



CHITKARA SCHOOL OF HEALTH SCIENCES



Overview

The Indian healthcare sector is expected to reach US\$ 100 billion by 2015 from the current US\$ 65 billion, growing at around 20 per cent a year, according to rating agency Fitch. Considering the ever-increasing demand for professionally qualified, competent and trained allied techno-medical expertise, the University established Chitkara School of Health Sciences as a premier healthcare institution in North India exclusively dedicated to the education of allied health professionals.

We envision training and developing health care professionals who can create a difference in the quality of life of the physically or mentally compromised individuals. Our graduates have great scope for employment in corporate hospitals, rehabilitation centres, polyclinics, industries, training institutions in India and abroad, apart from the option of private practice. It is one of the largest allied health colleges in North India.

We feel this to be the appropriate time to get trained manpower in Healthcare Institutions to take up the challenges in the modern global healthcare institutions. The practical inputs are provided through our strong industry collaborations with industry leaders in healthcare management such as Fortis Healthcare and Sankara Eyecare. Our course curriculum is a blend of both theory and practice whereas the theoretical knowledge is provided through internal and external faculties and practical experience is delivered with the help of our industry partners.

For the academic year 2013, we are offering the following courses-

Programs in collaboration with Fortis Healthcare

- 4 year B.Sc Nursing (Basic)
- 3 year B.Sc Medical Laboratory Technology (MLT)
- 3 year B.Sc Medical Imaging Technology (MIT)

Programs in collaboration with Sankara Healthcare

- 4 year B.Sc (Hons.) Optometry
- 2 year Master in Clinical Optometry

Program in Collaboration with University of Nebraska Medical Centre (UNMC), USA

- 2 year Master in Public Health

Healthcare Industry

- India's rapid growth has brought about a "health transition" in terms of shifting demographics, socio-economic transformations and changes in disease patterns.
- Some of the major factors driving the growth in the sector include increasing population, growing lifestyle related health issues, cheaper costs for treatment, thrust in medical tourism, improving health insurance penetration, increasing disposable income, government initiatives and focus on Public Private Partnership (PPP) models.
- Meanwhile, the Government of India has decided to increase health expenditure to 2.5 per cent of gross domestic product (GDP) by the end of the Twelfth Five Year Plan (2012-17), from the existing 1.4 per cent. Prime Minister, Dr Manmohan Singh also emphasised the need for increased outlay to health sector during the Twelfth Five Year Plan.
- According to a report by Price Waterhouse Coopers, an estimated 189 million people in the country will be more than 60 years of age by 2025, needing higher healthcare spends.
- A combined study by an industry body and Ernst & Young suggests that India will need as many as 1.75 million additional beds by the end of 2025. Further, an investment of US\$ 86 billion is required to achieve 1 doctor, 2 beds and 2.3 nurses per 1000 population by 2025.
- As per the report, "Healthcare Information Technology Market in India" released by Frost & Sullivan electronic medical record (EMR) services have a high growth potential at an estimated compound annual growth rate (CAGR) of 13.5 per cent from 2009 to 2016. With many new private hospitals opening in the next few years, investment in EMR is expected to become a necessity for these hospitals.
- Medical tourism in India has also received a boost with arrival of patients from countries with advanced medical systems. This underlines the fact that India has good infrastructure and talent.
- According to a new report published by RNCOS, titled "Booming Medical Tourism in India" India's share in the global medical tourism industry will reach around 3 per cent by the end of 2013. The report states that medical tourism is expected to generate revenue around US\$ 3 billion by 2013, growing at a CAGR of around 26 per cent during 2011–2013. The number of medical tourists is anticipated to grow at a CAGR of over 19 per cent during the forecast period to reach 1.3 million by 2013.
- Allied Health professions are clinical health care professions distinct from medicine, dentistry, and nursing. One estimate reported allied health professionals make up 60 percent of the total health workforce. They work in health care teams to make the health care system function by providing a range of diagnostic, technical, therapeutic and direct patient care and support services that are critical to the other health professionals they work with and the patients they serve.
- Many allied health jobs are considered career ladder jobs because of the opportunities for advancement within specific fields. These may include basic life support; medical terminology, acronyms and spelling; basics of medical law and ethics; understanding of human relations; interpersonal communication skills; counseling skills; computer literacy; ability to document healthcare information; interviewing skills; and proficiency in word processing; database management and electronic dictation.



Healthcare Programs In Collaboration With Fortis Healthcare



Chitkara School of Health Sciences in collaboration with Fortis Healthcare conducts 3-year full time **B.Sc in Allied Healthcare** and 4-year **B.Sc Nursing (Basic)**.

