

CHITKARA
UNIVERSITY



YOUR DREAMS.
YOUR GOALS.
YOUR UNIVERSITY.

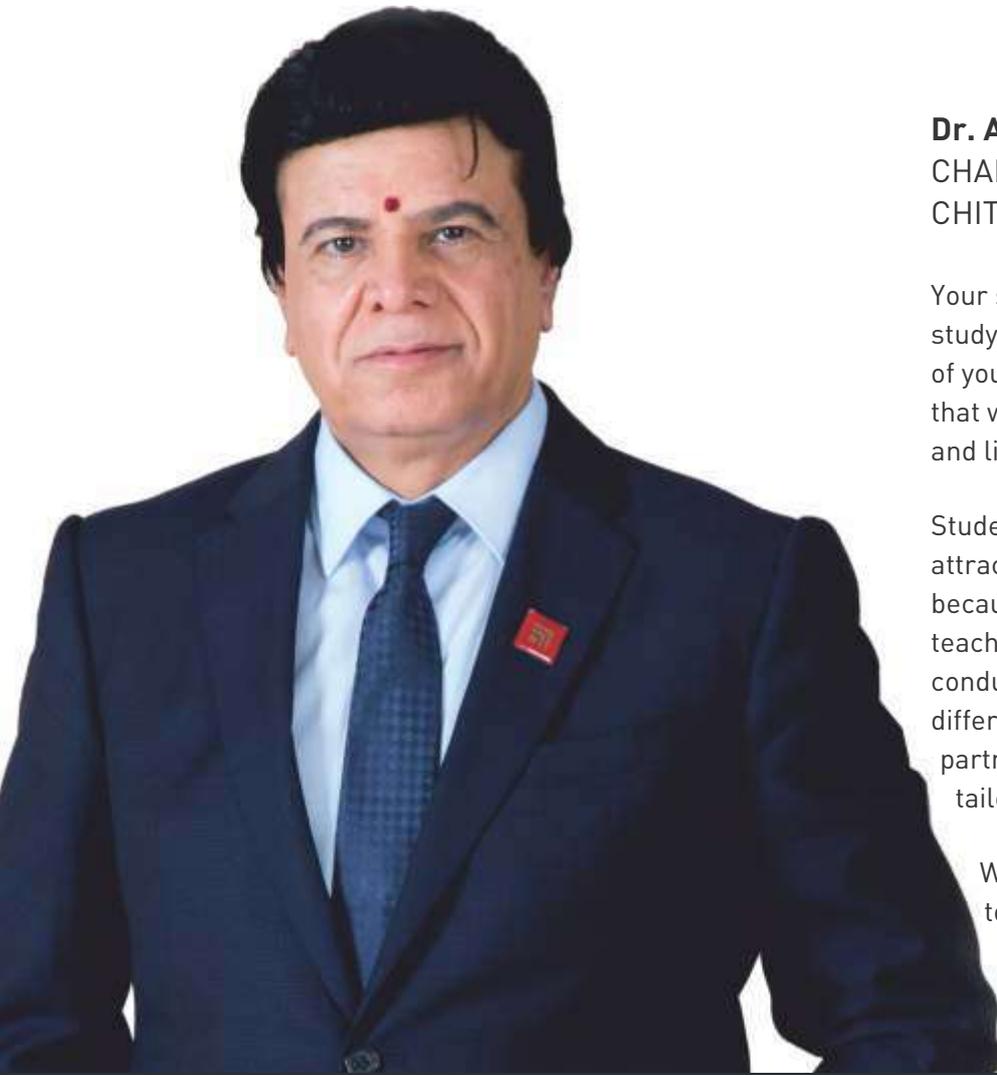
Business | Hospitality | Culinary Arts
Pharmacy | Health Sciences
Basic Sciences | Education



Study at Chitkara University and really go places

Whatever the dream, Chitkara University can help you get there. Chitkara University offers a world of learning opportunities that will help you reach your goals. Opportunities to get placed at one of the 1500+ companies that visit our campus for recruitment. Learn from outstanding faculty at our state-of-the-art teaching facilities. Choose from our varied industry endorsed programs. And meet other students with dreams as big as yours.

Excellence is our bottom line



Dr. ASHOK CHITKARA
CHANCELLOR
CHITKARA UNIVERSITY

Your selection of a University, and a study program marks an exciting phase of your life. You embark upon a journey that will lead to building your career and life.

Students from around the country are attracted to Chitkara University because of our commitment to teaching excellence, because we conduct research that makes a difference, because of our industry partnerships and because of our tailored courses.

We look forward to welcoming you to Chitkara University.

**STRONG
ACADEMIC
HERITAGE**

Dr. MADHU CHITKARA
PRO CHANCELLOR
CHITKARA UNIVERSITY

Chitkara Education brings with it a reputation that has been earned through years of serving the career-needs of the student community.

It has a reputation for excellence and innovation among coveted employers for preparing graduates who have the knowledge and skills they need for success in their workplace.

There are many reasons to choose Chitkara University. Our graduates go on to great careers, we're hands-on and responsive in our teaching, we provide a great environment to study and our research is world-class.



“The learning environment at **CHITKARA UNIVERSITY** represents a unique blend of distinguished faculty, brilliant & intellectual students with a proactive collaboration with industry.”

WELCOME TO CHITKARA UNIVERSITY PUNJAB

Chitkara Educational Trust established its Punjab campus in the year 2002 on Chandigarh-Patiala national highway which is 30km from Chandigarh. In the year 2010, Chitkara University was established by the Punjab State Legislature under "The Chitkara University Act".

Chitkara University is a government recognised University with the right to confer degrees as per the Sections 2(f) and 22(1) of the UGC Act. 1956. Chitkara University, Punjab, is a multi-discipline student centric campus with more than 10,000 students.

