


**Pioneering  
Health Sciences  
in Eastern India  
for decades**



**NSHM Knowledge Campus,  
Kolkata**  
Established by HCG Charitable Trust  
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**NSHM Knowledge Campus,  
Durgapur**  
Established by NSHM Academy  
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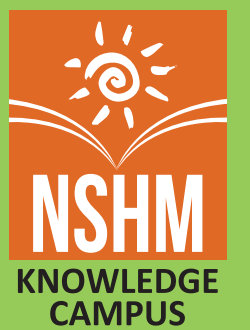


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**Disclaimer:** This information booklet of NSHM Knowledge Campus was published in February 2023, and the information given was correct at that time. It is intended primarily for those considering admission to the college in the year 2023. We reserve the right to modify any statement if necessary, to make variations to this content or methods of delivery of programmes of study, to discontinue programmes or to merge or combine programmes. If such action is reasonably considered by the college, every resort will be made not to do so, notice of any changes will be given and the college will use all reasonable endeavours to provide a suitable alternative. Information about specific entrance requirements is intended as a guide only. For campus specific details, please visit the respective NSHM Knowledge Campus at Kolkata and Durgapur. All disputes are to be settled within the jurisdiction of Kolkata for all NSHM Knowledge Campuses.

[www.nshm.com](http://www.nshm.com)



# NSHM Knowledge Campus

**NSHM Knowledge Campus**, with a legacy of over 25+ years in providing quality education, with campuses in Kolkata and Durgapur. Being one of Eastern India's pioneering institutions, NSHM offers multidisciplinary UG & PG programmes under Business & Management, Hotel & Tourism Management, Health Sciences, Media, Design, Computing & Analytics, Engineering & Technology, and Nursing.

## **New Age Programmes**

We have always wondered about the future and experimented with offering full-time degree programmes that are futuristic to meet India's evolving needs as well as being globally accepted. New age degree programmes in AI & Machine Learning, Digital Health, Cyber Security, Yoga, Data Science, Fashion Design & Culinary Science have been added over the last 5 years to provide interested students an opportunity to learn and explore exciting career options in these emerging fields.

## **Youth Connect Initiatives**

Every year we have driven initiatives to host eminent personalities from diverse fields to interact, empower and share their experiences with our students. Inspire the Champion in You, NSHM's flagship annual event, where diverse speakers ranging from Dr. Shashi Tharoor, Member of Parliament, to legendary footballer Pele have visited our campuses and interacted with our students. Other events like Vectra, Y-Comm, Login are also held annually to create platforms for students to showcase their talents.





**Our  
Legacy**

**26+**

Years of  
Excellence  
in Education

More than

**60+**

Degree  
Courses

**8**

Schools

Over

**30**

Thousand Alumni working  
in India and abroad

**2**

Campuses  
Kolkata & Durgapur



# Affiliations, Accreditations & Awards



## Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT)

- NSHM's courses are affiliated to & degrees are awarded by MAKAUT



## All India Council for Technical Education (AICTE)

- AICTE is responsible for proper planning and coordinated development of the technical education and management education system in India
- NSHM's course contents and curriculum design, teaching methodologies, student intake norms, etc., are approved by AICTE



## West Bengal University of Health Sciences (WBUHS)

- The nursing courses are affiliated to & degrees are awarded by WBUHS



## Pharmacy Council of India (PCI)

- NSHM's UG and PG Pharmacy courses are accredited by the Pharmacy Council of India



## West Bengal Nursing Council (WBNC)

- NSHM's GNM Diploma programme is approved by the West Bengal Nursing Council



## National Assessment and Accreditation Council (NAAC)

- NSHM Knowledge Campus, Kolkata & Durgapur are accredited by NAAC, as applicable



## National Board of Accreditation (NBA)

- NSHM's UG Pharmacy programmes are accredited by NBA



## Ministry of Ayush, a ministry of the Government of India

- Responsible for developing education, research and propagation of traditional medicine systems in India



## Authorised Training Centre, Yoga Certification Board, Ministry of AYUSH, Government of India

# Programmes Offered

## NSHM Institute of Health Sciences

Bachelor of Pharmacy  
Bachelor of Optometry  
B.Sc. - Psychology  
B.Sc. - Medical Lab Technology  
B.Sc. - Medical Instrumentation & Critical Care Technology  
B.Sc. - Medical Imaging Technology  
B.Sc. - Yoga  
B.Sc. - Digital Health & Telemedicine  
B.Sc. - Dietetics & Nutrition  
Master of Optometry\*  
Master of Pharmacy - Pharmacology  
Master of Pharmacy - Pharmaceutics  
Master of Public Health\*  
M.Sc. - Clinical Psychology  
M.Sc. - Dietetics & Nutrition  
M.Sc. - Yoga\*  
M.Sc. - Medical Lab Technology  
M.Sc. - Medical Imaging Technology  
M.Sc. - Environmental Science

## NSHM Business School

Bachelor of Business Administration  
BBA - Hospital Management  
BBA - Global Business  
BBA - Sports Management  
BBA - Banking & Finance  
BBA - Supply Chain Management  
BBA - Accountancy, Taxation & Auditing  
MBA+ Harvard Business School Online  
Master of Business Administration (MBA)  
Master of Hospital Administration

## NSHM Design School

B.Sc. - Fashion Design & Management  
B.Sc. - Interior Designing  
B.Sc. - Multimedia, Animation & Graphics  
B.Sc. - VFX Film Making  
M.Sc. - Fashion Management  
M.Sc. - Animation & Graphic Design

## NSHM Institute of Computing & Analytics

B.Sc. - Data Science  
B.Sc. - Cyber Security  
Bachelor of Computer Applications (BCA)  
Master of Computer Application\*\* (MCA)  
M.Sc. - Data Science & Analytics\*  
M.Sc. - Information & Cyber Security\*

## NSHM Institute of Hotel & Tourism Management

B.Sc. - Culinary Science  
B.Sc. - Hospitality & Hotel Administration  
B.Sc. - Hospitality & Hotel Administration (Europe Internship)  
BBA - Travel & Tourism Management  
Bachelor of Hotel Management & Catering Technology  
M.Sc. - Hospitality Management\*  
Master of Tourism & Travel Management\*

## NSHM Institute of Engineering & Technology

B.Tech. - Civil Engineering  
B.Tech. - Electrical Engineering  
B.Tech. - Mechanical Engineering  
B.Tech. - Electronics & Communication Engineering  
B.Tech. - Computer Science Engineering  
B.Tech. - Computer Science Engineering (Data Science)  
B.Tech. - Computer Science Engineering (Artificial Intelligence & Machine Learning)

## NSHM Media School

B.Sc. - Film & Television  
B.Sc. - Media Science  
M.Sc. - Film & Television  
M.Sc. - Media Science

## Nursing

B.Sc. - Nursing\*\*  
Diploma in General Nursing and Midwifery (GNM)

\*Hybrid Learning (Online + Offline) Blended Classes Option offered at Kolkata Campus

\*\*Approval awaited

# Academic Partners



# Academic Partners



# CBEL

## Choice Based Extended Learning

CBEL is Choice Based Extended Learning (CBEL) which is an exciting design to bring NSHM's learners across all programmes and levels (UG-to-PG) in a cohort of a CBEL programme, as per their choice. NSHM is one of the top education centres in India that offers 50+ CBEL programmes of 20-40 hours duration under 9 baskets.

The baskets are replete with curated multidisciplinary programmes of useful and productive learning beyond the programmes of study of a learner. Moreover, CBEL will be all about active learning and is intended to extend the joy of learning through engaging activities. The maximum a learner can choose per semester is 4 programmes and the minimum is 1 programme.