Chitkara University and Fortis Healthcare Limited, two prominent players in their respective fields, having realized the need to build an interface between Academia and Industry, have joined hands to produce quality healthcare professionals in the allied healthcare fields. The training methodology will provide integrated inputs which will help to develop high degree of conceptual skills, analytical skills and quality technical knowledge base among aspirants and prepare them for hospitals and related healthcare domains.

For the academic year 2013, we are offering the following **programs in collaboration with Fortis Healthcare**

- 4-Year B.Sc Nursing (Basic)
- 3-Year B.Sc Medical Laboratory Technology (MLT)
- 3-Year B.Sc Medical Imaging Technology (MIT)



Fortis Healthcare Limited

Fortis Healthcare Limited, the fastest growing healthcare provider in India was incorporated in 1996. The company was founded by the visionary leader, Late Shri Dr. Parvinder Singh, the architect of Ranbaxy Laboratories. Fortis is a manifestation of Dr. Singh's vision "to create a world-class integrated healthcare delivery system in India, entailing the finest medical skills combined with compassionate patient care".

The Fortis mission to deliver quality healthcare focuses on such drivers as excellence, technology and research. The Fortis ethos is enshrined in a "Total Patient Centric Approach" to medical care, delivered through a chain of super-specialty hospitals supported by a complete multispecialty backbone. Presently Fortis has a network of 66 hospitals which include multi specialty hospitals as well as super-specialty centers providing tertiary and quaternary healthcare to patients in areas such as cardiac care, orthopedics, neurosciences, oncology, renal care, gastroenterology and mother and child care.

Fortis Healthcare has been at the forefront of providing quality healthcare services and has raised the bar of quality standards in country. Due to its excellent quality care and safety for patients, Fortis Hospital Mohali has received the highly prestigious JCI accreditation (Joint Commission International) and NABH accreditation (National Accreditation Board for Hospitals and healthcare providers), the highest national recognition for quality patient care and safety.

■ Operating Model

Fortis operates on a hub and spoke model to provide Super Specialty, Multi Specialty and Tertiary level medical care. Hubs are the super specialty hospitals and spokes are the multi specialty centers. Patients who have the need are referred to these hubs from the multi specialty facilities in the region. By embracing this system the patient benefits from the many available network facilities

FORTIS HOSPITALS

Fortis Hospital, Mohali

Super-speciality in Heart
Sector 62, Phase - VIII,
Mohali 160 062. Punjab, India



Escorts Heart Institute & Research Centre Ltd.

Okhla Road,
New Delhi 110 025, India.



Fortis Hospital, Noida

Super-speciality in Orthopaedics
and Neuro Sciences
B-22, Sector-62, Noida 201 301,
Uttar Pradesh, India.



Fortis Ft. Lt. Rajan Dhall Hospital, Vasant Kunj

Sector B, Pocket 1,
Aruna Asaf Ali Marg,
New Delhi 110 070, India.



Fortis La Femme, New Delhi

S-549, Greater Kailash, Part II,
New Delhi 110 048, India.



Fortis Escorts Hospital, Faridabad

Neelam Bata Road,
Faridabad 121 001,
Haryana, India.



Fortis Escorts Hospital, Jaipur

Jawaharlal Nehru Marg,
Malviya Nagar, Jaipur - 302 017,
Rajasthan, India.



Fortis Malar Hospital, Chennai

No. 52, First Main Road,
Gandhi Nagar, Adyar,
Chennai - 600 020



Hiranandani Fortis Hospital, Vashi, Navi Mumbai

Mini Sea Shore Road,
Sector 10-A, Vashi,
Navi Mumbai - 400 703



Escorts Heart Centre

Pt. J.N.M. Medical College,
Raipur 492 001,
Chhattisgarh, India.



**Fortis Escorts Hospital,
Amritsar**
Majitha -Verka Bypass Road,
Amritsar 143 004, Punjab, India.



**Fortis Jessa Ram Hospital,
New Delhi**
WEA, Karol Bagh,
New Delhi 110 005, India

**Fortis Hospital Seshadripuram,
Bengaluru**
No. 65, Prime Center,
1st Main Road, Seshadripuram,
Bengaluru - 560 020, India.