Small World

Whether you are a Bachelor's student, Master student or taking part in one of our Exchange Programs, we make sure you feel right at home with us. Chitkara University provides a specially safe and serene setting for studies. Students get to enjoy the changing seasons and are able to grow personally as well as professionally.

At Chitkara University, Education is not only "State-of-the-art" but truly "State-of-the-heart". Everything we do shares the same mindset.

We are passionate about what we do and we hope you will become a part of our family.

Cleared for launch

Any good roadmap to success requires that you know where you are going – and also where you have been. The third element is momentum.

In accordance with Chitkara University strategy, we allocate more and more resources to excellence in teaching and learning.

Our approach at Chitkara University is learning-centric, enhancing knowledge, skills and understanding through practical exposure.

Today, we have impressive world-wide collaboration agreements with top International Universities and research institutions which is helping us train Chitkara University students for the new global economy.

We strongly believe that we are creating the right kind of future for the professionals of tomorrow who we are educating today.

Industry-led Courses

Chitkara University offers a learning experience that improves your employment prospects. We maintain close links with leading blue-chip companies and professional associations to deliver most of our academic programs. Through these alliances we stay in touch with industry, ensuring that our courses are relevant, practical and deliver the skills in demand allowing our graduates to hit the ground running.

Strong corporate relationships also have a direct influence on our degree programs and have resulted in our "industry facing" curricula. This ensures that our education is up to date and valued by the future employers of our alumni.

Great Campus Recruitment

Chitkara University has established an unassailable reputation for strong campus recruitment on the sheer virtue of our intensive focus on making all our graduates "industry ready".

Start Me Up

The possibility to combine business and technology in their studies gives our students unique opportunities to build their future careers, be it through top-class companies or capitalising on their own innovations in order to create new businesses.

Think of it as your own, personal launch pad.

**The UNIVERSITY
with one of the
highest number
of PATENTS
in the country**

- 250+ Patents
- Joint research projects with Global Universities
- One of the largest University grants' recipient for the European Commission Erasmus+ Programme



**the
largest
incubator
in North India
with more
than
100+
start-ups**

**★★★★★
HIGHLY
RATED
FOR OUR
WORLD-CLASS,
FACILITIES
TEACHING &
RESEARCH**

MHRD
Ministry of Human Resource Development
Department of India

एक कदम स्वच्छता की ओर

**Ranked as
one of the
Cleanest
Universities
of India in the
'SWACHHTA'
ranking**





WELCOME TO CHITKARA UNIVERSITY HIMACHAL PRADESH

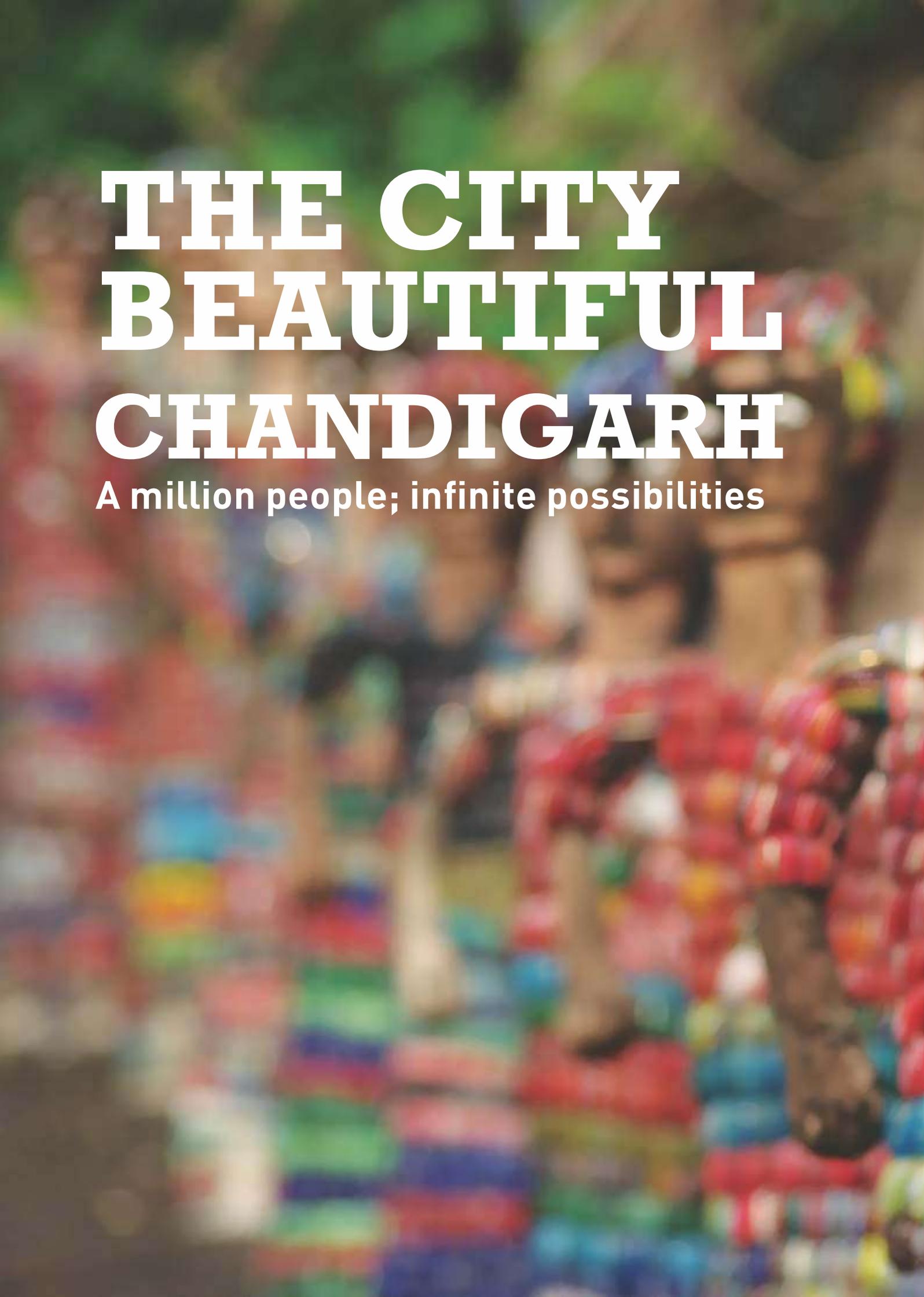
Chitkara University was established in the year 2008 by the Himachal Pradesh State Legislature under the "Chitkara University Act". Chitkara University is a government recognised University with the right to confer degrees as per the Sections 2f and 22(1) of the UGC Act, 1956 and is included in the list of universities maintained by the University Grants Commission.