# CBEL

## Choice Based Extended Learning

### **Business Management**

Courses: Brand Management | Sustainable and Ethical Studies | Integrated Marketing Communication  
Luxury Brand Management | Market ability of Indian Craftsmanship | Social Entrepreneurship | Managing  
Work Force Diversity | Logistics and International Supply Chain Management | Lateral Thinking using De  
Bono's Six Thinking Hats | Essentials of Entrepreneurship | Business Plan Formulation & Pitching

### **Communication & Creative Studies**

Courses: Cinematography | Set Design | History of Art | Aesthetics | Sculpting | Event Management  
Press & Public Relations | Product Photography | Design Thinking | Designing a Powerful Presentation  
Effective Communication through Theatre | Music, Arts, and Acting Appreciation | Monetising Social Media

### **Health & Wellness Management**

Courses: Economic Evaluation of Various Diseases | Legal Issues in Health Care | Health Insurance  
Management | Ophthalmic Product Development | Self-practitioner Optometrist | Metrics for Public Health  
Clinical Data Management | Health Data Analytics | Pharmacokinetics with Calculations Pharmaceutical  
Product Development | Mental Wellness | Yoga for Resilient and Resonant Personality Development | Yoga  
for Health Management | Wellness through Sports and Fitness Management

### **IT & Analytics**

Courses: Research and Data Analysis | Working with Data | Field-survey Project-based Qualitative Analysis of  
Data | Data Privacy in the Digital Business | Data Analytics with Excel | Industry 4.0

### **Language & Linguistic Studies**

Courses: French | German | Sanskrit for Beginners | Phonetics, Linguistics, and Literature Appreciation

### **Professionalism & Skill Enhancement**

Courses: Image Development | Professional Attitude for Customer Service | Scientific Writing | Designing  
Impactful Presence | Emotional Intelligence

### **Socio-cultural Studies**

Courses: Universal Human Values | Indian Knowledge System: Introduction to Manuscriptology and  
Palaeography

### **Entrepreneurship**

Courses: Organic Product Making - Farm and Non-farm

### **Hospitality Management**

Courses: International Travel Formalities | Tourism Destination Management  
Customer Relationship Management in Tourism

# Experiential Learning

The Centres of Excellence at NSHM Knowledge Campus are committed to the holistic development of its students by grooming talented professionals through unique programmes and initiatives.



NSHM Centre of Creative  
& Performing Arts

**aangan**

## **CENTRE FOR CREATIVE & PERFORMING ARTS**

Aangan is a creative platform where NSHMites learn and showcase their creativity. Aangan features both traditional and contemporary training programmes. A fresh basket of training programmes is offered in every semester by the trainers from various creative disciplines. Aangan works closely with the student community and clubs of NSHM.



## **CENTRE FOR INNOVATION & INCUBATION**

Determined to provide team-designed, team-delivered, experience-based and community-based applied learning, NSHM has endeavoured to create this unique platform and has christened it as TAG. This centre inspires, motivates and cultivates the innate human curiosity to bring out the genius in our students, taking them ahead on the path of creation, innovation and entrepreneurship.





## CENTRE FOR SPORTS & WELLNESS

Uday aims at contributing to the personal, physical & psychological growth and well-being of students, creating a sporting environment at NSHM. With its state-of-the-art fitness training & gym facilities, Uday organises regular fitness training programmes and also organises various sports activities and events round-the-year. The centre is also committed to nurturing young sporting talents through regular training camps and practices.



NSHM Centre for Language  
& Communication

## CENTRE FOR LANGUAGE AND COMMUNICATION

NSHM CLC ensures the development of people skills among its students so that they are able to connect with the industry and its people, thereby emerging as successful professionals. Apart from conducting regular English and business communication classes, the centre conducts regular evening classes on the English language, foreign languages & employability skills.



## CENTRE FOR SOCIAL ACTION

Outreach is involved in contributing to social causes by mobilising student volunteers to participate in various outreach activities, often in collaboration with charitable organisations and NGOs. It is a platform through which students and individuals can connect with the society and its people.





# About NSHM Institute of Health Sciences

NSHM Institute of Health Sciences provides education through experiential learning that prepares students for tomorrow. Besides classroom teaching, students are given clinical and community exposure so that they become active change-makers and solution providers for the healthcare sector. The industry-aligned curriculum taught by faculty who are specialists in their respective fields along with active collaborations with industry leaders enables students to develop professional competencies required to address the world's health challenges.

## Departments

- Pharmacy
- Optometry
- Psychology
- Dietetics & Nutrition
- Public Health
- Yoga Sciences
- Medical Technology







# Pharmacy

Bachelor of Pharmacy

Master of Pharmacy - Pharmacology

Master of Pharmacy - Pharmaceutics



# Bachelor of Pharmacy

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Human Anatomy and Physiology I Pharmaceutical Analysis I Pharmaceutics I Pharmaceutical Inorganic Chemistry Remedial Biology Remedial Mathematics	Masterclass on career avenues in Pharmacy profession Paramedic (Life saving skills) training CLC-Adaptability & Communication

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Human Anatomy and Physiology II Pharmaceutical Organic Chemistry I Biochemistry Pathophysiology Environmental sciences	Masterclass on Pathological and Biochemical investigations Workshop on Universal Human Values CLC-Team Building and Conflict resolution

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Pharmaceutical Organic Chemistry II Physical Pharmaceutics I Pharmaceutical Microbiology Pharmaceutical Engineering Computer Applications In Pharmacy	Masterclass on MS Office Masterclass on Sterile Manufacturing CLC-German Language Course

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Pharmaceutical Organic Chemistry III Medicinal Chemistry I Physical Pharmaceutics II Pharmacology I Pharmacognosy and Phytochemistry I Communication skills	Masterclass on Green Chemistry Industrial tour (Phase I) CLC-Problem solving & Critical Thinking



### Fifth Semester

#### Academic Curriculum

Medicinal Chemistry II  
Industrial Pharmacy I  
Pharmacology II  
Pharmacognosy and Phytochemistry II  
Pharmaceutical Jurisprudence

#### NSHM Value Added Curriculum

Masterclass on Herbal formulation & Nutraceuticals  
Industrial tour (Phase II)  
CLC-Negotiation & Interpersonal Skills

### Sixth Semester

#### Academic Curriculum

Medicinal Chemistry III  
Pharmacology III  
Herbal Drug Technology  
Biopharmaceutics and Pharmacokinetics  
Pharmaceutical Biotechnology  
Quality Assurance

#### NSHM Value Added Curriculum

Masterclass on Computer Aided Drug Design  
Masterclass on Six Sigma  
Workshop on Analytical Instrument Handling  
CLC-Employability Skills"

### Seventh Semester

#### Academic Curriculum

Instrumental Methods of Analysis  
Industrial Pharmacy II  
Pharmacy Practice  
Novel Drug Delivery System  
Practice School

#### NSHM Value Added Curriculum

Pre-placement Seminar  
Seminar on Opportunities in Higher Studies  
AlumniScape - An Alumni Connect Initiative  
CLC-Expectation Management & Impact Communication-I

### Eighth Semester

#### Academic Curriculum

Biostatistics and Research Methodology  
Social and Preventive Pharmacy  
Pharma Marketing Management(Elective)\*  
Computer Aided Drug Design(Elective)\*  
Advanced Instrumentation Techniques(Elective)\*  
Life Science Skill Development \*  
Project Work

#### NSHM Value Added Curriculum

Seminar on IPR & Regulatory Affairs  
Workshop on Sophisticated Analytical Instrument handling  
CLC-Expectation Management & Impact Communication-II

# Master of Pharmacy - Pharmacology

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Modern Pharmaceutical Analytical Techniques Advanced Pharmacology-I Pharmacological and Toxicological Screening Methods-I Cellular and Molecular Pharmacology Pharmacology Practical I Seminar/Assignment	Masterclass on Pharamcovigilance & Clinical Data Management Workshop on Sophisticated Instrument handling (in-house) CLC - Foreign Language

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Advanced Pharmacology II Pharmacological and Toxicological Screening Methods-II Principles of Drug Discovery Experimental Pharmacology practical- II Pharmacology Practical II Seminar/Assignment	Week long workshop on Experimental animal handling & Molecular Biological techniques (External) CLC - Foreign Language

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Discussion / Presentation (Proposal) Research Work Research Methodology and Biostatistics Journal club	Masterclass on Data Analysis & AI Masterclass on MS Office CLC - Foreign Language

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Discussion/Final Presentation Research Work Journal Club Co-curricular Activities	CLC - Team Building & Conflict resolution CLC - Employability Skills



