

# YUGEN...

A Universe within



## NIRMALA COLLEGE OF PHARMACY

Muvattupuzha, Ernakulam Dist., Kerala

[wwwnirmalacp.org](http://wwwnirmalacp.org)



UG B.PHARM PROGRAM



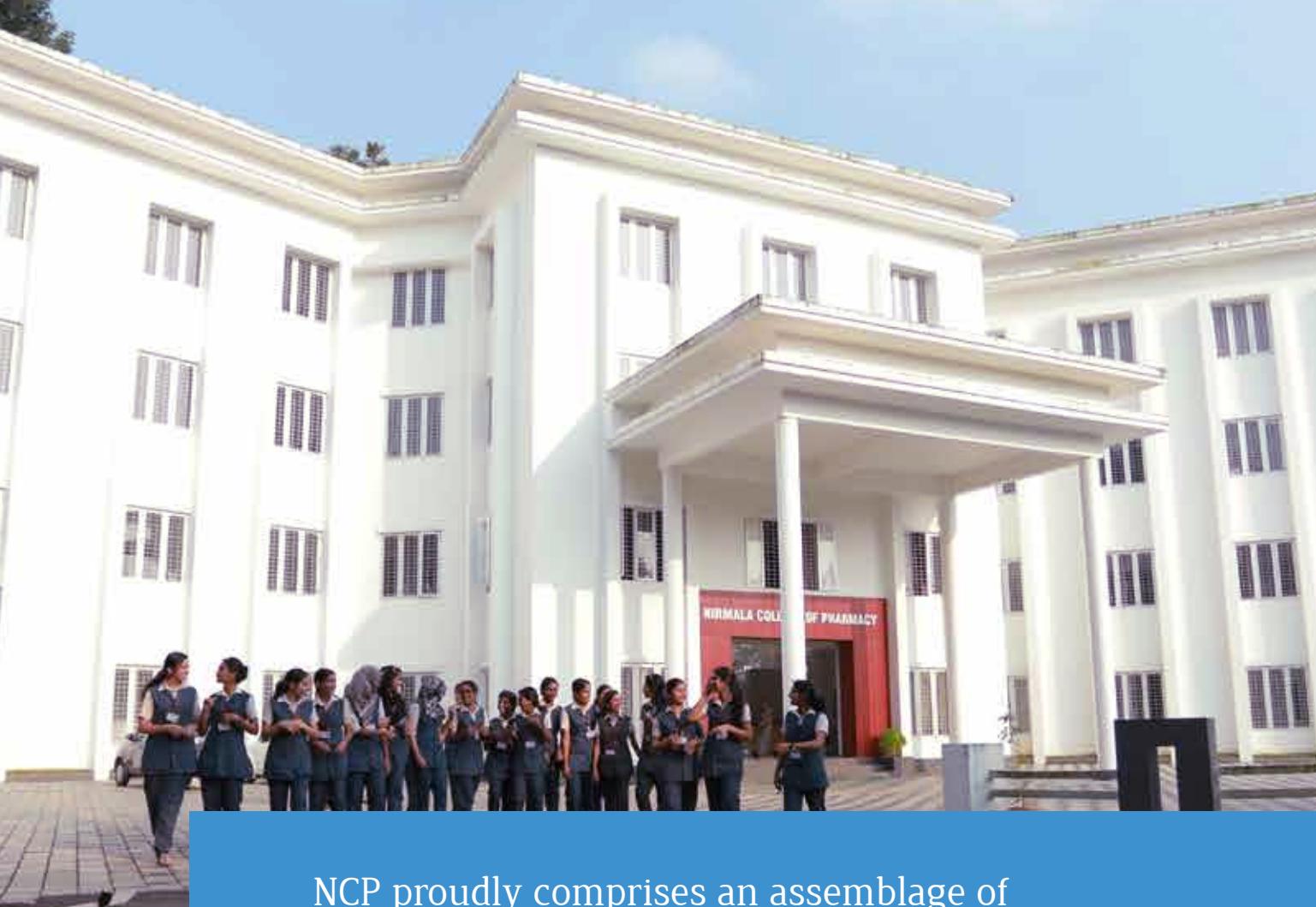
ISO 9001:2015 CERTIFIED





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NCP proudly comprises an assemblage of passionate, proficient & dexterous faculty under the veteran leadership of the management, unswerving to enkindle the quality contributors to the society & the professional world.

