescribed student: OPD ratio.
- d. The affiliated hospital shall provide information regarding any MOU with other colleges, if any & MOU should be for at least five years.
- e. The MOU should mention the available clinical specialties, patient loads, and availability of required equipment for clinical training with names and designations of the faculties responsible for the training in the hospital.
- f. **FACULTY:** The college/institute must arrange for Optometry faculty members for supervision and clinical teaching of students inside the hospital. This can be done either by posting its own Optometry faculty members in the hospital or making remunerative arrangement for recruiting Optometry faculty members of the hospital.
- g. Hospitals may recruit its faculty members of Optometry for supervision and clinical training of Optometry students and supervision of Optometry interns with similar eligibility, pay scales and promotional avenues of Optometry institutes.



5) Space allotment for an annual intake of 60 students of Bachelors in Optometry

Infrastructure requirement for the college

S.No	Details	Total number required	Area required per student in Sq.ft	For 30 students	For 60 students
1	Classrooms	4+1=5	10	1500	3000
2	Optics Lab	1	20	600	1200
3	Biochemistry lab	1	20	600	1200
4	Anatomy lab	1	20	600	1200
5	Clinical labs	2	20	1200	2400
6	Library	1	30	900	1800
7	Common room for girls	1	10	300	600
8	Common room for boys	1	10	300	600
9	Auditorium	1	-	7500	7500
10	Principal room	1	-	500	500
11	Admin room	1	-	500	500
12	Faculty room	1	-	1000	2000
13	Guest faculty room	1	-	500	500
14	Waiting/Lounge area	1	-	500	500
15	Toilet for girls	1	-	500	1000
16	Toilet for boys	1	-	500	1000
17	ECR room	1	-	350	350
18	Store room	1	-	250	500
19	Pantry	1	-	150	150
			Total	18250	26500

Infrastructure requirement for Optometry Clinic

S.No	Details	Total number required	Area required in Sq.ft
1	Contact lens clinic	1	500
2	LVA clinic	1	500
3	BV/VT clinic	1	500
4	Ocularist	1	500
5	Myopia Clinic	1	500
6	Sports vision clinic	1	500
7	Reception area	1	500
8	Patient waiting area	1	1500
9	Toilet for Women	1	500
10	Toilet for Men	1	500
		Total	6000

- Total area required for Optometry college for 30 intake is $18250 + 6000 + \text{Plinth } 10\% = 26675 \text{ Sq.ft}$
- Total area required for Optometry clinics for 60 intake is $26500 + 6000 + \text{Plinth } 10\% = 35750 \text{ Sq.ft}$

स्वास्थ्यम् सर्वार्थसाधनम्

NCAHP

Since-2021

Chapter 6.1: Minimum Infrastructure Recommendation or MSR for Optometry College for the batch of 30 students

1. Classrooms (4)
 - a. Minimum number of classrooms -4
 - b. Size of each classroom: 10 Square feet per student (10X30= 300 Sq. ft)
2. Basic Science lab: (3)
 - a. Optics lab: 20 square feet per student (20X30= 600 Sq. ft)
 - b. Biochemistry and physiology lab: 20 Sq. ft per student)
 - c. Anatomy lab: 20 square feet per student (20X30= 600 Sq. ft)
3. Clinical Lab: (2)
 - a. Size: 20 Sq. ft per student (20X30 = 600 Sq. ft)
 - b. One room for Refraction Lane: 6 lanes for 30 students
 - c. One room for lanes on Contact lens, Binocular vision and low vision clinic
4. Library: (1)
 - a. 30 Sq. ft per students (30x30= 900 Sq. ft)
5. Common Room for girls- (1)
6. Common Room for boys- (1)
7. Auditorium (optional)- (1)
8. Principal and Administration office: Two rooms of 500 sq. ft.
9. Faculty room: One room of 500 sq. ft.
10. Computers: Twenty Desktop computers with necessary software applications

Clinical infrastructure

A school of optometry should have an attached clinic/hospital to cater to the clinical learning. Every student, irrespective of the year of the programme he/ she is enrolled in, is expected to examine (under supervision in the first three years) at least 5 patients per day on the days of clinical postings as prescribed in the curriculum.