# Master of Pharmacy - Pharmaceutics

## First Semester

### Academic Curriculum

Modern Pharmaceutical Analytical Techniques  
Drug Delivery System  
Modern Pharmaceutics  
Regulatory Affair  
Pharmaceutics Practical I  
Seminar/Assignment

### NSHM Value Added Curriculum

Masterclass on AI & Robotic Techniques  
in Pharmaceutical Industry  
Workshop on Sophisticated Instrument  
handling (in-house)  
CLC - Foreign Language

## Second Semester

### Academic Curriculum

Molecular Pharmaceutics  
(Nano Tech and Targeted DDS)  
Advanced Biopharmaceutics & Pharmacokinetics  
Computer Aided Drug Delivery System  
Cosmetic and Cosmeceuticals  
Pharmaceutics Practical II  
Seminar/Assignment

### NSHM Value Added Curriculum

Week long workshop on Sophisticated  
Instrument Handling (External)  
CLC - Foreign Language

## Third Semester

### Academic Curriculum

Discussion / Presentation (Proposal)  
Research Work  
Research Methodology and Biostatistics  
Journal club

### NSHM Value Added Curriculum

Masterclass on Data Analysis & AI  
Masterclass on MS Office  
CLC - Foreign Language"

## Fourth Semester

### Academic Curriculum

Discussion/Final Presentation  
Research Work  
Journal Club  
Co-curricular Activities

### NSHM Value Added Curriculum

CLC - Team Building & Conflict resolution  
CLC - Employability Skills"

# Career Directions

The pharmacy programme offer highly rewarding careers in both India and abroad. The Indian pharmaceutical industry is one of the world's largest, ranking 3rd in terms of volume and 13th in terms of value. By 2023, the domestic pharmacy market is expected to grow to \$55 billion. Advanced knowledge and training in different branches of pharmaceutical sciences offer a wide range of career options to the students, some of which are mentioned:

Production Chemist	Manufacturing Chemist	Production Superior
Production Officer	Production Executive	Production Manager
Quality Control Chemist	Quality Assurance Chemist	Product Development Chemist
Research & Development Chemist	Pharmacovigilance	Associate Professor
Professor	Medical Representative	Product Manager
Production Chemist	Manufacturing Chemist	Bioequivalence Studies
Govt. Analyst	Drugs Inspector	Data Analyst
Senior D.I.	Deputy Drug Controller	Asst. Drug Controller
Drug Controller of India	Regulatory Manager	Toxicological Studies

# Success Stories



**Sumana Dey Chowdhury**  
Ph.D. Aspirant  
Nova South-eastern  
University College of  
Pharmacy USA



**Torsha Ghosh**  
Ph.D. Aspirant  
School of Chemical  
Engineering Sungkyunkwan  
University South Korea



**Anwesha Paul**  
MBA Student  
University of East London  
United Kingdom



**Tanmoy Banerjee**  
Associate Pharmacovigilance  
Wipro



**Poulami Chakraborty**  
Junior QC Executive  
Cipla Ltd.



**Nasim Mondal**  
Executive Quality Control  
MacLeods Pharmaceuticals Ltd.



**Arkaprova Basak**  
Trainee Officer  
Alkem Laboratories Pvt. Ltd



**Ranajit Mandal**  
BE Trainee  
Intas Pharmaceuticals Ltd.



**Promita Chakraborty**  
Trainee Junior Data Analyst  
Cognizant Solutions Ltd.



**Nairrita Majumder**  
Ph.D. Aspirant  
West Virginia University  
USA



# Vision Science

Bachelor of Optometry

Master of Optometry





# Bachelor of Optometry

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Geometrical Optics General Physiology General Anatomy Professional Communication in English	Communication Skills I (Basic) Workshop on Basic life support I Seminar on Adaptive Optics Seminar on relationship between brain and eye

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Physical Optics (Optics II) Anatomy (Ocular) Environment & Ecology Computer Fundamentals	Training on Advance Excel and Powerpoint Learning Seminar of Nutritional effect on eye Workshop on Basic life support II Seminar on Biomedical waste management in eye hospital

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Visual Optics Binocular Vision & Ocular Motility Medical pathology & Microbiology (General & Ocular) Pharmacology Ophthalmic Instrumentation & Procedure -I	Workshop on Basic life support III Workshop on Binocular Vision Communication Skills II ( Clinical) Seminar on Histopathological evaluation of infected eye

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Introduction to Vision Science Ocular Disease I (Anterior Segment Disease) Clinical Refraction I Ophthalmic Lens & Dispensing Optics Ophthalmic Instrumentation & Procedure -II	Session on examining Anterior Segment Disease Workshop on Basic life support training IV Lens manufacturing lab visit Workshop on dispensing of ophthalmic (spectacle) lens



### Fifth Semester

#### Academic Curriculum

Low Vision Aids & Visual Rehabilitation  
Contact Lens  
Clinical Refraction II  
Ocular Disease II (Posterior & Neuro-eye Disease)  
Public Health & Community Optometry

#### NSHM Value Added Curriculum

Visit for Low Vision rehabilitation in Blind School  
Workshop on Basic life support training V  
Seminar on scope of entrepreneurship in Optometry  
Seminar on Ocular surface evaluation

### Sixth Semester

#### Academic Curriculum

Systemic Condition & the eye  
Fundamentals of Clinical Research methods  
Specialized Contact Lens  
Professional Practice Management  
Applied Optometry & Orthoptics

#### NSHM Value Added Curriculum

Workshop on vision therapy  
Bausch and Lomb Mastermind  
Workshop on Basic life support training VI  
Workshop on Research methodology and bio statistics  
Zeiss Pathsaala

### Seventh & Eighth Semester

#### Academic Curriculum

Internship

#### NSHM Value Added Curriculum

Interactive session with intern students  
Case study  
Webinar  
Personality Development



# Master of Optometry

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Applied Optometric Optics Advanced ophthalmic diagnostic procedures & instrumentation Epidemiology and Community optometry Research Methodology & Biostatistics Business aspects in optometry	Synopsis writing Scope of Entrepreneurship in Optometry Zeiss Pathsala Journal Club 1 Training of SPSS and its Application

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Applied clinical optometry Advanced contact lens practice Geriatric optometry & Low vision rehabilitation-1 Ocular diseases & Therapeutics Paediatric Optometry and binocular Vision-1	Seminar/Webinar on Advancement of low vision technique Seminar/Webinar on Special Children assessment Journal Club 2 Community Service through eye-camp

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Recent advances in Optometry Occupational optometry Geriatric optometry and low vision rehabilitation II Paediatric optometry & binocular vision II Advance contact lens practice II	Seminar/Webinar on speciality contact lens Journal Club 3 Session on advance pedagogy Seminar/webinar on Sports Vision

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Speciality Clinics Dissertation Project submission	Scientific paper writing Clinical Dissertation writing

# Career Directions

Optometry is one of the top ten income earning professions in the country today. In an overly populated country like India, there are millions of people suffering from various kinds of defect in their eyes. We train our students for an array of lucrative career opportunities. Some of them are:





# Success Stories



**Hardy Mehta**  
Optometrist  
Roosevelt Vision, Washington



**Shalini Kumari**  
Lenskart



**Roheet Dhakkal**  
Research Scholar  
University of London



**Abhishek Singh**  
Branch Manager  
Optica East Africa-Nairobi,  
Kenya



**Akansha Singh**  
Proliance Retina, Washington, USA



**Aadersh Gaddhyan**  
Clinical Associate Member at College  
of Syntonic Optometry-New York



**Shalini Karn**  
Medplus



**Rohit Dutta**  
Medplus



# Psychology

**B.Sc. - Psychology**

**M.Sc. - Clinical Psychology**

# B.Sc. – Psychology

## First Semester

### Academic Curriculum

Introduction to Psychology  
Biological Psychology  
Practical on Reaction Time, Arousal, and identification of changes in facial expressions of emotion  
Project based Practical on Memory functioning including bedside tests  
Communicative English  
Any one from GE Basket

### NSHM Value Added Curriculum

Communication Skills Workshop 1  
Face your fear Bootcamps  
Graphology

## Second Semester

### Academic Curriculum

Introduction to Statistical Methods for Psychological Research  
Anti –Bullying Bootcamp  
Psychology of Individual Differences  
Practical on statistical methods including usage of Excel  
Practical on assessing intelligence and Personality  
Ecology: Ecosystem Dynamics and Conservation  
Any one from GE Basket