# NIRMALA COLLEGE

- Nirmala College of Pharmacy (NCP) is yet another hallmark of the commitment and experience of the Catholic diocese of Kothamangalam in the field of education.
- It is a Christian minority institution established in 2004 as a memorial of the diocesan golden jubilee.
- It is managed by the Catholic diocese of Kothamangalam under Nirmala College Society (Reg. No. ER928/2001).
- It is situated in Nirmala Hills on the side of state Highway No.8, about 2 kms from Muvattupuzha en-route to Thodupuzha.
- The infrastructural facilities include well equipped laboratories, central instrument room with modern analytical instruments, LCD mounted classrooms, industrial pharmacy unit, computer lab with internet facilities, Wi-Fi enabled lush green campus, air-conditioned seminar hall, auditorium, library with ample number of books and journals, herbal garden, drug museum etc. add the excellence in institution for higher learning.
- At present the College is affiliated to Kerala University of Health Sciences, Thrissur. This college is approved by Govt. of Kerala and Pharmacy Council of India (PCI), New Delhi.

# GE OF PHARMACY

## Accreditations & Certification

Accreditation is a tool that stakeholders use to monitor, assess and evaluate the standards and the quality of the education a student receives at a college or university.

**National Board of Accreditation (NBA):** UG, B.Pharm program is accredited by NBA. NBA promotes international quality standards for technical education in India. Accreditation status granted for the period 2018-19 to 2020-21.

**International accreditation organisation (IAO):** IAO has successfully granted full accreditation to Nirmala College of Pharmacy on April 2021 and valid up to 5 years. IAO is an international quality assurance agency, working to improve quality assurance standards of organisations world-wide.

**International Organisation for Standardization (ISO) Certification:** ISO 9001:2015 Quality Management System Certification of Universal Certification Ltd., UK with American Accreditation Board (AAB), USA with a validity of 3 Years issued on April 2021 after assessing organisations quality management system and finding it in compliance with ISO 9001:2015 for the following scope: development of students with intellectual, professional competence and social commitment to meet the challenges of technology, industry and services in pharmaceutical sciences.





## VISION

A centre of Excellence for Pharmacy education and research, moulding students with value integration and social commitment.

## MISSION

- › To develop students with intellectual and professional competence to meet the challenges of technology, industry and services.
- › To promote research and development in basics and frontier areas to solve the complexity of the health care system.
- › To evolve and disseminate appropriate Pharmacy Practices.
- › To develop socially committed and responsible professionals by inculcating ethical values.
- › To improve the performance standards by benchmarking and internal drive.

# MANAGEMENT



**His Excellency Rt.Rev. Dr. George  
Madathikandathil**  
Patron



**Rev. Dr. Msgr. Cherian  
Kanjirakombil**  
Manager/President



**Rev. Fr. Jos Mathai  
Mailadiath**  
Administrator/Secretary



**Dr. Badmanaban R**  
Principal

## OUR HEAVENLY PATRON



## B. PHARM PROGRAM

### Vision

To mould professionally competent and socially committed pharmacists to meet the global challenges in the field of pharmacy.

### Mission

- › To equip the graduates with pharmaceutical knowledge and the technical skills to build their career.
- › To foster the principles and practices of pharmacy to empower lifelong learning.
- › To impart value addition and skill development programs to equip the graduates committed for social transformation.
- › To develop the students with required attributes and outcomes to meet the challenges of society, industry and healthcare services.

## PROGRAM EDUCATIONAL OBJECTIVES

Graduates of B Pharmacy program

**PEO1:** shall have in depth knowledge in pharmaceutical sciences, that enables them to meet the professional challenges.

**PEO2:** shall have lifelong learning, along with professional ethics, good communication skills, entrepreneur and leadership skills, so that they can succeed in their life.