Our 17 acres campus located at Atal Shiksha Kunj in Barotiwala is 32km from Chandigarh and 12km from Pinjore. It currently has more than 4000 full time students and over 300 faculty.

**FOR THE ACADEMIC YEAR 2020, CHITKARA UNIVERSITY IN HIMACHAL PRADESH
IS OFFERING ACADEMIC PROGRAMS IN THE FIELDS OF**

**ENGINEERING | INFORMATION TECHNOLOGY
BUSINESS | NURSING | PHARMACY | HOSPITALITY**





THE CITY BEAUTIFUL CHANDIGARH

A million people; infinite possibilities



A+

CU

CHITKARA UNIVERSITY





COUNTED AMONG THE BEST



Chitkara University has once again been ranked among the Nation's Best in the 2019 NIRF Ranking



Data Quest has awarded Chitkara University as 'Outstanding University with Highest Campus Recruitment 2019'



Outlook-ICARE India Rankings 2019 ranked Chitkara University highly among the Top 50 Private State Universities list



The Week-Hansa Research Survey 2019 ranked Chitkara University 6th among Non-Government Multi-Disciplinary Universities in North Zone'



India Today has consistently ranked Chitkara University among the best in the country



Careers 360 has counted Chitkara University as one of the best in the North Region.

LEARN THE CHITKARA WAY

One-on-one discussions with the professors make the classes interesting and interactive. The faculty is very helpful and approachable at all times – even for the slightest of doubts. We have lot of group projects and presentations which help students in team-building, understanding and bonding with classmates.



GRADUATE WITH A HOLISTIC SKILL SET

Our holistic educational approach is designed with an intensive focus to equip you with a complete skill set package comprising of hard knowledge skills, soft people skills and 'heart' skills. You will be equipped with both; depth and breadth of knowledge. You will be transformed into a well-rounded individual, and become a valuable asset to your future employer and society at large.



Hard knowledge skills
(specific to your chosen track of study)

+



Soft people skills
(analytical thinking, problem solving, communication, presentation, leadership and team-building)

+



'Heart skills'
(ethical and social responsibility)

LEARN FROM THE BEST MINDS

Tradition of Teaching Excellence

Chitkara University faculty members are explorers and discoverers, seeking new ideas and insights at the frontiers of knowledge. They are internationally recognised leaders in the study of the economic, social, political, and technological forces shaping the world today.

The faculty at Chitkara University includes people from core academics having vast experience in academics and industry. Among our talented faculty, you meet academic scholars with doctorate degrees, experts from Industry and authors of important texts in all fields. Our faculty enjoy a good reputation and strong relations with leading industrial houses in terms of consultancy and research work.

Chitkara University faculty members play an active role in national and international business & research communities, serving as consultants, board members, and speakers at major conferences and seminars.

With serious students and talented teachers, you will become a stakeholder in pursuit of purposeful learning and experience. Faculty at Chitkara University is striving hard to impart best of professional experience to students through its fast growing & challenging academic environment.





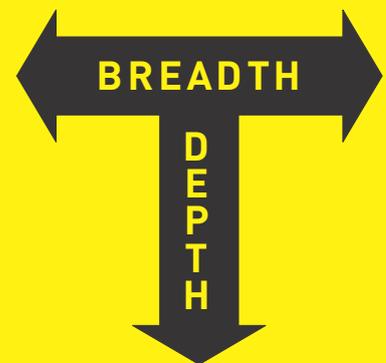
A RIGOROUS, FLEXIBLE CURRICULUM

PREPARES YOU FOR EVERY KIND OF LEADERSHIP CHALLENGE

Hands-on and interactive learning means classes are never dull. Theories are brought to life, and you learn by experiencing them.

Classes incorporate activities such as simulations and problem sets conducted in the format of mini lectures, video lectures, small group recitations, hands-on demos, designettes and concept quizzes to cement the understanding of different concepts in a subject.

The interactive sessions foster collaborative learning to help you enjoy and better understand concepts that are traditionally viewed as difficult. Real-life examples are demonstrated regularly.



FOUNDATION COURSES

UNIVERSITY CORE

GLOBAL STUDIES

SPECIALISATION

TECHNOLOGY STUDIES

ENTREPRENEURSHIP

CRITICAL THINKING

GENERAL EDUCATION

OUR PEDAGOGY

Our degree programs prepare students for the real world and offer the opportunity for practical, hands-on experience, internships and projects. Take advantage of this experience to gain the practical skills employers are looking for and open yourself to career opportunities. Academics at Chitkara University keep pace with workplace demands and ensure that students are “industry ready” and in touch with what’s expected in a professional environment.