### NSHM Value Added Curriculum

Communication Skills Workshop 2  
Training on basics of Research

## Third Semester

### Academic Curriculum

Development of Psychological Thought  
Psychological Research  
Social Psychology  
Project based Practical on Gender Identity  
Project based practical on short tool development  
Project based practical on Group cohesiveness and problem solving  
Any one from GE Basket

### NSHM Value Added Curriculum

Training on Public Speaking  
Resume Building Workshop  
  
Gender Sensitization BOOTCAMP  
  
Training in Personality Development

## Forth Semester

Academic Curriculum	NSHM Value Added Curriculum
Understanding psychological Disorders Statistical methods for psychological research II Applied social psychology in Practice Practical on assessing psychological symptoms of anxiety and depression Practical on t test and chi square test Practical based on Likert's Scale and Goode and Hatte's revision of Bogardus's Scale Any one from GE Basket	Case Study Group Project Workshop on Schizophrenia  Seminar on Bipolar Disorder  Seminar on Depression
Students will choose any 1 of 2 programs	
Emotional Intelligence	Stress Management

## Fifth Semester

Academic Curriculum	NSHM Value Added Curriculum
Academic Curriculum Understanding Psychological Disorders II Developmental Psychology Practical on Psychopathology Project based Practical on Attachment and Parenting Styles	NSHM's value-added Curriculum  Training on Poster Making Person with disability camp Forgiveness and Happiness Bootcamp Seminar on Art Therapy
<p style="text-align: center;"><b>Students will choose any 1 of 2 programs</b></p> <div> <div>           Positive Psychology            Health Psychology            Project Work/Dissertation         </div> <div>           Cultural Psychology            Educational Psychology         </div> </div>	

## Sixth Semester

Academic Curriculum	NSHM Value Added Curriculum
Organizational Behaviour Counselling Psychology Project based practical on Emotional Intelligence and Motivation of employee Project based practical on attitude towards mental health treatment in various population	Soft Skill Development Training Career Counselling  Eating disorder awareness camp  Mental Health Awareness Bootcamp
<p style="text-align: center;"><b>Students will choose any 1 of 2 programs</b></p> <div> <div> Human Resource Management  Community Psychology  Project Work/Dissertation </div> <div> Engineering Psychology  Forensic Psychology </div> </div>	



# M.Sc. - Clinical Psychology

First Semester	
Academic Curriculum	NSHM Value Added Curriculum
Cognitive Psychology Physiological Psychology Theories of Personality Structure Application of Psychology in Community Field Work Personality & IQ	Communication Skills Workshop 1 and Empathy Building Training on Neuropsychology Community mental health programme Graphology Poster Competition Bootcamp
Second Semester	
Academic Curriculum	NSHM Value Added Curriculum
Developmental Psychology Fundamentals of Clinical Psychology Research methodology Statistics in Psychology, Scale Construction Projective Techniques	Communication Skills Workshop and Empathy Building 2 building among caregiver Journal club including review literature Orientation on Children's Apperception test (CAT) Workshop on Hypnosis
Third Semester	
Academic Curriculum	NSHM Value Added Curriculum
Advanced Psychopathology Childhood & Developmental Disorders Therapy Psychotherapy & Counseling 1 Psychotherapy Processes Clinical Assessment & Intervention Observation Clinical Assessments (Case History Taking Psychometric Evaluation) on Out-door Clients Observation and clinical symptoms rating scale application	Multiple Sensitization Program Workshop on Cognitive Behaviour Workshop on Acceptance and Commitment therapy Peer/group supervision Geriatric Mental Health Camp Capacity building among caregivers
Fourth Semester	
Academic Curriculum	NSHM Value Added Curriculum
Psychotherapy Health Psychology Seminar clinical assessments (case history taking & Psychometric Evaluation) on Out-door Clients (adult cases) Observation and clinical symptoms rating scale application Internship Dissertation	Hands-on training on mental health assessment and Intervention Session on Personal and interpersonal Development Workshop on family and couple Therapy Hand on training on assessment using different types of projective and objective tests Borderline personality Disorder boot camp Workshop on play therapy

# Career Directions

Employment of psychologists is projected to grow 3 percent from 2019 to 2029, about as fast as the average for all occupations. On successful completion of the programme, a student can be gainfully employed as:

Hospitals and Healthcare Facilities	Law enforcement	Marketing and Analysis
Non-government organizations	Education sector	Psychological and Sociological Research
Caregiver	Career Counsellor	Career Employment Specialist
Research & Development Chemist	Lecturer	Associate Professor
Child Care Worker	Clinical Psychologist	Counselling Psychologist
Community Relations Officer	Developmental Psychologist	Day-care Centre Supervisor
Educational Psychologist	Forensic Psychologist	Health Educator
Industrial Psychologist	Neuropsychologist	Psychiatric Technician
Public Statistician	Psychiatric Assistant	Recreation Worker
Rehabilitation Specialist	Research Psychologist	Social Psychologist
Social Worker	Staff Recruiter	

# Success Stories



**Debdutta Biswas**  
Basilmind



**Indrakshee Sen**  
Guru Teg Bahadur Public School



**Jamima Afrin**  
Indus International School



**Prodorsita Dhar**  
Bhaskar Aditya Academy



**Subhadip Sen**  
Beyond Autism



# **Dietetics & Nutrition**

**B.Sc. - Dietetics & Nutrition**

**M.Sc. - Dietetics & Nutrition**



# B.Sc.- Dietetics & Nutrition

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Basics of Nutrition (Theory and Practical) Food Microbiology (Theory and Practical) English Communication	Hospital visit to gain knowledge on biological waste management Workshop on biometric assessment Seminar on importance of Probiotics and Prebiotics in Human Health Communication skill workshop for patient handling I

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Basic Chemistry (Theory and Practical) Food Science (Theory and Practical) Environmental Science	Workshop on Food Adulteration Test Seminar on different aspects of Food Safety Seminar on role of dietitian and nutritionist in Food Industry Communication skill workshop for patient handling II

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Human Physiology-I (Theory and Practical) Biochemistry-I (Theory and Practical) Public Health Nutrition (Theory and Practical) Sports Nutrition	Seminar on Sports Nutrition Community survey on Nutritional Status Assessment Seminar on the physiology of GI tract

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Nutrition & Life Cycle (Theory and Practical) Diet Therapy I (Theory and Practical) Human Physiology-II (Theory and Practical) Public Health	Hands-on training on Diet chart preparation Nutritional Awareness programme on community health and well being Seminar on prevalence and management of communicable and non-communicable disease Health camp

Fifth Semester

Academic Curriculum

Diet Therapy II (Theory and Practical)  
Biochemistry II (Theory and Practical)  
Basic of Biostatistics  
Internship I (Any one discipline)  
a) Food Industry  
b) Health Industry  
c) Community)

NSHM Value Added Curriculum

FoSTaC Training I  
Visit to Dairy Industry  
Hands-on Training on SPSS  
and its application  
Food fermentation

Sixth Semester

Academic Curriculum

Food Safety and Quality control  
(Theory and Practical)  
Geriatric Nutrition (Theory and Practical)  
Nutritional management and diet counselling  
Introduction to Business Management  
Internship -II (Any one discipline a) Food Industry,  
b) Health Industry, c) Community)

NSHM Value Added Curriculum

FoSTaC Training II  
Journal Club and research paper writing  
Geriatric Nutritional Status Assessment and  
visit to Old-Age home

# M.Sc.- Dietetics & Nutrition

## First Semester

### Academic Curriculum

Human Anatomy and Physiology  
Principles of Food Science  
Epidemiology and Changing Health Care Sector  
Food Microbiology  
Nutritional Biochemistry  
Nutritional Physiology & Biochemistry Practical  
Biometric Assessment of Nutritional Status

### NSHM Value Added Curriculum

Seminars on Physiological ailments  
Seminars on application of Epidemiological studies to control malnutrition  
Exhibition on different food recipes to generate awareness about food group system and its day to day application  
FoSTaC training  
Journal Club Activity I