**PEO3:** shall have expertise on various domains and platforms, meeting the expectations of industry academics and research.

# PROGRAMS OFFERED

## UNDER GRADUATE PROGRAM:

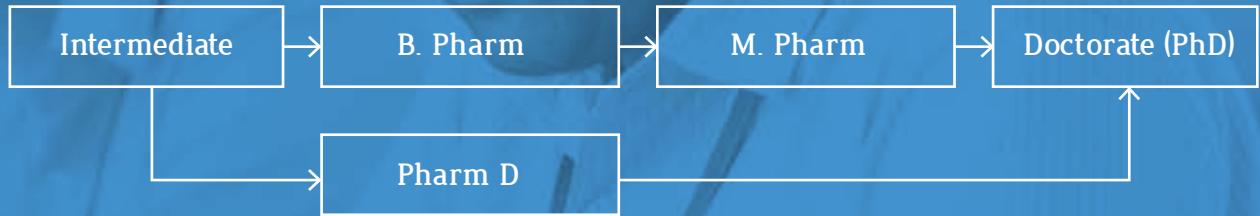
B.Pharm (4 years duration)

## POST GRADUATE PROGRAM:

M. Pharm in Pharmaceutics (2 years duration)

Pharm D (6 years duration)

It is an incredibly exciting time to pursue a career in pharmacy and students graduating have a wide-range of career opportunities available to them.



# CAREER PROSPECTIVE IN PHARMACY PROFESSION BASED ON QUALIFICATION

## **Bachelor in Pharmacy (B. Pharm.)**

- Pharmaceutical Industry - QA/QC Production/Manufacturing
- Regulatory Affairs (filing new drug application etc)
- Marketing (Medical Representative)
- Drug Inspectors
- Hospital Pharmacist or Community Pharmacist.
- Medical Transcription
- Analytical Chemist or Quality Control Manager
- Career in Regulatory bodies
- Post graduation Studies (M.Pharm / M.B.A)
- Clinical Research
- Insurance Sectors
- Various certificate courses in Management,
- Industrial applications
- Can establish own Pharmaceutical Company.
- Will get license for starting the retail pharmacy.
- Can become a member of Pharmacy Council of India.

## **Post-graduation (M. Pharm. and Pharm D)**

- Academics
- R & D scientist (Basic / Applied research)
- CRO's (Clinical research organization)
- Production
- Consultant
- Knowledge Process Outsourcing (KPO)
- Analysts in Drug Laboratories,
- Scientists in Drug Research Laboratories and CSIR Institutes.
- Pharmacoepidemiologist/data analyst (latest emerging field)
- Data entry manager
- Medical writer
- Medical coding
- Higher Studies: Ph. D (In Pharmacy branches),
- Post-doctorate (Abroad)

## **Research & Development**

### **New Drug Discovery Research (NDDR)**

A new drug discovery is one of the main aspirations of a pharmaceutical company to establish as a research based company.

### **Process & Development (P&D)**

One of the important areas in bulk drugs industry is developing viable processes for the manufacture of drugs and intermediates for their commercial production.

### **Formulation & Development (F&D)**

To ensure the quality of its product, a pharmaceutical company always emphasizes on its formulations & dosage forms and constant research is required to develop new products that are more patient compliant.

### **Clinical Trials, Bioequivalence studies and Toxicological studies**

These are some of the areas of clinical research which are in high demand as they are involved in the systematic evaluation of potential drug substances prior to getting them approved by the authorities.

## **Special Career Opportunities for Pharmacists**

There are some more special career opportunities for Pharmacists which includes;

- Nuclear Pharmacy
- Nutrition Support Pharmacy
- Oncology Pharmacy
- Psychiatric Pharmacy
- Forensic Pharmacy
- Poison Control
- Pharmaco Therapy
- Geriatric / Pediatric Pharmacy
- Nutrition Support Pharmacy



## OPPORTUNITIES ABROAD

Pharmacy graduates and postgraduates can work in abroad in the various fields of pharmacy by appearing for various exams