Academic Excellence

Our academic programs enjoy a great reputation in the industry. To maintain our leadership position, we focus on inducting the best faculty from across the industry and academia. Our faculty is known for its strong academic orientation contributing to the creation of knowledge in a dynamic, ever changing environment. Classes are built around experiential learning where students are constantly encouraged to take conceptual framework and apply them. Teaching methods include lectures and tutorials that emphasise a learner-centered approach and application of knowledge. Faculty bring their rich experience into the classroom to enrich the learning process and ensure that the coursework reflects current industry practices.

Problem Based Learning (PBL)

Some of our courses are taught using the PBL approach where students apply their knowledge to solve problems they may encounter in a professional context and in doing so extend their experience beyond text books. Elements of real-life work scenario are brought into the classroom by the PBL approach. Students undertake a series of tasks that bring industry problems into the academic environment.

Applied & Project Based Learning

Applied learning is a hallmark of all teaching at Chitkara University. We believe that the best way to learn is by “doing” and that’s why we emphasise a hands-on approach. We lay stress on project based learning, thus, encouraging the need for independent thinking and creativity among students, resulting in interesting and novel projects. Further, a significant increase in the open category credits enables students to have a broad base, pursue interests and adopt a multi-disciplinary approach.

Specialisation Options

In every program, further specialisation and electives are offered in the final year of the study. To help a student in this task, various tracks have been identified through our curriculum geared towards a variety of specialisations. Our goal is to prepare students for a satisfying career. Following a particular curricular track will equip the students with the skills required for progressing further in the chosen career track.

Faculty

Chitkara University boasts of strong faculty with Masters and Doctorate degrees in different specialisations with appropriate academic and research bent of mind. The entire faculty has been drawn from leading academic institutions and corporations from across the country with years of teaching and research experience. Our faculty enjoy a good reputation and strong relations with leading industrial houses in terms of consultancy and research work. Our faculty not only focus on conceptual understanding of various academic concepts but also give first-hand experience to all students through role plays, experiential learning exercises, industrial visits and classroom lectures.

Guest Lectures

Guest lectures are regularly organised by eminent industry experts, entrepreneurs and HR managers from large and medium-sized companies to keep students abreast with latest trends and information.

OUR INDUSTRY PARTNERSHIPS

Chitkara University maintains close links with leading corporations and professional associations to deliver most of our professional programs. Through these alliances we stay in touch with the industry, ensuring that our courses are relevant, practical and deliver the skills in demand allowing our graduates to hit the ground running. Some of our leading industry collaborations are:

FOR ENGINEERING PROGRAMS





FOR BUSINESS | HEALTHCARE PROGRAMS





1500+ Campus Recruiters

98% of Chitkara Graduates are Employed within months of Graduation

72% of Chitkara Graduates are paid higher than the market average

35% of Chitkara Graduates get a job offer before they Graduate

OUR CAMPUS RECRUITERS

Since inception, Chitkara University has had a path breaking recruitment record for graduates from various academic programs. Some of the prominent recruiters on campus are:

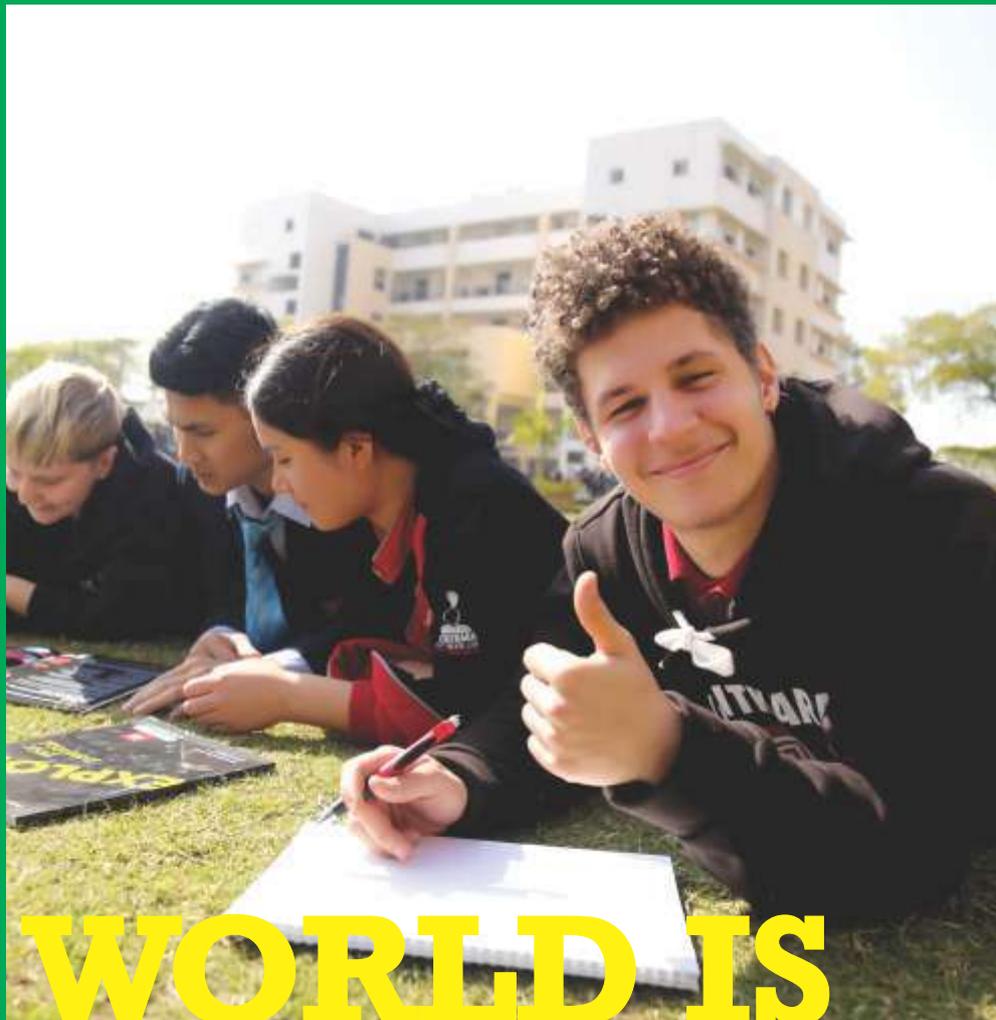
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**The Global
University**

Live independently. Gain cultural awareness. Expand your social network to span the globe. Make new friends who may become your future business collaborators in an increasingly interconnected world.