## Second Semester

### Academic Curriculum

Dietary Management-I  
Biostatistics  
Advanced Nutrition  
Women Health and Nutrition  
Public Health and Nutrition Policy Program  
Therapeutic Diet Chart Preparation-I  
Industry Assignment

### NSHM Value Added Curriculum

Training on Diet counselling and patient handling  
Seminars on nutrigenomics and its application  
Hands on training on Management of Diabetes- Type I and Type II  
Seminars on pre-natal and post-natal nutrition  
Journal Club Activity II

## Third Semester

### Academic Curriculum

Dietary Management- II  
Research Methodology  
Paediatric, Geriatric and Sports Nutrition  
Health Information and Management and Decision Making  
Food Technology and Quality Control  
Therapeutic Diet Chart Preparation-II  
Research Project

### NSHM Value Added Curriculum

Seminar on Nutritional ergogenic aid on sports performance  
Workshop on formulating scientific strategy in inter-disciplinary research project  
Workshop on nutritional disorder and its dietary management  
Seminars on enteral and parenteral nutrition  
Journal Club Activity III

## Fourth Semester

### Academic Curriculum

Entrepreneurship in Food Service  
Nutrition Communication for Health Promotion and Its Applications  
Practical Exposure to Microbiology and Packaging  
Dissertation

### NSHM Value Added Curriculum

Workshop on importance of intellectual property right in research writing  
Hands on training to establish start-up and developing entrepreneurship skills  
Industrial visit on food packaging.  
Seminar on side effect of the internal coating of food container  
Journal club Activity IV

# Career Direction

The increasing awareness regarding staying fit and healthy, avoiding high-calorie unplanned diets is contributing to high demand of professional dietitians and nutritionists in India and abroad. After completing the programme, one can work as:

Food Science and Technology	Sports Nutritionist	Public Health Nutritionist
Clinical Nutritionist	Nutritionist	Research Fellow/Scholar
Registered Dietician	Food Researcher	Food and Nutrition Quality Management Officer
Food Processing Manager	Dietician	Menu Planner – Monitoring the Food Preparation
Dietician or Nutritionist	Clinical and Therapeutic Dietician	Researcher in Universities, Specialist Institution and Hospitals
Public Health and Community Dietician	Food Quality Manager	Preserving Supervisor
Teacher	Professor	Article Writer and Columnist





# Success Stories



**Anindita Nandi**  
Starmark Fitness Studio



**Jhilik Mahanta**  
Desun Hospital Junior Dietician



**Mallika Chakraborty**  
Medica North Bengal Clinic



**Mayuree Das**  
Assam Medical College  
Pediatric Oncology Nutritionist



**Neelanjana Basu**  
Nutrition Dietetics  
Saroj Gupta Cancer Institute



**Oindrila Mukherjee**  
Cultfit



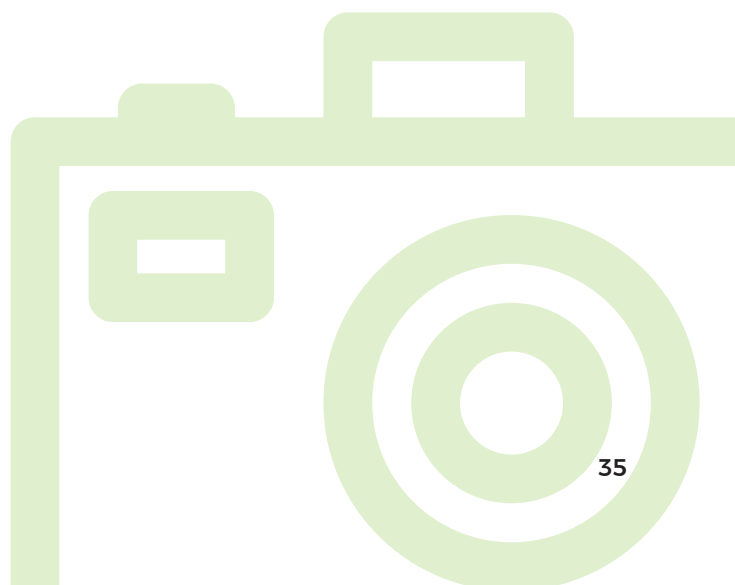
**Dipika Ghatak**  
Senior Dietetics & Nutrition Consultant  
Jeevan Jyoti Institute of Medical Sciences  
Silchar, Assam



**Shalu Kumari Neotia**  
Getwell Assistant Dietician



**Somaiya Shakil**  
Sugarfit





# Public Health

## Master of Public Health

# Master of Public Health

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Introduction To Public Health Principles of Management In Public Health Epidemiology & Changing Healthcare Sector Health Education & Communication Health Information Management & Decision Making Research Methodology	Orientation of Students To The Community Based Clinical Activities In Urban Public Health Center Focusing Specifically on Immunisation Activities, Antenatal Care, Family Planning and Welfare Activities Communication Skill & Public Speaking Development Workshops and Cme's Theoretical aspect of Report Writing

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Health Economics Finance Management & Budgeting In Health Application Of Quantitative Methods In Public Health Health Care Services Ethics & Legislations In Public Health	Internship at Ngo's and Field visit to Understand Community Health Issues Under The Supervision of Key Ngo Functionaries and Faculty Members Communication Skill & Public Speaking Development Workshops and Cme's of Professional Bodies Case Study Project

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Quality Managemnet Inventory and Logistics Management Health Insurance & Managed Care Managing Human Resources In Health	Internship at Ngo's, Govt. Hospitals Under The Supervision of Key Ngo Functionaries an Faculty Members Communication Skill & Public Speaking Development Workshops and Cme's Research Project

## Fourth Semester

Academic Curriculum	NSHM Value Added Curriculum
Health Policies & Research Social & Behavioural Perspective of Health Managing Diverse Health Services Organisations Health & Ecology <b>Electives:</b> Advanced Epidemiology Health Program, Policy and Planning Health Management Rmnch+a	Internship at Ngo's, Govt. Hospitals Communication Skill & Public Speaking Development Workshops and Cme's Research Project & Publication

# Career Direction

The Master of Public Health program equips students with the skills and knowledge necessary to collaborate with communities, oversee and assess public health initiatives, and enhance public awareness of effective healthcare practices. Public health professionals can pursue careers in government, non-profit organizations, or private sector industries. In addition to implementing solutions such as health education campaigns, they also prioritize maintaining IT systems to address public health concerns.

Academicians	Ph.D. Aspirants	Research/Field Officers
State Consultants (Quality Assurance)	QA Consultant	State Epidemiologists
State Programme Managers	Block Programme Managers	Consultant Rural
Field Investigators - NGO's	Research Officers/ Field Investigators - WHO	Research Officers/ Field investigators - UNICEF
Consultant- Rural & Child Health under Health & Family Welfare Services	Medical Officers - Health Insurance Companies	Consultant (Research & Documentation) under National Health Mission

# Success Stories



**Dr Paulomee Kashya**  
National Consultant  
Monitoring & Evaluation  
National Center for Vector Borne  
Disease Control, MOHFW, India



**Dr Reshmi Saha**  
Asst.Professor  
IMS, Kolkata



**Dr Sudipta Bhattacharya**  
Junior Research Associate  
ICMR Hospital Based Cancer Registry  
Peerless Hospital



**Dr. Shramana Das**  
Program Impact Specialist  
Plan India



**Dr. Aditi Virmani**  
Medical Officer  
E-Expendise Healthcare  
Gurgaon



**Mr. Gajanan Maharana**  
Monitoring & Evaluation Specialist  
UNFPA, Odisha





# Yoga Sciences

B.Sc. - Yoga

M.Sc. - Yoga



# B.Sc.- Yoga

## First Semester

### Academic Curriculum

Human System According to Eastern & western Concept  
Yog-abhyasa  
Students Will have to Select From The Ge Basket  
English Communication

### NSHM Value Added Curriculum

Expert talk on relevant topics  
One week residential yoga retreat.  
Bhajan- The impact of sound vibration on wellness

## Second Semester

### Academic Curriculum

Texts on Yoga  
Yog-Abhyasa II  
Students will have to select from the GE Basket  
Environmental Science

### NSHM Value Added Curriculum

State level Yogasana competition  
Interpersonal skill development workshop  
Indian traditional performing arts training.