- The GRE (Graduate Record Examination)
- The NAPLEX (North American Pharmacist Licensure Examination). The NAPLEX is developed by the National Association of Boards of Pharmacy (NABP).
- Multistate Pharmacy Jurisprudence Examination (MPJE). It is a standardized examination conducted by the ETS (Educational Testing Services), United States of America.
- Test of English as a Foreign Language (TOEFL).
- Foreign Pharmacy Graduate Examination Committee (FPGEC) Certification (Pharm D) The TOEFL iBT required for FPGEC.
- MOH is the licensing exam generated for working in Sharjah (UAE), Oman, Bahrain, Kuwait, Saudi and Qatar.
- Dubai Health Authority (DHA) conducts licensing exam for Healthcare professionals.
- The Health Authority – Abu Dhabi (HAAD) is the regulative body of the Healthcare Sector in the Emirate of Abu Dhabi.



## DEPARTMENT OF PHARMACEUTICS



Pharmaceutics is the scientific discipline concerned with the process of creating dosage form of a therapeutic substance that is to be safely and effectively used by patients. The Department of Pharmaceutics is well equipped for both teaching and research activities. Master's program in Pharmaceutics was started in the year 2011 with an intake of 15 students.

The Department offers a professional research environment focusing on the novel areas of formulation research. The various sophisticated equipments and softwares in the department include V blender, Double cone blender, Cube mixer, Pelletizer, Dry granulator, Rotary tablet punching machine, Tablet coating machine, Disintegration apparatus, Dissolution apparatus, Capsule filling machine, Triple roller mill, Brookfield viscometer, High speed homogenizer, Refrigerated centrifuge, Moisture analyser, Rotary evaporator, Leak test apparatus, Stability chamber, Design expert software and Sigma plot software. The department also has a well-equipped Pilot plant setup.

The department moulds the graduates with scientific competence, knowledge and skills applicable for a variety of practical settings in dosage form design, manufacturing technology, regulatory aspects, patents, quality control, quality assurance etc.



## DEPARTMENT OF PHARMACOLOGY



Pharmacology is the discipline of pharmacy that establishes the understanding of the drugs mechanism of action and toxic effects.

The college has provided the required number of well equipped laboratories consisting advanced instruments like, Sherrington's Kymograph machine with Perspex bath assembly, Actophotometer, Rotarod Apparatus, Cook's Pole climbing apparatus, Analgesiometer (Eddy's hot plate), Convulsiometer, Plethysmograph, Centrifuge, Refrigerated Centrifuge, Elsevier Software for simulated animal experiments.

The area of research is Pharmacological screening using bioassay procedures, Computer aided Learning. The department has established a CPCSEA approved animal house that provides a platform to perform various preclinical studies.

The various sophisticated equipments and softwares in the department include Semi Auto analyser (ERBA MANNHIM, Germany), Neuropsychopharmacological instruments and Physiograph.



## DEPARTMENT OF PHARMACEUTICAL CHEMISTRY & ANALYSIS



Pharmaceutical Chemistry is the discipline of pharmacy that deals with the process of understanding the chemical structure of the drugs and their relationship with its activity.

The college is provided with five Pharmaceutical Chemistry laboratories equipped with sophisticated analytical instruments like UV, HPLC, FTIR, Flourimeter, Turbidometer, Nephelometer, Flame photometer, Colorimeter, Polarimeter, Conductometer, Electrophoresis equipment, Karl-Fischer Apparatus, Sonicator etc.

The areas of research include, drug discovery, organic synthesis of medicinal agents, natural products chemistry, prodrugs, peptide chemistry, molecular modeling, drug metabolism and molecular toxicology.

The department provides extensive opportunities for bioanalysis, analytical and bioanalytical method development and validation, stability studies, impurity profiling, pharmacokinetic studies, study on drug interaction and poison analysis.



## DEPARTMENT OF PHARMACOGNOSY



Pharmacognosy is the study of medicinal drugs derived from plants or other natural sources, physical, chemical, and biological properties of drugs.