Learn in a classroom on a different continent. Experience working in the real world, around the world. Lend a hand to those in need. There are so many new experiences awaiting you at Chitkara University.



THE WORLD IS

INTERNATIONAL STUDENT EXCHANGE PROGRAMS

Gain a global perspective

Chitkara University's robust international exchange program with more than 200 overseas universities gives you the opportunity to experience living on your own in a different country. The networks you build and experiences you encounter will give you a more global and culturally sensitive perspective.

SUMMER STUDY PROGRAMS

Immerse in overseas experience

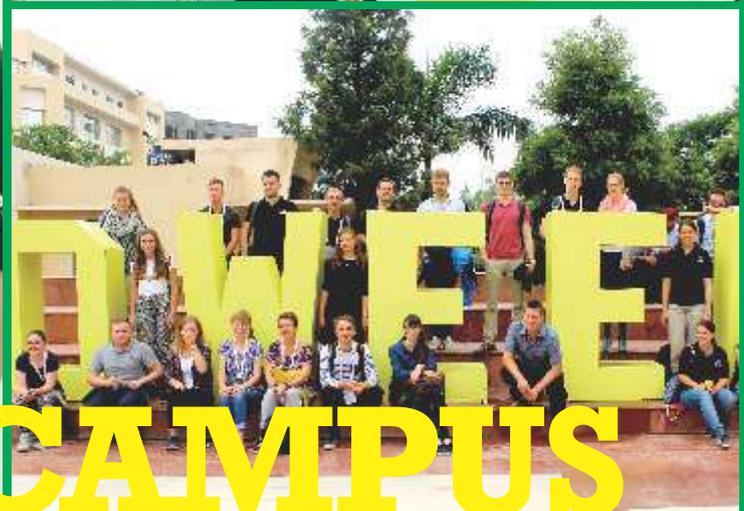
Summer Programs are short duration programs of 2-4 weeks on various specialisations. It adds to the international exposure of the students.

SEMESTER EXCHANGE PROGRAMS

Foster stronger bilateral ties

Chitkara students have option to finish the last half part of their degree programs at our partner Universities. Students visit Partner Universities for six months to one year for completing their semesters abroad.

Chitkara University's approach to Global Education rests on the belief that every student needs broad global knowledge and a global mindset. There are many opportunities to globalise your Education.



YOUR CAMPUS

OVERSEAS STUDY MISSIONS

Gain insights from industry leaders

Overseas study missions bring you right into the heart of multinational organisations around the world, giving you current insights on how they function through site visits. You will also go on a networking journey with prominent industry leaders, opening doors to a world of opportunities.

OVERSEAS INTERNSHIPS

Step into the global marketplace

Experience for yourself how industries and businesses operate, broaden your perspective and apply your skills and knowledge to real-world business operations.

GLOBAL EXPOSURE

Cultivate empathy and the human touch

We regularly invite faculty from accredited Institutions across the world. The exposure helps our students understand diverse cultural and educational contexts.

Global Connections

Some of our Major Global Partners Across the World



EUROPE

UNITED KINGDOM

- London School of Economics and Political Science (LSE)
- University of Hertfordshire, UK
- University of Birmingham
- University of Nottingham
- Glasgow Caledonian University
- Anglia Ruskin University
- University of Central Lancashire (UCLAN)
- University of West of England, Bristol
- The University College London (UCL)
- Nottingham Trent University
- Heriot-Watt University

NETHERLANDS

- Amsterdam University of Applied Sciences
- Fontys University of Applied Sciences
- The Hague University of Applied Sciences

SPAIN

- University of Alicante
- Fundacio Privada Universitat I Technologia
- Universitdad de Jaen
- Universidad Católica San Antonio de Murcia (UCAM)
- Universitat Rovira I Virgili
- Universidad de Huelva

BELGIUM

- Saint-Louis University, Brussels

FRANCE

- École pour l'informatique et les nouvelles technologies- EPITECH
- Lycee Emile Combes, Pons
- The Institut Polytechnique des Sciences Avancées, IPSA
- ESIGELEC – School of Engineering Rouen
- Ecole Pour L' Informatique Et Les Techniques Avacees- EPITA
- EM Normandie
- Kedge Business School
- Institut D' Etudes Politiques De Toulouse
- Sciences Po Lille
- ISTIA-Universite Angers
- Université Montpellier 2 Sciences et Techniques
- Institut Sup'Biotech de Paris
- ECAM Strasbourg
- France International Graduate Schools (FIGS)
- Institut Supérieur de Gestion (ISG)
- École supérieure des techniques aéronautiques et de construction automobile (ESTACA)
- Ecole Spéciale de Mécanique et d'Electricité (ESME Sudria)
- Sustainable Development Management Institute
- Ecole De Biologie Industrielle
- EPF Ecole d'ingenieurs (Sceaux)
- Universite De Technologies De Troyes
- Groupe EDH (EFAP, ICART, EFJ)
- IAE - Pau Beyonne

GERMANY

- Cologne Business School
- Karlshochschule International University
- Hochschule Osnabruck University of Applied Sciences Osnabruck
- Duale Hochschule Baden Wurttemberg (DHBW)
- University of Applied Sciences Stuttgart
- Technische Universitat Chemnitz
- Hochschule Emden/LEER