## Third Semester

### Academic Curriculum

Traditional Systems of Healing  
Cultural history of ancient India & the importance of Vedas, Upanishad & later Vedic literature  
Yoga for Common Ailments  
Students will have to select from the GE Basket  
Basics of Sanskrit Grammar

### NSHM Value Added Curriculum

1. State level Yogasana competition
2. Poster Presentation
3. Educational Tour
4. CLC - Sanskrit Language level -I

## Fourth Semester

### Academic Curriculum

Bhagavad Gita  
Science And Consciousness  
Narada Bhakti Sutras / Yogic Techniques  
Minor Project - Narada Bhakti Sutras / Yogic Techniques

### NSHM Value Added Curriculum

Public Speaking  
Wellness centric Yoga training workshop in hospital / centre  
National level Yogasana championship  
Optional Foreign Language Certification (Beginners)

## Fifth Semester

### Academic Curriculum

Entrepreneurship Mindset Development (Karma Yoga - Field Work)  
Teaching Practice  
Laya Yoga / Bhagavad Gita-II  
Major Project - Internship

### NSHM Value Added Curriculum

Expert talk on relevant topics  
Karma Yoga (Field Work)  
Visit to Traditional Yogic places of repute.  
Optional Foreign Language Certification (Intermediate)

# M.Sc. – Yoga

## First Semester

### Academic Curriculum

Introduction to Sanskrit  
Human Anatomy & Physiology  
Vedas Upanisads and Darsanas  
Yoga Philosophy and Health  
Psychology & Counseling  
Advanced yoga practice –i

### NSHM Value Added Curriculum

Seminar / Guest Lecture on relevant topics  
One week residential yoga retreat where students imbibe yogic lifestyle in Gurukula environment  
CLC - Sanskrit Language level -1  
Spoken English & Personality Development  
Optional Foreign Language Certification (Beginners)

## Second Semester

### Academic Curriculum

Bhagavad Gita  
Common Ailments - I  
Patanjali Yoga Sutras  
Hatha Yoga  
Research Methodology  
Advanced yoga practice – ii

### NSHM Value Added Curriculum

State level Yogasana competition  
Interpersonal skill development workshop  
Indian traditional performing arts training  
CLC - Sanskrit Language level -2  
Optional Foreign Language Certification (Intermediate)

## Third Semester

### Academic Curriculum

Common Ailments - Ii  
Philosophy Science & Consciousness  
Narada Bhakti Sutras  
Yoga Therapy & Other Systems Of Healing  
Advanced Yoga Practice – Iii  
Yoga therapy – i

### NSHM Value Added Curriculum

Public Speaking  
Yoga therapy training workshop in hospital / centre  
Educational Tour  
National level Yogasana championship

## Fourth Semester

### Academic Curriculum

Pranayama & Meditation  
Yoga Therapy – Ii  
Teaching Practice  
Yoga Therapy Training  
Dissertation & Presentation  
Karma yoga (field work)

### NSHM Value Added Curriculum

National Seminar / Guest Lecture on Paper / poster Presentation  
Intermediate Teacher Training Sessions  
Internship  
Bhajan- The impact of sound vibration on wellness

# Career Direction

As many people are embracing Yoga in their changing lifestyle, there is increasing job opportunities in India as well as in abroad for a Yoga professional. There are several career options available for a Yoga professional in government & private sectors in India where professionals can work as:

Research Officer- Yoga and Naturopathy	Yoga Aerobics Instructor	Assistant to Ayurvedic Doctors
Assistant to Clinical Psychologists	Yoga Therapist	Yoga Instructor
Yoga Teacher	Therapists and Naturopaths	Yoga Advisor
Yoga Specialist	Yoga Practitioner	Yoga Consultant

# Students Success Stories



**Namrata Shah**  
Research Analyst and  
Kumbhak Therapy Mentor  
Astika Wellness Pvt. Ltd.



**Priyanka Mondal**  
Junior Faculty, Dept. of Yoga  
NSHM College of Management



**Kakali Chatterjee**  
Junior Faculty, Dept. of Yoga  
NSHM College of Management





# **Medical Technology**

**B.Sc. - Medical Lab Technology**

**B.Sc. - Medical Instrumentation & Critical  
Care Technology**

**B .Sc. - Medical Imaging Technology**

**M.Sc. - Medical Lab Technology**

**M.Sc. - Medical Imaging Technology**



# B.Sc. – Medical Lab Technology

## First Semester

### Academic Curriculum

Human Anatomy I  
Human Physiology I  
Health Education and communication  
English Communication

### NSHM Value Added Curriculum

Public Speaking Bootcamp  
Advance PowerPoint Bootcamp  
Communication Skill Bootcamp I  
Resume Building Workshop

## Second Semester

### Academic Curriculum

Human Anatomy II  
Human Physiology II  
Biomedical Waste Management  
Entrepreneurship  
Environmental Science

### NSHM Value Added Curriculum

Case Study Group Project I  
Financial Technical Analysis Bootcamp  
Communication Skill Bootcamp II  
Hospital visit

## Third Semester

### Academic Curriculum

Pathology  
Haematology I  
Biochemistry  
Presentation Skill and Excel Basic Data Analysis  
Design and human Evolution  
Lab management and medical Ethics

### NSHM Value Added Curriculum

ELO Class I  
Performing Arts  
Sculpture and 3D Arts  
Photography  
Travel and Tourism  
Hospital Training-I

## Fourth Semester

### Academic Curriculum

Microbiology  
Haematology II  
Immunology  
Biostatistics  
Hospital Support Service

### NSHM Value Added Curriculum

Communication Skill Bootcamp III  
Cultural Activity  
Sports activity  
Mushroom Cultivation  
Hospital Training-II

## Fifth Semester

### Academic Curriculum

Immunology and Blood banking  
Parasitology and Virology  
Diagnostic Cytology  
Clinical Enzymology

### NSHM Value Added Curriculum

Communication Skill Bootcamp IV  
ELO Class II  
Case Study Group Project II  
Hospital Training III

## Sixth Semester

### Academic Curriculum

Human Anatomy II  
Human Physiology II  
Biomedical Waste Management  
Entrepreneurship  
Environmental Science

### NSHM Value Added Curriculum

Case Study Group Project I  
Financial Technical Analysis Bootcamp  
Communication Skill Bootcamp II  
Hospital visit

# B.Sc. – Medical Instrumentation & Critical Care Technology

## First Semester

### Academic Curriculum

Basic Anatomy  
Basic Physiology  
Health Education and communication  
Environmental studies

### NSHM Value Added Curriculum

Communication Skill Bootcamp I  
Public Speaking Bootcamp  
Advance PowerPoint Bootcamp  
Resume Building Workshop

## Second Semester

### Academic Curriculum

Fundamentals of Biochemistry  
Essentials of Pathology  
Biomedical Waste Management  
Entrepreneurship  
English Communication and Language Lab

### NSHM Value Added Curriculum

Presentation I  
Financial Technical Analysis Bootcamp  
Communication Skill Bootcamp II  
Case Study Group Project I

## Third Semester

### Academic Curriculum

Applied Anatomy Related to Critical care  
Applied Physiology Related to Critical care  
Fundamentals of Electrical and Electronics  
Presentation Skill and Excel Basic Data Analysis  
Design and human Evolution  
Ethical Standard of Critical Care Technology

### NSHM Value Added Curriculum

ELO Class I  
Performing Arts  
Photography  
Travel and Tourism  
Hospital Training-I  
Presentation II

## Fourth Semester

### Academic Curriculum

Biomedical instrumentation  
ICU Therapy  
Clinical Pharmacology  
Biostatistics  
Hospital Support Services  
Procedural Skills in Critical Care

### NSHM Value Added Curriculum

Communication Skill Bootcamp III  
Cultural Activity  
Sports activity  
Mushroom Cultivation  
Hospital Training-II

Cont.