**Fortis Clinique Darne,
Mauritius**
Georges Guibert Street
Floréal, Mauritius

**Fortis Modi Hospital,
Kota**
Swami Vivekanand Nagar,
Rajasthan Housing Board Colony,
Kota, Rajasthan 324 010, India.



**S.L. Raheja Hospital,
Mumbai**
Raheja, Rugnalaya Marg,
Mahim (W),
Mumbai 400016, India

**Fortis Hospital,
Shalimar Bagh**
A Block
Shalimar Bagh
New Delhi-110088, India



**Fortis International
Institute of Medical-Bio
Sciences**
Sector 44
(Adjacent HUDA
City Centre Metro Station)
Gurgaon – 122002, Haryana

SOME OTHER HOSPITALS ARE

- Fortis Hospital, Bannerghatta Road – Bengaluru
- Fortis Hospital, Cunningham Road - Bengaluru
 - Fortis Hospital, Nagarbhavi - Bengaluru
 - Fortis Hospital, Rajajinagar - Bengaluru
 - Marathali Specialty Clinic - Bengaluru
- Fortis Hospital & Kidney Institute - Kolkata
 - Fortis Hospital, Anandapur - Kolkata
- Fortis Hospitals, Mulund Goregaon - Mumbai
 - Fortis Kalyan Hospital - Mumbai
- Fortis Hospital, Shalimar Bagh, New Delhi



4-Year B.Sc Nursing (Basic)

Overview

The global population is rising but the number of health care workers is decreasing relatively. With more and more nurses migrating abroad, India is facing an acute shortage of faculty and clinical practitioners. This necessitates the initialization of more and more educational institutions to meet local, national and global demand for health care providers. Keeping in view the World Health Organization's (WHO) theme of working together for health, Chitkara University initiated nursing program at School of Health Sciences to train and develop quality nursing staff to provide health care services at the grassroots and to meet the global demand.

Accreditation

Our 4 year B.Sc (Nursing) is fully recognised by Indian Nursing Council (INC) and Punjab Nursing Council (PNC).

Collaboration with Fortis Healthcare

Our collaboration with Fortis (Mohali) will be our key partner to provide the necessary "hands on" clinical and para-clinical experience; necessary for the students pursuing this hospital based academic programmes. The overall aim of Nursing programme is to prepare a graduate Nurse to work as frontline worker in the clinical and community field and educational arena.

Our Pedagogy

Our nursing program aims to create leaders in the nursing professionals by providing unique, innovative program that is responsive to the market need, keeping in mind the rapid advance in the health care sector in India as well as abroad. The curriculum emphasizes on a holistic approach to nursing care, in order to ensure an all round growth of the nursing students. Student nurses will be trained to meet the international standards of professionalism and maintain the highest standard of clinical practice. They will receive training in basic nursing procedures which will help them to give basic care to patients. and are given training in developing basic skills in the laboratory, in simulated conditions, before they are exposed to actual hospital situations.

Objective of Program

On completion of the B.Sc. Nursing program, the graduate will be able to:

- Apply knowledge from physical, biological and behavioral sciences, medicine including alternative systems and nursing in providing nursing care to individuals, families and communities.
- Demonstrate understanding of life style and other factors, which affect the health of individuals and groups.
- Provide nursing care on the steps of nursing process in collaboration with the individuals and groups.
- Demonstrate critical thinking skills in making decisions in all situations in order to provide quality care.
- Utilize the latest trends and technology in providing health care.
- Provide promotive, preventive and restorative health services in line with the national health policies.
- Practice within the framework of code of ethics and professional conduct, and acceptable standards of practice within the legal boundaries.
- Communicate effectively with individuals and groups and members of the health team in order to promote effective interpersonal relationships and teamwork.
- Demonstrate skills in teaching to individuals and groups in clinical/community health settings.
- Participate effectively as members of health team in health care delivery system.
- Demonstrate leadership and managerial skills in clinical/community health settings.
- Conduct need based research studies in various settings and utilize the research findings to improve the quality of care.
- Demonstrate awareness, interest and contribute towards advancement of self and of the profession.

Our Academic facilities

The laboratory attached to the nursing school is equipped to carry out screening of all common ailments e.g. Diabetes, Hypertension and Anemia. In addition, the laboratory has specially designed bags to carry the necessary equipment for home care like thermometer, articles for urine testing, growth monitoring, dressing and physical examination. Besides the infrastructure of the college, the well equipped laboratories and clinics of various departments of Fortis Mohali will support various academic and research activities.

Special Courses

We will offer special courses in communication skills, besides computer skills with the aim to

- Improve interaction skills with multidisciplinary team and their clients in hospitals
- Exercise analytical skills when confronted with critical situations.
- Make them familiar with use of computer and related technology
- Make them self-confident

Along with these special courses, students will have the opportunity to attend various workshops, certification programs for developing their competencies in the clinical nursing, as well as related to management and education. The programs maybe on the following themes:

- Emergency Nursing
- Critical care Nursing
- Nursing Management skill
- Innovative Nursing Education methods etc.