HUNGARY

- Kodolanyi Janos University Of Applied Science

CROATIA

- Algebra University College

SWITZERLAND

- HTMI

CZECH REPUBLIC

- University of Ostrava

FINLAND

- Helsinki Metropolia University of Applied Sciences
- JAMK University of Applied Sciences
- Turku Vocational Institute

PORTUGAL

- Politecnico De Coimbra
- Instituto Superior De Engenharia Do Porto

RUSSIA

- ITMO University

TURKEY

- Abdullah Gul University
- Middle East Technical University
- Istanbul Aytansaray University
- Altinbas University, Turkey

ALBANIA

- University of New York Tirana

BULGARIA

- Varna University of Management

NORTH AMERICA

U.S.A

- Central Michigan University
- University of Florida
- Purdue University
- San Diego State University
- University of Massachusetts, Lowell
- Missouri University of Science and Technology
- Northern Illinois University
- Northern Arizona University
- Portland State University
- Regents of the University of California, Irvine
- University of La Verne
- The George Washington University
- The University of California San Diego Extension
- The University of California, Berkeley-Extension
- Pennsylvania College Of Optometry
- Texas Southern University
- California State University Monterey Bay
- University of Wisconsin-Parkside
- University of Wisconsin-Milwaukee
- Kent State University, USA
- California State University San Marcos
- Southern Illinois University Edwardsville (SIUE)
- St. Thomas University
- San Ignacio University

MEXICO

- Universidad Autónoma del Estado de Hidalgo (UAEH)
- Benemérita Universidad Autónoma de Puebla
- Universidad Popular Autónoma del Estado de Puebla
- Universidad de Guanajuato

GRENADA

- Saint George's University,

CANADA

- George Brown College
- British Columbia Institute of Technology
- Kings University College at Western University
- University of Prince Edward Island (UPEI)
- Vancouver Island University
- Georgian College
- Vancouver Film School (VFS)
- Lakehead University
- University of British Columbia
- University of Ottawa
- Medicine Hat College
- Trent University
- Red River College
- York University

SOUTH AMERICA

BRAZIL

- PUCRS
- UNICAMP (University of Campinas)
- The Federal University of Lavras
- Federal University of São João del-Rei

PERU

- Universidad San Ignacio de Loyola (USIL)

AUSTRALIA

- Deakin University
- Edith Cowan University
- Flinders University
- Federation University
- Murdoch University
- Griffith University
- James Cook University
- Western Sydney University
- Macquarie University
- Western Sydney University
- University of New Castle

ASIA

JAPAN

- Kindai University
- Gunma University

INDONESIA

- Binus Univesity
- Telkom University
- Airlangga University

THAILAND

- Kasetsart University
- Pathumthani University

PHILIPPINES

- Mapúa University
- Tarloc Agricultural University

CHINA

- Qilu University of Technology
- Zhejiang University of Science & Technology
- Qingdao Technological University Qindao College
- University of Nottingham, China

TAIWAN

- China Medical University
- Providence University
- National Tsing Hua University (NTHU)
- National Chi Nan University
- National Chung Cheng University

SOUTH KOREA

- Soongsil University
- Kookmin University
- Korea University (Sejong Campus)
- Kongju National University
- Chung Ang University
- Kyung Hee University
- Sookmyung Women's University
- Shinhan University
- Chonbuk National University
- Kyungpook National University
- Chosun University
- Sangmyung University
- Jungwon University
- Kwangwoon University
- Seoul National University of Science & Technology (SeoulTech)
- Woosong University

MALAYSIA

- HELP University
- Management & Science University (MSU)
- University of Nottingham, Malaysia
- Heriot-Watt University, Malaysia

DUBAI

- Heriot-Watt University, Dubai
- University of Birmingham, Dubai

AFRICA

SOUTH AFRICA

- Regenesys Business School, Johannesburg

CHITKARA INNOVATION INCUBATOR



Chitkara Innovation Incubator is one of the largest Government supported incubators in North India with more than 100+ student startups. It is designed to provide aspiring student entrepreneurs with the education, resources and funding to start and expand their businesses.

We have also entrepreneurship elective in all our undergraduate programs which can help turn students business ideas into reality. Student ventures with scalable and commercial potential are given access to high tech office space.

SUPPORTED BY





can

Chitkara
Alumni Network

Chitkara Alumni Network has more than 20,000 active members who have been a part of Chitkara University since the year 2002. We have active Alumni chapters across India and in North America, Europe and Australia.

Chitkara University maintains close ties with the alumni and keeps them updated with latest career advice and recruiters connect.

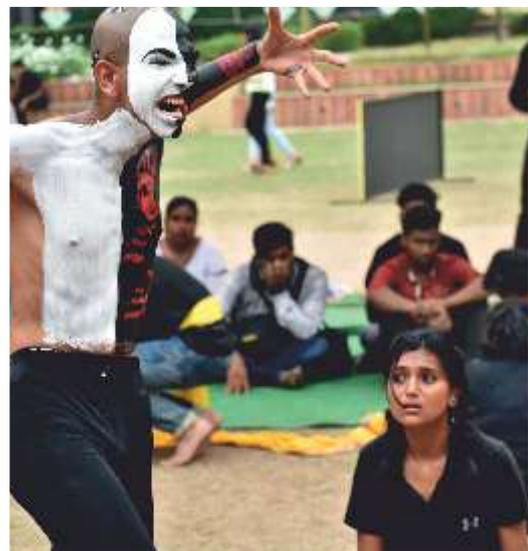
Our graduates can also connect with other Chitkara alumni through the world for business networking and entrepreneurship opportunities.