Fifth Semester

Academic Curriculum

CSSD Procedures  
Cellular Biophysics  
Cardiovascular Technology  
Major Project

NSHM Value Added Curriculum

ELO Class II  
Communication Skill Bootcamp IV  
Presentation III  
Hospital Training III

Sixth Semester

Academic Curriculum

Equipment Maintenance and Troubleshooting  
Radiation Biophysics  
Dialysis Technology  
Major Project

NSHM Value Added Curriculum

Communication Skill Bootcamp V  
Case Study Group Project III  
Presentation IV  
Hospital Training IV



# B.Sc. – Medical Imaging Technology

## First Semester

### Academic Curriculum

Human Anatomy and Physiology  
Basic Biochemistry  
Health Education and communication  
English Communication

### NSHM Value Added Curriculum

Public Speaking Bootcamp  
Advance PowerPoint Bootcamp  
Communication Skill Bootcamp I  
Resume Building Workshop

## Second Semester

### Academic Curriculum

Pathology  
Microbiology  
Biomedical Waste Management  
Environmental Science

### NSHM Value Added Curriculum

Communication Skill Bootcamp II  
Financial Technical Analysis Bootcamp  
Case Study Group Project I  
Blood Bank Camp  
Workshop on Advance Diag. Technique

## Third Semester

### Academic Curriculum

Pharmacology  
Basic Physics of Radiography  
Radiographic film & Image processing techniques  
Presentation Skill and Excel Basic Data Analysis  
Medical Ethics

### NSHM Value Added Curriculum

ELO Class I  
Performing Arts  
Sculpture and 3D Arts  
Photography  
Travel and Tourism  
Hospital Training-I

## Fourth Semester

### Academic Curriculum

Radiography of Chest, Abdomen, Pelvis and Skull  
Radiography of Spine and Extremities  
Mammography, Fluoroscopy, and  
Mobile Radiography  
Biostatistics  
Hospital Management

### NSHM Value Added Curriculum

Communication Skill Bootcamp III  
Cultural Activity  
Sports Activity  
Development and Management Skill  
Hospital Training-II

Fifth Semester

Academic Curriculum

Contrast Media: Reaction and Management of Special Radiography procedures  
Physics of Ultrasound and CT  
Quality Control in radiography, PC and PNDT, PACS and planning of Radiology Department  
Dental Radiography

NSHM Value Added Curriculum

Communication Skill Bootcamp IV  
ELO Class II  
Case Study Group Project II  
Seminar-I  
Hospital Training III

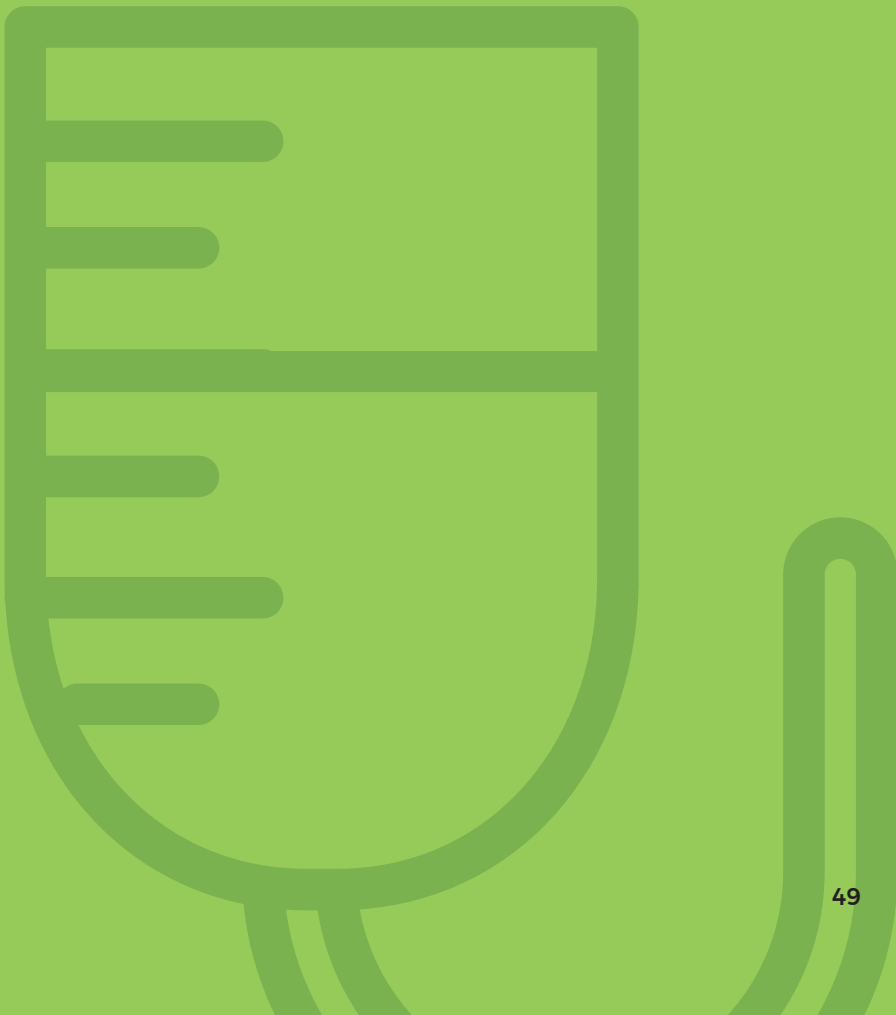
Sixth Semester

Academic Curriculum

Radiobiology and Radiation safety  
Physics and Hardware of MRI  
Imaging sequences and advances in MRI  
Recent advances and guided Radiological Procedures

NSHM Value Added Curriculum

Communication Skill Bootcamp V  
Case Study Group Project III  
Medical Camp  
Seminar-II  
Hospital Training IV





# M.Sc. - Medical Imaging Technology

## First Semester

Academic Curriculum	NSHM Value Added Curriculum
Human Anatomy and Physiology Instrumentation of Conventional Radiological Equipments-I Radiographic Procedures-I Radiation Physics-I Advanced Technique and Instrumentation of Ultrasound-I Radiation Protection and Management of Radiology Department-I	Communication Skill Bootcamp I Public Speaking Bootcamp Advance PowerPoint Bootcamp Resume Building Workshop Seminar-I Hospital Training-I

## Second Semester

Academic Curriculum	NSHM Value Added Curriculum
Human Anatomy and Physiology Instrumentation of Conventional Equipments-II Radiographic Procedures-II Radiation Physics-II Advanced Technique and Instrumentation of Ultrasound-II Radiation Protection and Management of Radiology Department-II	Case Study Group Project I Radiological Development and management skill ELO Classes-I Cultural Activity Sports Activity Seminar-II Blood Donation Camp Hospital Training-II

## Third Semester

Academic Curriculum	NSHM Value Added Curriculum
Advance Technique and Instrumentation of CT-I Advance Technique and Instrumentation of MRI-I Techniques and Equipments of Interventional Radiology and Nuclear Medicine Technology-I Care of Patient in Diagnostic Radiology and Management of Health Organization-I Biostatistics	Poster Presentation Workshop on Advance Diag. Techniques Financial Analysis Boot Camp ELO Classes-II Photography Performing Arts Seminar-III Hospital Training-III

Forth Semester

Academic Curriculum

Advance Technique and Instrumentation of CT-II  
Advance Technique and Instrumentation of MRI-II  
Techniques and Equipments of Interventional Radiology and Nuclear Medicine Technology-II  
Care of Patient in Diagnostic Radiology and Management of Health Organization-II  
Project/ Thesis  
Seminar/ Presentation  
Hospital Training

NSHM Value Added Curriculum

Entrepreneurial Skill Development  
Community Visit  
Medical Camp



# M.Sc. – Medical Laboratory Technology

First Semester	
Academic Curriculum	NSHM Value Added Curriculum
Structure and Function of Biomolecules Analytical and Physical Biochemistry Fundamentals of Enzymology Molecular Metabolism- I	Public Speaking Bootcamp Communication Skill Bootcamp I Advance PowerPoint Bootcamp Resume Building Workshop Seminar-I Hospital Training-I
Second Semester	
Academic Curriculum	NSHM Value Added Curriculum
Biochemical Techniques Clinical Biochemistry-I Molecular Metabolism-II General Physiology & Organ Function Test	Case Study Group Project I Development and management skill ELO Classes-I Cultural Activity Sports Activity Blood donation Camp Seminar-II Hospital Training-I
Third Semester	
Academic Curriculum	NSHM Value Added Curriculum
Clinical Biochemistry-II Applied molecular Biology Statistics and Cli. Biochemistry Lab Management Automation in the Clinical Biochemistry Laboratory	Poster Presentation Workshop on Advance Diag. Techniques Financial Analysis Boot Camp ELO Classes-II Photography Performing Arts Seminar-III Hospital Training-III
Fourth Semester	
Academic Curriculum	NSHM Value Added Curriculum
Dissertation Journal Club Industrial/Laboratory Training	Entrepreneurial Skill Development Seminar-IV Community Visit Medical Camp

# Career Direction

The course also enables them to adapt to modern and emerging medical lab technologies by way of lifelong learning and practice in a multi-disciplinary and diverse health environment and discharge their services with ethics, values, and social responsibility.