Employability

On completion of the B.Sc Nursing, they can work as clinical nurses, managers, researchers and educators who will possess the professional knowledge, critical thinking, ethical decision-making, leadership skills, and the independent and interdisciplinary pursuit of high standards of health care.

3-Year B.Sc

Medical Laboratory Technology (B.Sc. MLT)

A Medical Laboratory Technologist (MLT) is a healthcare professional who performs chemical, hematological, immunologic, microscopic, and bacteriological diagnostic analyses on body fluids. His role is to provide accurate laboratory results in a timely manner as well as safeguard such as experimental controls, calibration of laboratory instruments, delta checks i.e., monitoring of significant changes within a normal series of results, and ensure accuracy.

The technologist also performs equipment validations, calibrations, quality controls, "STAT" or run-by-run assessment, statistical control of observed data, and recording normal operations. He must recognize anomalies in their test results and know how to correct problems with the instrumentation apart from also monitoring, screening and troubleshooting analyzers featuring the latest technology available on the market.

At Chitkara School of Health Sciences, a graduate for Medical Laboratory degree programs will attend classroom courses for two years and clinical rotations are completed in their final year of study. This combination is called a 2+1 program.

In clinical rotations, the student experiences hands-on learning in each discipline of the laboratory and, under supervision, performs diagnostic testing in a functioning laboratory. Although not compensated, a student in the clinical phase of training usually works 40 hours per week for 20 to 52 weeks, experiencing work as a full-time employee.

At Chitkara School of Health Sciences, the MLS are promoted to become specialists, qualified by unique graduate education and / or additional training to perform more complex analyses than usual within a specific field.

Internship

After having successfully completed the second year University examination the student will be qualified to commence the Compulsory Rotatory Internship. The completion of internship is mandatory to enable a student to obtain the degree of Bachelor of Medical Laboratory Technology.

Employability

- After successful completion of program a student will be capable of holding assignments in hospital and health care institutions, pharmaceutical industries, research laboratories and diagnostic centres.
- Successful candidate can set-up their own establishments
- Students with an instinct to learn can do higher studies in specialized field of study and can progress as scientists and even can enjoy faculty positions in academic institutions.
- Students can get placed as Industrial consultant, quality assurance officer.



Our Academic Framework

First Year

Medical Sciences (Medical Anatomy : Part 1)
 Medical Sciences (Human Physiology : Part 1)
 Medical Sciences (Medical Biochemistry)
 Medical Sciences (Microbiology & Bacteriology)
 Environmental Sciences
 Health Systems Research (Biostatistics & Research Methodology)
 1 Week Observership in Clinical Labs / Diagnostic Centres
 Basic Medical Sciences (Medical Anatomy : Part 2)
 Basic Medical Sciences (Human Physiology : Part 2)
 Basic Medical Sciences (Clinical Biochemistry)
 Basic Medical Sciences (Medical Microbiology - Immunology & Serology)
 Basic Medical Sciences (Pathology)
 Laboratory Management Sciences - 1 : (Fundamentals)
 1 week Observership in Clinical Labs / Diagnostic Centres

Second Year

Medical Sciences (Medical Microbiology - Virology & Parasitology)
 Medical Sciences (Clinical Pathology & Histopathology)
 Laboratory Medical Sciences 1 : Fundamentals of Haematology
 Laboratory Management Sciences - 2 : (Advanced)
 Public Health
 Laboratory Management Skills (Computer Aided Management)
 Laboratory Management Skills (Communication and Report Writing)
 1 week Observership in Clinical Labs / Diagnostic Centres.
 Medical Sciences (Pharmacology)
 Medical Sciences (Cytology & Cytotechniques)
 Laboratory Medical Sciences 2 : Clinical Haematology
 Laboratory Management Sciences - 3 : (Specialised Diagnostic Techniques)
 Medical Science (Medical Microbiology : Mycology)
 Medical Science (Cytogenetics & Tissue Culture)
 Blood Banking and Immuno Haematology
 1 week Observership in Clinical Labs / Diagnostic Centres

Third Year

Internship at Fortis Hospital

3-Year B.Sc

Medical Imaging Technology (B.Sc. MIT)

Medical imaging is the technique and process used to create images of the human body (or parts and function thereof) for clinical purposes (medical procedures seeking to reveal, diagnose or examine disease) or medical science (including the study of normal anatomy and physiology).