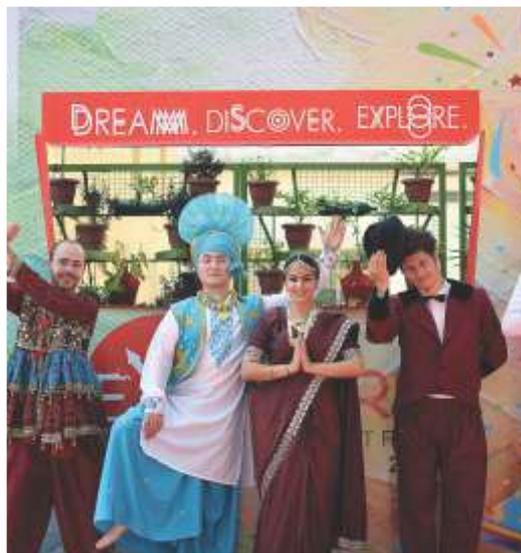




STUDENT LIFE

EXCITEMENT REDEFINED





100+ STUDENT CLUBS



There are countless opportunities to get active and involved, engaged and enriched, and we want you to become a part of our diverse community of people who work together to make an impact on the future and have fun in the present. With more than 100+ student clubs and organisations based on a wide range of academic, cultural, and recreational areas of interest, you can find a way to express yourself.

Join, lead, or start your own—the important thing is to participate. Engaging with these organisations builds strong connections with fellow students, provides personal growth, and enhances your Chitkara experience.



CHITKARA
UNIVERSITY



was honoured to bestow the Degree of
Doctor of Literature (D.Litt) Honoris Causa
upon

HIS HOLINESS THE 14th DALAI LAMA

on October 14, 2019



CHITKARA COLLEGE OF PHARMACY

2-Year D. Pharm.

4-Year B. Pharm.

6-Year Pharm. D.

3-Year Pharm. D. (Post Baccalaureate)

2-Year B. Pharm. (Practice)

2-Year M. Pharm.

2-Year M.Sc Pharmacovigilance &
Clinical Research



FUTURE READY PHARMA COURSES



CHITKARA COLLEGE OF PHARMACY



Chitkara College of Pharmacy ranks 44th in MHRD-AICTE-NIRF rankings out of more than 500 Pharma colleges spread across India

Established in the year 2005, Chitkara College of Pharmacy is approved by All India Council of Technical Education (AICTE) and Pharmacy Council of India, and offers full time Pharmacy Programs.

Chitkara College of Pharmacy is the Centre of Excellence for Pharmaceutical Sciences in North India and has been consistently ranked among the Top 50 Pharmacy Institutions of the country which speaks volumes about our multi-disciplinary curriculum, strong industry partnerships & highly research focused faculty.

OUR ACADEMIC PROGRAMS

B. Pharm Plus

4-Year program with a difference

Undergraduate program with a strong pharmaceutical industry focus and intensive practical exposure for a period of 6 months and more.

B. Pharm Plus M. Pharm

6-Year Dual Degree Program

An integrated program leading to B. Pharm & M. Pharm, with diverse range of specialisation based on the needs of Pharma industry. Additional exposure to value added certification programs such as Regulatory Affairs / IP / Clinical Research.

Pharm D

6-Year Doctoral program

A Postgraduate Doctoral program with a strong Pharmaceutical industry focus and intensive practical exposure.

B. Pharm Practice

2-Year program

B. Pharm (Practice) program provides advance specialisation for the diploma students in the areas of clinical therapeutics and Pharmacy and achieve graduate degree in the advanced areas.



**INDUSTRY
ENDORSED
PHARMA
COURSES**

Pharm D

(Post-Baccalaureate)

3-Year program

Students have an option to pursue lateral entry into Pharm D program. B. Pharm candidates can pursue this program. The candidate will join the program in the 4th year of Pharm D and will subsequently complete the course.

M. Pharm Plus

2-Year program with a difference

Postgraduate program with a strong pharmaceutical industry focus and intensive practical exposure for a period of 6 months and more with specialisations in Pharmaceutics / Pharmacology & Pharmaceutical Technology.

M.Sc in Pharmacovigilance & Clinical Research

2-Year Masters Program

Aimed at creating skilled Pharmacovigilance professionals who can work with leading Pharma companies & Clinical Research Organizations (CROs) worldwide.

M. Pharm Plus Ph.D

A combination of PG & Research (Integrated Doctoral Program)

Students enrolling for M. Pharm can pursue a doctoral program without taking a break from the course. Financial assistance will be offered to meritorious students.



PHARMACEUTICAL STUDIES

All our full time Bachelor's & Master's programs in Pharmacy comprise of the following core areas of study and additional support courses as under:

Pharmaceutical Chemistry and Analysis

These are related scientific disciplines at the intersection of chemistry and pharmacy dealing with designing and developing Pharmaceutical drugs and also with analytical topics that help develop basics about quality management of raw materials and finished pharmaceuticals.

Pharmaceutics

It's the discipline of Pharmacy which deals with all facets of the process of turning a new chemical entity into a medication able to be safely and effectively used by patients in the community. Apart from techniques to manufacture orthodox tablet, liquids and injectable formulations, the subject has evolved so much over the years that many novel drug delivery systems including dermal and mucosal patches, targeted delivery systems, antibody based delivery systems and other prolonged release minimal dosage formulations have become extremely common.

Pharmacology

It's the study of how chemical substances interact with living systems. The field encompasses study of drug composition, drug properties, interactions, toxicology, & desirable effects that can be used in therapy of diseases. Other subjects, viz., Anatomy & Physiology and Pathophysiology are a prelude to Pharmacology helping the students to develop the knowledge of intricate functioning and make up of human body and disease processes.

Pharmacognosy

It's the study of medicinal products in their crude, or unprepared form as directly obtained from plants, animals and other natural sources.. It includes the study of the physical, chemical, biochemical and biological properties of drugs, drug substances as well as the search for new drugs from natural sources. Additional elective integrated projects are a part of the curriculum to help students understand using knowledge from different subjects to carry out Pharmaceutical research.