Laboratory Technologists	Laboratory Supervisors	Laboratory Technologist
Technology Manager	Laboratory Manager	Laboratory Assistant
Dialysis Technologists	Research Associate	Medical Record Technologist
Resident Medical Officer	Laboratory Testing Manager	Associate Professor – Biotechnology
Associate Professor – Bio-Medical	Phlebotomist	Blood Bank Technologist
Critical Technology	ICU In-charge	

# Success Stories



**Ahmed Reja**  
Asarfi Hospital



**Kollol Dey**  
Health World Hospital



**Md. Jahid Equebal**  
My Med Healthcare



**Poushali Ghosh**  
Asarfi Hospital



**Rahul Banerjee**  
Asarfi Hospital



**Md. Sarfaraz Hauque**  
Gouri Devi Hospital



**Sakib Hossain**  
Milki BPHC



# M.Sc. – Environmental Science

First Semester	
Academic Curriculum	NSHM Value Added Curriculum
Systems Perspectives and Holism in Environment "Evolution of Earth-Environment Systems" "Atmospheric Processes and Climate Cognition" Environmental Geoscience Energy & Environment Audit Course I	Clc Class Field Visit Industry Visit External Laboratory Collaboration
Second Semester	
Academic Curriculum	NSHM Value Added Curriculum
"Ecosystems and Challenging Ecological Realms" Environmental Risks,Vulnerability & Sustainability "Environmental Engineering and Pollution Control Technology" Forestry, Wildlife Conservation and Ecotourism "Natural Resources Management & Sustainability" Audit Course II	Clc Class Field Visit Industry Visit External Laboratory Collaboration
Third Semester	
Academic Curriculum	NSHM Value Added Curriculum
Statistics & Environmental Modelling "Remote Sensing and Geographical Information System" Disaster Management Ecological Restoration	Clc Class Field Visit Industry Visit External Laboratory Collaboration
Fourth Semester	
Academic Curriculum	NSHM Value Added Curriculum
"Environmental Biotechnology, Eco-Toxicology and Bioremediation" "Environmental Legislation & Impact Assessment" "Environmental Economics & Audit" "Wastes & Waste Management" "Environmental Research Project & Dissertation"	Clc Class Field Visit Industry Visit External Laboratory Collaboration

# Placements & Internships



# Research Projects - Health Sciences

## **Development Of An Aloe Vera Gel-based Hand Sanitizer**

Dr. Mainak Mal

Department of Pharmacy

Studies have shown that gel-based sanitizers are often more desirable than liquid sanitizers because they generally smell less and are more portable, among other benefits. We at the Department of Pharmaceutical Technology, NSHM Institute of Health Sciences, Kolkata, Group of Institutions, have developed an aloe vera gel-based hand sanitizer using optimal amount of isopropyl alcohol (about 50% v/v) and containing ingredients like jojoba oil and glycerine which makes it a skin friendly option among all age groups. Moreover, we have carried out dermal toxicity study of the prepared gel based hand sanitizer using Wistar rats as per OECD guideline number 402. The results obtained from dermal toxicity study ensured its safety and skin friendliness. Some of the post graduate M.Pharm students of the department carried out the dermal toxicity study while some of the undergraduate B.Pharm students were involved in preparing the aloe vera gel based sanitizer.

## **Development Of Mobile Based Fundus Camera**

Dr. Satyam Kumar Jha

Department of Optometry & Vision Science

The motivation of this project is to involve students for the development of mobile based fundus camera which is not only a novel device for fundus examination but also allows students to think of out of the box ophthalmic devices which are not there in current curriculum. Currently, indirect ophthalmoscopes are considered gold standard for fundus examination as it permits stereoscopic vision and wider field of view. However, indirect ophthalmoscopy does not provide recording of patient's fundus for comparison in between the follow-ups. The field of optometry is undergoing a major transformation with the advent of mobile-based technology. One such technology is the mobile fundus camera, which has the potential to revolutionize the way eye examinations are performed. A fundus camera is a specialized device used to capture high-resolution images of the retina and other eye structures. The development of mobile-based retinal cameras offers several advantages over fundus evaluation technique i.e. indirect ophthalmoscopy. Not only mobile based fundus camera will be ease of use for eye care practitioners but also offers improved portability and cost reduction.

# Research Projects - Health Sciences

## **Nutritional Status Of Community-dwelling Adult Women In Urban Areas of Bankura, West Bengal & its Association With Cardiovascular Disease Risk Factors & Socio-Demographic**

Dr. Joyeta Ghosh

Department of Dietetics & Nutrition

Nutrition has been a major health issue in India for centuries. Chronic hunger and under- nutrition are the worst tribulation of the poverty that still plagues millions of households in India. India, in the recent past, has made a considerable progress in social and economic fronts but improvement in nutritional status especially of the women is found to be lagging. Women constitute substantial population in any society and their statistics reflects the type of society and cultures they live in. Thus, for studying the intake of a society, analysis of women's position in terms of their status and role becomes significant.

The wheel of development and fortune of the society depends upon the progress and development of women. She contributes a lot for the welfare of the society but unfortunately she is the most discriminated one. The discrimination against women starts right from her birth and continues till her last breath. Differences frequently emerge in consideration of health and nutritional status between the sexes. Throughout their life cycles women receive less food and also inferior quality of foods than men do. The socio- economic and socio- cultural dimensions of the subject "women and nutrition" have two- fold significance. Firstly, the cultural norms and practices and socio-economic situation determine the extent to which women are able to contribute to the nutritional levels of their families. Secondly these factors also determine their own nutritional status. According to the survey conducted by Indian Council of Social Science Research, 48.53 percent respondents stated that women serve the family first and eat last. In poor families this results in greater malnutrition of women. There are few studies reported on urban adult women of West Bengal and there has been no study done yet at urban areas of Bankura. Therefore, the present study is focused on to find out the prevalence of malnutrition among community-dwelling adult women in urban areas of Bankura, West Bengal and its association with cardiovascular disease risk factors and the socio-demographic profile.

# Research Projects - Health Sciences

## Comparative Study of Covid-19 Outbreak on Dietary Diversity and Food Security in Rural and Urban Areas of Durgapur

Dr. Manisha Chatterjee

Aniruddha Samanta, Anuradha Mukherjee, Krishna Agarwal, Sweta Kumari, Neha Roy, Anuska Koner, Richa Singh

Department of Dietetics & Nutrition

In 2020, the Covid-19 outbreak spread rapidly all over the world and caused fatal consequences on people's health. Adequate nutrition was required to boost the immune system and fight against Covid-19. Therefore, the knowledge, attitude, and practice (KAP) towards Covid-19 prevention is most essential. The objective of this study is to assess the knowledge, attitude, and practices regarding the dietary diversity & food security of people before & during the Covid-19 outbreak. A cross sectional study was conducted over a period of three months with a pre-tested validated questionnaire among 360 people of rural & urban areas of Durgapur. It is observed that 33% of rural people and 22% of urban people experience lack of knowledge and attitudes regarding nutrition. But in practice they changed their food pattern during Covid situation. The consumption of different food groups like pulses (7%), nuts (6%) and fruits (7%) were increased for urban population whereas for rural people mainly the consumption of vegetables (5%) were increased during covid situation in comparison to pre-Covid situation. As there is a lack of knowledge, so proper education about nutrition may potentially improve the practices to prevent Covid-19 and other lifestyle diseases.



# Events & Activities