Medical Radiological Technologist:

A Radiologic Technologist, also known as medical radiation technologist and as radiographer, performs imaging of the human body for diagnosis or treating medical problems.

Nature of the work

Radiologic technology modalities (or specialties) include

- Diagnostic radiography deals with examination of internal organs, bones, cavities and foreign objects; includes cardiovascular imaging and interventional radiography.
- Sonography uses high frequency sound and is used in: obstetrics (including fetal monitoring throughout pregnancy), necology, abdominal, pediatrics, cardiac, vascular and musculo-skeletal region imaging.
- Fluoroscopy live motion radiography (constant radiation) usually used to visualize the digestive system; monitor the administration of contrast agents to highlight vessels and organs or to help position devices within the body.
- CT (Computed Tomography) which provides cross-sectional views (slices) of the body; can also reconstruct additional images from those taken to provide more information in either 2 or 3D.
- MRI (Magnetic Resonance Imaging) builds a 2-D or 3-D map of different tissue types within the body.
- Nuclear Medicine uses radioactive tracers which can be administered to examine how the body and organs function, for example the kidneys or heart.
- Radiotherapy uses radiation to shrink, and sometimes eradicate, cancerous cells/growths in and on the body.
- Mammography use low dose x-ray systems to produce images of the human mammary glands.

Internship

After having successfully completed the second year University examination the student will be qualified to commence the compulsory rotatory internship. The completion of internship is mandatory to enable a student to obtain the degree of Bachelor of Medical Imaging Technology. It is meant to instill in the students clinical practice skills to encompass the qualities of work behavior, roles, communication and interaction skills with patients, colleagues, supervisors and other professionals of multidisciplinary team.

Employability

- After successful completion of program a student will be capable of holding assignments in hospital and health care institutions, pharmaceutical industries, research laboratories and diagnostic centres.
- Students with an instinct to learn can do higher studies in specialized field of study and can progress as scientists and even can enjoy faculty positions in academic institutions.
- Students can get placed as Industrial consultant & quality assurance officer.



Our Academic Framework

First Year

Medical Sciences (Medical Anatomy : Part 1)
 Medical Sciences (Human Physiology : Part 1)
 Medical Sciences (Medical Biochemistry)
 Medical Sciences (Medical Microbiology)
 Environmental Sciences
 Health Systems Research (Biostatistics & Research Methodology)
 2 week Observership in Diagnostic Centres
 Medical Sciences (Medical Anatomy : Part 2)
 Medical Sciences (Human Physiology : Part 2)
 Medical Sciences (Pathology)
 Radiological Sciences : 1 : Applied Electronics - Fundamentals
 Radiological Sciences : 2 : Atomic and Nuclear Physics
 Health Systems Research : Applicable Mathematics
 2 weeks Observership in Clinical Labs

Second Year

Radio diagnostic
 Radiotherapy
 Radiation Physics
 Radio diagnosis Management
 Public Health
 Diagnostic Centre Management Skills (Computer Aided Management)
 Diagnostic Centre Management Skills (Communication and Report Writing)
 2 week Observership in Advanced Diagnostic Institutions
 Medical Sciences (Pharmacology)
 Medical Sciences(Forensic Sciences)
 Radiodiagnosis Management : 2 : Equipment Maintenance Policies & Practices
 Laboratory Management Sciences : Basic & Specialised Diagnostic Techniques
 Radiological Technology : 4 : Radiodiagnosis : 2
 Radiological Technology : 5 : Radiotherapy : 2
 Radiological Technology : 6 : Radiation Physics : 2
 1 week Observership in Hospital Diagnostic Centres