The college has provided with required number of Pharmacognosy laboratories, well equipped with apparatus like Monocular Microscope, Compound Microscopes, Simple Microscopes, Extraction Units like Soxhlet Apparatus, Clevenger's apparatus for Hydro distillation, TLC Plates, TLC Spreader and TLC Chamber, Camera Lucida-Prism Type and Mirror Type, Stage micrometers and Eyepiece micrometers for Quantitative Microscopy, BOD Incubator, Hot Air Oven, Heating Mantles, Electric Water bath, Colorimeter, Centrifuge, Electronic Balance, Moisture Balance, Dispensing Balance, Hot Plate, Mechanical Stirrers, pH Meter, UV Cabinet and Centrifuge Phytochemistry lab/Research lab is specialized for extractions and chromatographic separations.

The main area of research in the department is phytochemical screening of plant extracts and identification and separation of compounds by chromatographic techniques.



## DEPARTMENT OF PHARMACY PRACTICE



Pharmacy practice is one of the emerging branches of pharmacy that facilitates the students to have interprofessional collaborations with physician and other healthcare providers' in-order to promote better patient care, to focus on optimizing medication use, decreasing medication errors, and adverse drug reactions (ADRs), promoting health and preventing disease.

The department is provided with a separate computer lab and a case presentation room with mounted LCD projector dedicated to Pharm D program.



## **Patient Medication Counseling Center**

The department has a well-equipped drug information centre (DIC) located in Nirmala Medical Center, Muvattupuzha, where drug information queries are critically analyzed and provides up-to-date, clinically relevant information to the healthcare professionals as well as patients. The DIC has sufficient computers and has the access to drug information resource - Micromedex.

The focused area of research include Pharmacoepidemiology, Pharmacovigilance, medication errors, Pharmacoeconomics, Therapeutic management to enhance quality of life, medication therapy management, patient reported outcomes, anticoagulant therapy monitoring etc.

## PROGRAMME STRUCTURE

- Pharmaceutical Chemistry
- Dispensing and General Pharmacy
- Human Anatomy & Physiology
- Pharmacognosy & Phytopharmaceuticals
- Pharmaceutical Analysis
- Pathophysiology & Health Education
- Mathematics, Biostatistics & Computer Applications
- Pharmaceutical Technology
- Applied Biochemistry & Molecular Biology
- Pharmaceutical Industrial Management
- Formulative & Industrial Pharmacy
- Pharmacology
- Pharmacy Practice
- Pharmaceutical Microbiology
- Pharmacotherapeutics & drug monitoring
- Biostatistics & Research Methodology





## ADMISSION

For the admission in **B. Pharm & Pharm. D**, candidates should have passed the higher secondary examinations, Kerala or examination recognized as equivalent thereto with 50% marks in Biology/mathematics separately and 50% marks in physics, chemistry and biology/mathematics put together are eligible.

For the admission in **M. Pharm**, a candidate who has passed B. Pharm degree examinations with not less than a total of 50% marks shall be eligible.

The candidate who is the diploma holder in pharmacy from any PCI approved institution can take admission as a lateral entry to the B. Pharm course directly to second year.

# INSTITUTIONAL REGULATORY COMMITTEES

## **Institutional Advisory Board**

Institutional advisory board consisting the management, principal, faculty and alumni meet periodically to assess the performance of the institution and to plan future development activities.

## **Internal Quality Audit Cell (IQAC)**

The role of the Audit Committee is to examine the adequacy of the nature, substance and effectiveness of academic activities and to ensure that the academic parameters are complying with all aspects of the quality objectives and values of the institution.

## **Program Assessment Committee (PAC)**

The role of the PAC is to assess the fulfillment of action plans proposed by each committee and to ensure that all shortcomings identified are considered and contented.

IQAC & PAC are structured with following committees:

1. Examination committee	6. Student disciplinary committee
2. Academic regulatory committee	7. Committee for Co-curricular and extracurricular activities
3. Research & faculty development	8. Students/ Staff Welfare committee
4. Library committee	9. Finance and purchase committee
5. Training & Placement cell	10. Housekeeping committee.