Minimum Equipment (for 30 students) for the B Optom program

1. Distance vision drum: (6)
2. Trial set: (6)
3. Streak retinoscope*(6)
4. Keratometer: (6)
5. Lensometer: (6)
6. Slit lamp: (6)

7. Applanation tonometer: (6)
8. Direct Ophthalmoscope*(6)
9. Indirect Ophthalmoscope: (3)
10. Non-mydriatic fundus camera-(1)
11. Color vision test (Ishihara)- (3)
12. Contact lens
 - RGP contact Lens kit - 3 sets comprising choices of base curves and powers
 - Disposable Soft contact lenses kit-3 sets comprising choices of base curves and powers
13. Low Vision
 - Log MAR chart (Distance and Near) -(1 each)
 - Contrast Sensitivity chart-(1): Pelli-Robson CS chart
 - Optical low vision devices
 - Non optical low vision devices
 - Video magnifiers/ SeeTV/ Smart vision glasses – one each
14. Binocular Vision
 - Accommodative flippers (+/- 1.50 and 2) (1 each)
 - Prism Bars (1)
 - Stereo-acuity test chart (1)
 - Modified Thorington (1)
 - Vergence Flippers (12 BO/3 BI) (2)
 - Near Worth Four dot test
15. Dispensing
 - Geneva Lens measure (6)
 - Axis, PAL' marking and Grid charts (1 each)
 - PD ruler (10)
 - Pen torch-(10)
 - Uncut and cut lenses

Frame adjustment kit (1)

Pupillometer- (2)

- Students are expected to possess one streak retinoscope and Direct Ophthalmoscope on their own
- Institutions are expected to buy original versions of the test charts and maintain calibration of all the equipment periodically

Desirable Batch size for B.Optom:

It should be proportional to the OPD (Outpatient Department) of the clinic/hospital. Each student should be able to examine minimum of 5 patients per day. For example: For an OPD of 150, one can have an intake of 30 students per batch. A clinic/hospital having an OPD of 500 can have the intake of 100 students per batch. If the intake is more than 30, infrastructure should also be increased proportionally. Student and faculty ratio is 10:1. The maximum batch size should be proportional to infrastructure, number of faculties and OPD.

Desirable Batch size for M.Optom:

- Maximum of 25% of Bachelor's program shall be the batch size of a post graduate program.
- Teachers at the level of Assistant Professor II or Scientist D and above shall guide the students
- The teacher student ratio for dissertation guidance shall be 1:4.

Guidelines for standalone institutes:

- A clear legal vetted (Notarised stamp paper) Memorandum of understanding (MoU) needs to be provided for any institute/hospital for sharing the infrastructure and it should follow the NCAHP guidelines.

Faculty requirement for UG:

- Full time (FT); Part time (PT)
- It is recommended that a core faculty and student ratio for UG 1:15 to be followed.
- Faculty (Optometrists) ratio shall be approximately 1:2:5 for Professor: Associate Professor: Assistant Professor.
- Ideally all the faculties should be full time. In case of non-availability of full time faculty, 40% may be part time/visiting/Ad hoc faculties (non-core subjects only)
- Faculties appointed for academics for teaching purposes are considered as Full time (Maximum of 8 hours per day or Minimum 40 hours per week).
- If the college/hospital wants faculties to take care of OPD for 3 days in a week, then faculty requirement shall be doubled.
- Visiting faculties can also be considered as part time.

Suggested faculty strength for UG:

30 seats (5*30=150 students)	40 seats	50 seats	60 seats	100 Seats
	(5*40=200 students)	(5*50= 250 students)	(5*60= 300 students)	(5*100= 500 students)
Professor – 1	Professor – 1	Professor –1	Professor – 2	Professor – 3
Assoc. Prof. - 2	Assoc. Prof. - 2	Assoc. Prof. - 3	Assoc. Prof. – 3	Assoc. Prof. – 6
Asst. Prof. – 8	Asst. Prof. – 11	Asst. Prof. – 13	Asst. Prof. – 15	Asst. Prof. – 24

Library Details:

Item	Requirement
Text Books As per syllabus; one copy of Book per 10 students.	Approximately 450 books for 30 intake and 900 books for 60 in take for UG.
Reference books	100 Advanced Books As per requirement
Journals	At least 2 international and 2 national journals
Subscription to electronic data base / e-journals	Required
Mandatory Internet facility Access to e-library Equipment	Minimum 15 computer terminals for 60 students/8 for 30 students.

Faculty requirement for PG:

- Principal/Vice principal/HOD is same for both UG and PG programs.
- It is recommended that a core faculty and student ratio of 1:3 for PG to be followed.
- Minimum of 5 optometry speciality clinics (headed by Optometrists only) need to be seen by a PG student in EACH speciality clinic.
- Student faculty ratio needs to be 3:1 at least Associate professor Level for PG teaching. In case of non-availability of full time faculty, 30% may be part time/visiting/Ad hoc faculties.
- Separate facilities need to be provided for PG students/Fellowship programs/PhD programs.