Third Year

Internship at Fortis Hospital



Optometry Programs in Collaboration with Sankara Eye Care

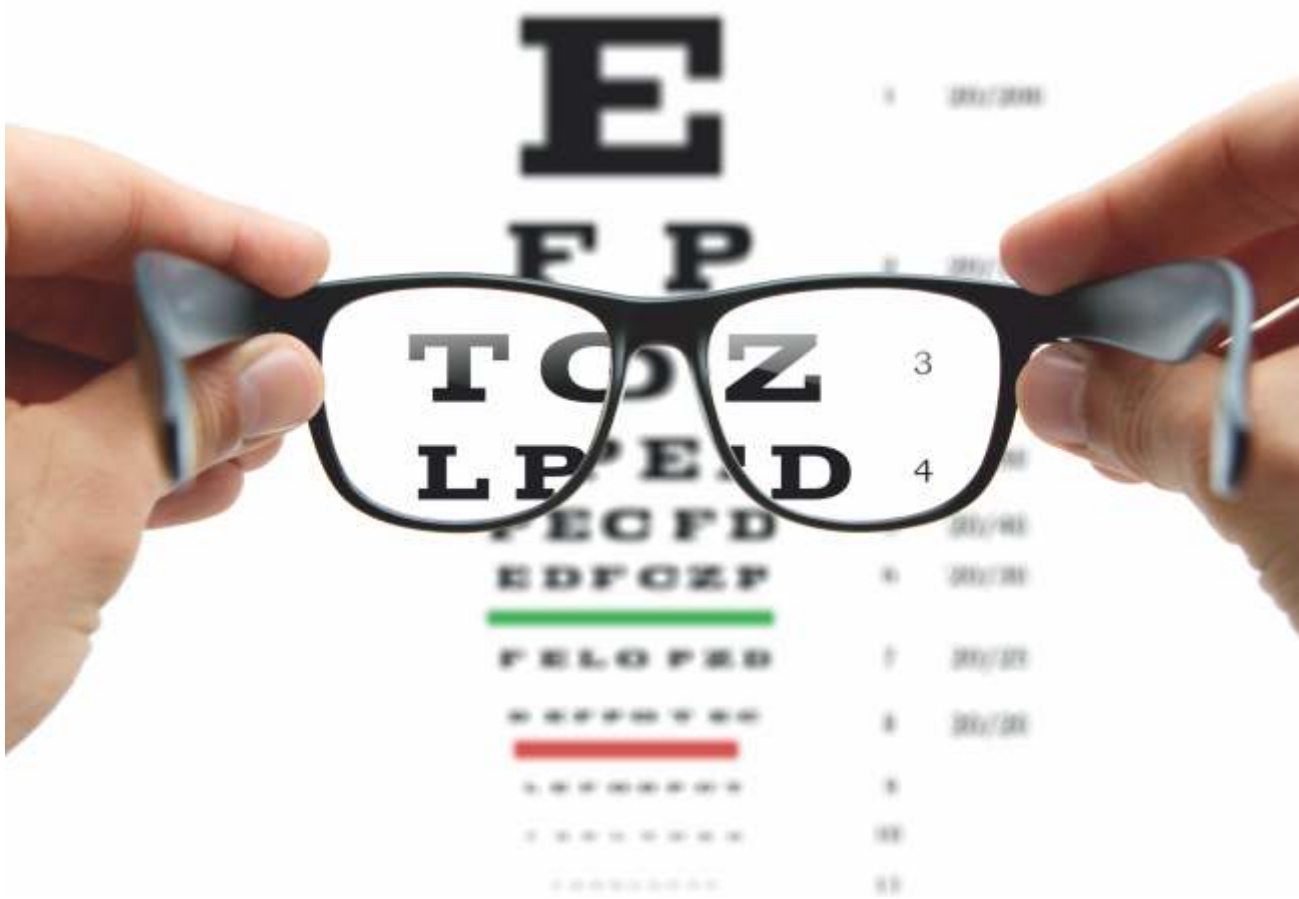


Sankara Eye Care is a group of 11 eye hospitals comprises a team of 125 doctors, 600 paramedical professionals, 275 support staff and has touched the lives of over 40 million people in these 35 plus years. Its mission towards freeing mankind of preventable and curable blindness continues to follow divine light. The vision of Sankara was born from the need to provide quality eye care to everyone, regardless of socio-economic, religious, linguistic and geographical backgrounds. Over the years, Sankara has become an institution that is known for affordable, super-specialty eye care, while firmly believing that increased accessibility to such services is the key to eliminating needless blindness in India.

With these facilities and the best of optometric faculties, Chitkara and Sankara are well placed to provide Optometry education of the highest levels.

For the academic year 2013, we are offering the following programs in collaboration with **Sankara Healthcare**

- 4-Year B.Sc (Hons.) Optometry
- 2-Year Master in Clinical Optometry



Career Options in Optometry

An optometrist tests the visual acuity and prescribes corrective lenses. Adept at handling eyetesting equipment to examine a person's vision, the optometrist also fabricates lenses to prescribed specifications and fits them and other low-vision aids to suit individual requirements. In fact, optometry is the first line of defence against blindness as it deals with refraction, eyewear Rx, contact lens fitting, low-vision aid evaluation and referrals mainly to ophthalmology. Hi-precision machines are used to polish and harden lenses. With an increasing aged population and the growing incidence of muscular degeneration and diabetic retinopathy — optometrists can be an important part of the primary treatment. Besides the need for spectacles and contact lenses, low-vision aids and co-management of eye disorders spell good news for optometry as a profession.