## **Highlights of the Research and Development**

Nirmala College of Pharmacy (NCP) is approved research center for M. Pharm and Pharm D by Kerala University of Health Sciences (KUHS). Faculty in NCP are constantly involved in research and publishing quality research papers and books. NCP also encourages the faculty to participate and organize various seminars and conferences. The faculty of NCP are acting as PG and PhD guides, reviewers, board members in various national and international journals, resource persons in different national and international conference and member of various Institutes, states, national and international associations.

# ASSOCIATIONS

## Parent Teacher Association

Nirmala College of Pharmacy values the suggestions and concerns of the parents and conducts formal meetings with a comprehensive representation of parents.

## Alumni Association

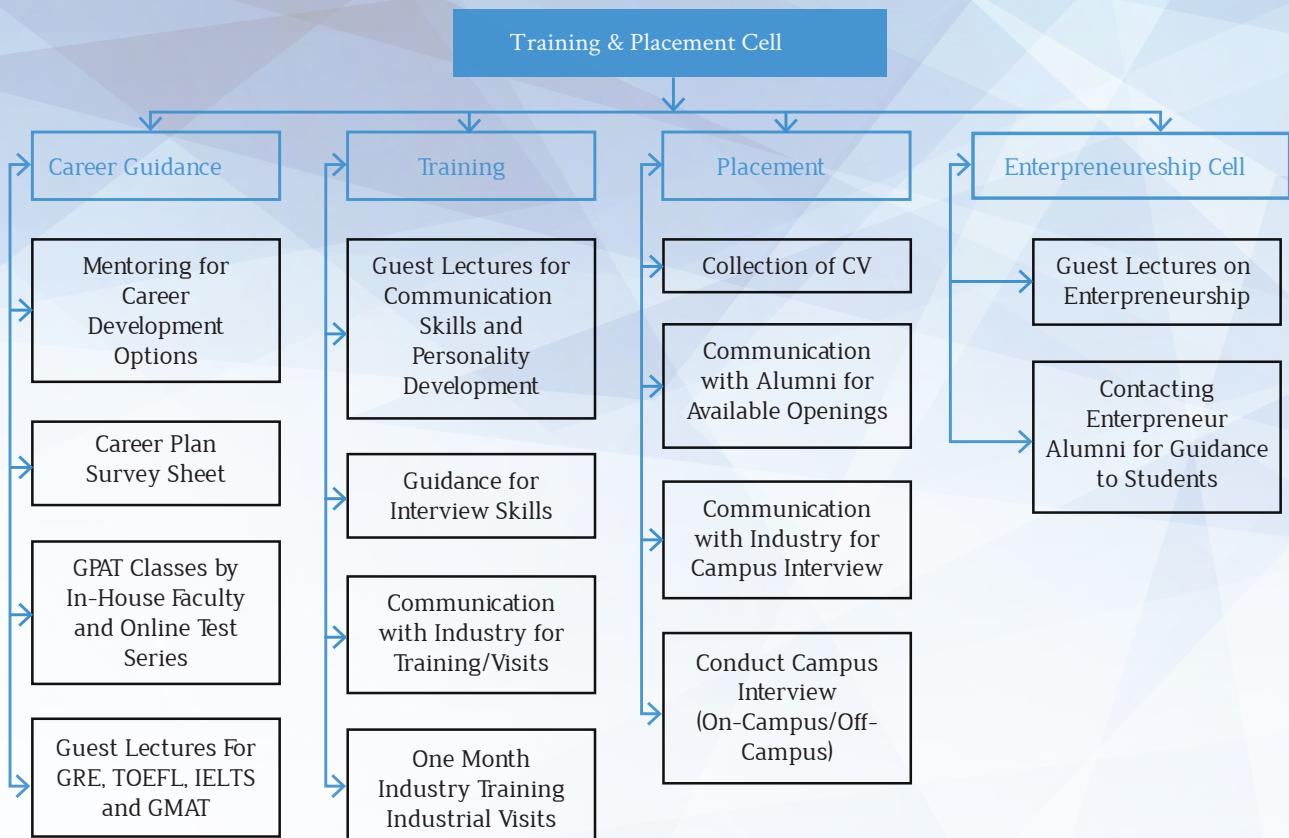
The Alumni Association supports academic and non academic activities of the college. It attempts to lend a helping hand through placement services and enables the students to find suitable jobs.



## STUDENT DEVELOPMENT PROGRAMMES

- Life skill classes
- Student Welfare Office (SWO)
- Students council
- NSS unit
- Blood donation club
- Journal club
- Career guidance and placement cell
- Entrepreneurship development cell

The college has a very effective career guidance and placement cell activities



### Training and guidance for competitive exams

Students interested in pursuing higher studies are given training session and mock tests for National level Pharmacy aptitude test like Graduate Pharmacy Aptitude Test-GPAT. Students are also exposed to online GPAT mock tests conducted by national organizations. Our many students got valid scores in GPAT exams in successive years.

## AWARDS/ ENDOWMENTS/SCHOLARSHIPS

- 1) Bishop Mar George Punnakkottil Gold Medal for the Best Outgoing Student
- 2) Government Scholarships
  - E-grants (SC, ST, OEC)
  - Minority Welfare Scholarship (Merit-cum-means)
  - Central Sector Scholarship
- 3) Pragathi and Saksham scholarship for Women by AICTE
- 4) Student Support Scheme, 2015 by KUHS
- 5) Jeeva Milk Scholarship (instituted by Kothamangalam Diocese)



## ACADEMIC ACTIVITIES

Nirmala College of Pharmacy conducts various activities every year by which the students, faculty and society are being benefited in different ways.

### Co-Curricular

Various activities are planned to help the students to get better more insights into the pharmacy profession. Celebrations such as Pharmacist day, National education day, World heart day, World diabetes day, World aids day and World cancer day are being conducted. NCP organises a series of seminars under the name NILA (Nirmala Ignites the Learning Aspirations). National Pharmacist week celebrations and national level quiz competitions are also being conducted.

### Extra-Curricular

NCP provides opportunities to develop extra-curricular skills of the students. Different programs like Arts day, Sports day, College radio, Onam and Christmas celebrations, etc. are some of the activities that are held. Students are encouraged to participate in university level arts and sports competitions every year.

### Industrial Visits

Industrial visits are arranged to the top pharmaceutical companies in India during the course period and thus the students get the real-time experience of the functioning of a pharmaceutical industry as well as opportunity to interact with the industrial professionals.

# COMMUNITY SERVICE

Nirmala has maintained a steadfast commitment to advancing society through meaningful individual and collective participation in service.

## Drug Information Centre

The primary mission of the Nirmala college of Pharmacy Drug Information Center (DIC) is to improve patient care. This is accomplished by providing on-demand consultative services, generally free of charge, on any aspect of drugs, drug therapy, and pharmacy practice. The DIC provides these services live from 9 a.m. to 5 p.m., in collaboration with Nirmala medical center, Muvattupuzha.

## Model Pharmacy

This framework for model pharmacy service delivery in pharmacy practice is designed to facilitate collaboration among the pharmacists, patients, physicians and other healthcare professionals to promote safe and effective medication use and achieve optimal patient outcomes.