Optometrists usually work in eye hospitals, clinics and opticians' outlets or with multinational vision care companies. You may also specialise in particular types of vision disorders (i.e. infractive errors like presbyopia, squints, colour blindness). After gaining experience in a private establishment or with a lens manufacturer, you can open your own business. You will be surprised to know that optometry features among the top 10 income-earning professions in the US. Flexibility in practice and myriad choices in geographic location form the icing on the cake.

Just look at the figures: every third blind person in the world lives in India, 75% of which can be ascribed to preventive blindness (cataract, refractive error), underscoring the need for timely detection and treatment. Whereas, India needs more than 40,000 optometrists, the figure stands at below 10,000. Moreover, with most people over 40 (and even earlier) requiring glasses/lenses, a skilled and experienced optometrist is always in demand.

4-Year B.Sc (Hons.) Optometry

Chitkara School of Health Sciences in collaboration with Sankara Eye Care is initiating 4-year full time B.Sc (Hons.) in Optometry. The training methodology will provide integrated inputs which will help to develop high degree of conceptual skills, analytical skills and quality technical knowledge base among aspirants and prepare them for bright future in the Eye Industry.

Program Overview

Our four-year Optometry program is designed to provide you with all the theoretical and practical knowledge and skills needed to become a qualified optometrist. Optometrists do much more than supply spectacles and contact lenses. An optometric examination includes screening for signs of disease that may need medical attention. Optometrists may also offer specialist advice and treatment to patients having problems with low vision, binocular vision, and those with specific learning difficulties such as dyslexia.

Program Highlight

- **1-Year on campus**
- **2-Year practical training at Sankara Eye Hospital Ludhiana**
- **1-Year Paid Internship in Sankara Network Hospital across the country**

Course Content

First Year	Second Year	Third Year	Forth Year
Basic Biochemistry & Nutrition General & Ocular Physiology & Anatomy Physical & Geometric Optics Principles of Lighting	Optometric & Visual Optics Optometric instruments CEVS & Ocular Diseases Microbiology, Pathology & Pharmacology Clinics	Low Vision Aids & Geriatric Optometry Contact Lens Systemic diseases & Glaucoma Dispensing Optometry & Occupational Optometry Pediatric Optometry, Binocular vision & Advances in Optometry Project Clinics & Specialities	Internship
Computer programming* English* Mathematics *	Medical Psychology* Communications & Public relations*	Practice management * Law & Optometry * Public health, Epidemiology & Biostatistics *	



2-Year Master in Clinical Optometry

Chitkara School of Health Sciences, in collaboration with Sankara Eye Care Institutions offers a two year Masters in Clinical Optometry - M.Optom.

A higher professional degree in Optometry equips students to offer specialist advice on eye care and provide timely diagnostic intervention. Sound training in Optometry also enables professionals to specialize in the fields of low vision, advanced contact lenses, binocular vision, vision therapy, rehabilitation, neuro optometric rehabilitation and behavioural optometry etc. This program offers students great advantage in terms of hands-on exposure and rigorous theoretical training. In a nutshell, a career in optometry offers personal growth, unlimited opportunity, respect in society, contribution to the community for improving healthcare and therefore the quality of life, job flexibility and financial success.

Program Overview

The students will undergo lectures at the University and the clinical component of the course would be conducted at Sankara Eye Care. This would provide opportunity to Optometrists who are employed to further their education as there will be clinical modules every semester, which will be conducted at Sankara Eye Hospital.



Collaboration With University of Nebraska Medical Centre



The University of Nebraska Medical Center (UNMC, USA) is the only public health science center in the state of Nebraska. UNMC serves as both a primary care facility and a tertiary referral center, and is recognized as one of USA's leading centers in cancer with a specialty in hematopoietic malignancies, transplantation biology, bioterrorism preparedness, neurodegenerative disease, cardiovascular diseases, genetics and biomedical technology.

The UNMC College of Public Health (COPH) is accredited by CePH (Council for education on Public Health), the highest and only accreditation body in the U.S. UNMC-COPH is also a full member of the Association of American Schools of public health and attracting best talents from within and outside of the U.S. It offers a wide range of programs to provide students with a comprehensive, well-rounded education in public health and prepares students to shoulder the challenging needs of the future. The college has a mission to promote optimal health and well-being through robust education, research, and service in collaboration with communities in Nebraska, across the country, and around the world. The academic courses are designed to prepare students for research roles and settings, with programs that emphasize understanding of theoretical issues and the application of disciplinary methods to the study of public health problems.