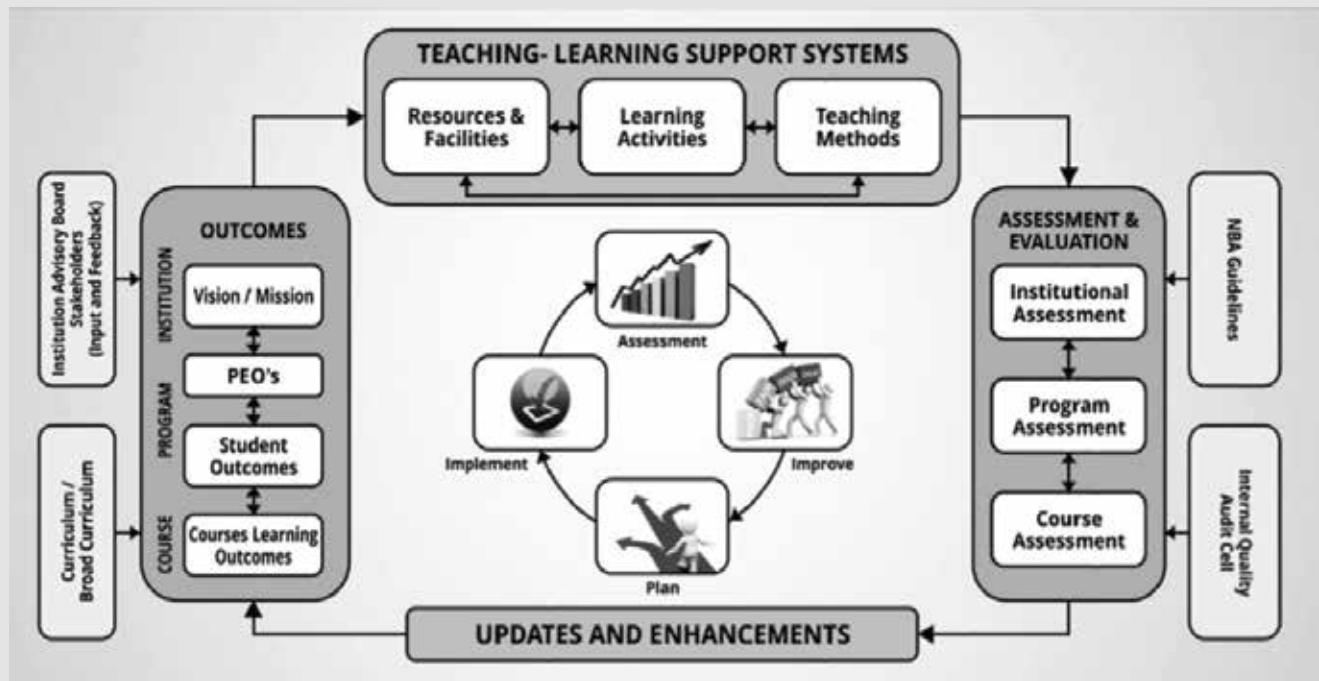
## National Service Scheme (NSSS)

NSS is the voluntary association of young people of our colleges working for a campus-community linkage.

## Tenalach

The students of Nirmala College of Pharmacy have established a group named Tenalach, to take up the environmental and social issues by giving their hands as well as in association with government bodies.

# OUTCOME BASED EDUCATION SYSTEM OF NIRMALA PHARMACY



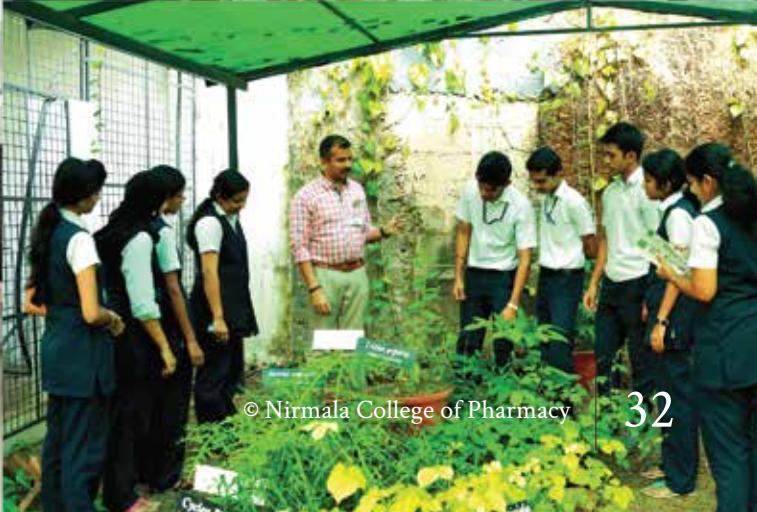
## OUR PRESTIGIOUS RECRUITERS AND ASSOCIATES



A Promise for Life







*We march... hand in hand  
We talk... heart to heart  
Strong in faith and excellence  
We are Nirmalites*



Nirmala College of Pharmacy  
Muvattupuzha, Ernakulam, Kerala-686 661  
P: 0485-2836888 Email: [nip\\_mvpa@yahoo.co.in](mailto:nip_mvpa@yahoo.co.in)  
[www.nirmalacp.org](http://www.nirmalacp.org)