For the academic year 2013, we are offering 2-Year Master in Public Health in Collaboration with **University of Nebraska Medical Centre (UNMC), USA**

2-Year Master in Public Health

Master in Public Health (MPH)

Public health is a discipline devoted to preventing diseases and promoting health in the human population. The threats challenging the health of the public include a variety of acute and chronic diseases and conditions including AIDS, addiction, obesity, and aging and some pervasive conditions based on gender, race, socioeconomics, and level of education. Post Graduate study in public health has a singular purpose: to train leaders in public health who are armed with the skills to conduct research, bring about policy change, and positively affect the health of populations.

As a post graduate student in Master of Public Health (MPH), a successful professional is expected to have the following skills and competencies at the end of the course:

- Assessing health needs of individual and the community, and determining community capacities to meet these needs, especially in the resource poor settings of developing countries.
- Planning and implementing effective community-based health intervention and education programs based on evidence based and community oriented concepts.
- Evaluating the effectiveness of public health programs by applying appropriate quantitative and qualitative research techniques.
- Acting as resource persons in disseminating public health principles.

Chitkara School of Health Sciences in collaboration with the University of Nebraska Medical Centre (UNMC, USA), is offering a two-year full time Post Graduate Program in Public Health (MPH). The training methodology adopted for the Master in Public Health program will provide integrated inputs to generate a highly efficient and skilled workforce to meet the challenges of public health in India and abroad. During research work, the students will get exposed to a real-world problem and work scientifically to find a solution. Together, we will provide that distinctive experience to the students under mentorship of Indian and American professors and their large networks in Public Health and Healthcare.

Two-Tracks of MPH

There are two ways of completing this unique MPH programme. The first year is planned to be done at Chitkara University itself. There will be courses taught by Chitkara Faculty however a major part of the first year consisting of six core domain courses yielding 18 credits will be taught by UNMC professors using high-end distance learning modalities along with on-site supervision and mentoring at Chitkara University. Completion of these 18 credits will enable the student to obtain a certificate from UNMC.

18 credits in India at Chitkara University taught by UNMC professors using high-end distance learning modalities and on-site supervision and mentoring.

The track differentiation is based on how the student would like to do the second year.

- a) A student can choose to complete the second year of MPH in the University. As a result of which the student obtains both a certificate from UNMC (for 18 credits) along with a Chitkara University's degree. The remaining 21 credits of courses and 6 credits of internship will be taught and managed by Chitkara with its expert faculty and network public health organizations in India.
- b) Another option that the students can avail is, after completing the first year in India at Chitkara University and obtaining the UNMC certificate the student can go to UNMC for the second year to complete the requirements and obtain an American MPH from UNMC. This is made possible as the 18 credits obtained in the first year are part of the UNMC MPH, accredited by CePH and are transferable to UNMC in the future.



Program Highlights

- Foundations in Public Health
- Health Planning & Management
- Biostatistics*
- Epidemiology (Theory & application) *
- Applied epidemiology in practice
 - a) Survey methods in Community Health
 - b) Interpretation of epidemiological data
- Disease related epidemiology
 - a) Infectious disease epidemiology
 - b) Chronic disease epidemiology
- Health behaviour *
- Global applications in Public Health*
- Maternal and Child Health
- Public Health, Environment & Society *
- Health Services Administration*
- Health Economics
- Public Health Nutrition
- Health policy analysis
- Applied Occupational Health
- Introduction to Qualitative data collection methods
- Community Oriented Primary Care

Acquired skills and competencies at the end of the course

- Assessing health needs of individual and the community, and determining community capacities to meet these needs, especially in the developing countries.
- Planning and implementing effective community-based health intervention and education programs based on evidence based and community oriented concepts.
- Evaluating the effectiveness of public health programs by applying appropriate techniques.
- Acting as resource persons in disseminating public health principles.

Some Unique Features

The program is highly student centric and interactive and students delve deep into public health problems in India and the world, which require them to do in depth search for up to date literature as well as maintain constant interaction among the peers and the teachers across India and U.S. This is a unique course as not only it gives the students an exposure to the public health issues, their challenges and effective solutions of both the Indian and the international relevance, but also facilitates them to avail an additional Certificate of Public Health from the College of Public Health, University of Nebraska Medical Centre (UNMC), Omaha, USA at the end of the first year of the program. The program is aimed at nurturing highly skilled public health professionals for the 21st century India, with the prowess to deliver solutions to global issues. Also theoretical grounding, professional development and all round grooming are emphasized in order to empower the students to face challenges in real life, on graduation.