4-Year Bachelor of Pharmacy (B.Pharm)

Approved by Pharmacy Council of India

Bachelor of Pharmacy (B.Pharm) is a 4 Year undergraduate program designed to introduce students with the properties and impacts of Pharmaceutical drugs. The program helps students in developing the skills essential to counsel patients about medication and use of drugs.

B.Pharm program at Chitkara University will focus on making our students understand mechanism of drug action, its dynamics and kinetics, visualize and work on laboratory techniques and improvements. Also, it would prepare them to interpret data arising out of research experience into production, quality control & quality assurance. In addition, the program also concentrates on preparing the students and training them for industry-ready holistic pharmaceutical care in the practice setting. There will also be focus on getting our students to learn skills to use modern Pharmaceutical tools, software and equipment to analyze & solve problems

The industrial visits and equally important practical sessions ensure students receive a perfect exposure to the real-world situations while learning. The course has been designed to cater to the requirements of a large horizon of healthcare needs for Pharmaceutical and Formulation Industry, Clinical Pharmacy, Pharmacovigilance, Research & Development of drugs including drugs of natural origin, Health Regulatory system and Academia. There will be focus on getting our students the ability to design formulation & Synthetic process as per needs and specifications in the Pharmaceutical industry.

In addition, the program also concentrates on preparing the students and training them for industry-ready holistic Pharmaceutical care in the practice setting. The industrial visits and practical sessions held on regular basis ensure the students to perfect exposure to the real-world situations while learning. The course has been designed to cater to the requirements of a large horizon of health care needs for Pharmaceutical and Formulation Industry, Clinical Pharmacy, Pharmacovigilance, Research and Development of drugs including drugs of natural origin, Health Regulatory system and Academia.

At Chitkara University, there is huge focus on getting our B.Pharm students industry ready for Pharmaceutical industries, Hospitals, Patent cells, IPR sections, Clinical Research Organisations, Retail Pharmacy and other opportunities



Pharm. D.

6-Year Doctoral Program in Pharmacy

Approved by Pharmacy Council of India

A Postgraduate Doctoral program with a strong Pharmaceutical industry focus and intensive practical exposure.

From the academic year 2014, we started offering the 6 year Pharm. D. which is an innovative combination of degree, masters and doctoral course combination that not only saves your time but offers you bright career prospects. It's a post-graduate professional doctoral degree and the student gets authorisation to use prefix Doctor (Dr) to his name.

The Doctor of Pharmacy (Pharm. D.) program at Chitkara University will prepare students to provide high quality Pharmaceutical care that has the patient as its focus and optimal drug therapy and health as its goal. The program stresses knowledge of the chemical, biological, social, and clinical sciences that underline Pharmacy, an understanding of the relevance of that knowledge to patient care and the skills to apply that knowledge to specific care circumstances.

Pharm. D. graduation is a post-graduate professional doctoral degree. It was introduced to improve clinical and hospital Pharmacy services in India and it is the only pharmacy service which is in direct contact with patient healthcare system and authorized to take critical decisions in in-patient prescription. The Pharm. D. Degree requires five years of classroom and hospital-based didactic study. It is followed by one year of internship training in a hospital setting for Clinical Management of In-Patients, in addition to ongoing practicals and research project. Pharm. D. students and graduates actively participate in direct patient care in hospitals.

Program Objective

The Pharm. D. curriculum is designed to produce a scientifically and technically competent Pharmacist who can apply this education in such a manner as to provide maximum Healthcare services to patients. Students are provided with the opportunity to gain greater experience in patient close cooperative relationships with health practitioners. It is the goal of all Pharmacy Schools to prepare Pharmacists who can assume expanded responsibilities in the care of patients and assure the provision of rational drug therapy.

Program Structure

Some of the important subjects taught in the various semesters of the 6-Year program are:

- Human Anatomy and Physiology
- Pharmaceutical Inorganic Chemistry
- Community Pharmacy
- Pharmacology
- Pharmaceutical Formulations
- Biostatistics & Research Methodology
- Pharmacoepidemiology
- Clinical Pharmacokinetics
- Pharmaceutics
- Pathophysiology
- Pharmacognosy & Phytopharmaceuticals
- Pharmaceutical Analysis
- Hospital Pharmacy
- Biopharmaceutics
- Pharmacoeconomics
- Pharmacotherapeutic Drug Monitoring

Career Opportunities

Pharm. D. qualification, as prevalent in U.S, U.K, Canada, other European and developed countries, entitles the Pharmacists to prescribe medicines, while the doctor's role is focused mainly on diagnosis. Also, with a Pharm. D., an individual can register as Pharmacist anywhere in the world and practice at a Hospital, Clinic, Community Healthcare Centre. A Pharmacist can also practice as a Clinical Scientific Expert and Clinical Research Associate.

- Hospital Pharmacist
- Community Pharmacist
- Pharmacy Education
- Managed Care
- Governmental Agencies
- Clinic Pharmacy Practice
- Clinical Pharmacist
- Specialised Area Opportunities
- Pharmacoeconomics
- Home Health Care
- Community Pharmacy
- Knowledge processing outsourcing (KPO)

All the jobs related to Hospital/Clinical Pharmacy etc in European/American and other countries are highly paid due to the authority given to the Pharmacist to give prescription and clinical monitoring to admitted patients, while the physicians focus on diagnosis & operative care.

PHARM. D (POST BACCALAUREATE)

Students have an option to pursue lateral entry into Pharm. D. program. B. Pharm candidates can pursue Pharm. D. (Post Baccalaureate) program. The candidate will join the program in the 4th year of Pharm. D. and subsequently complete 4th, 5th and 6th year.



2-Year Diploma in Pharmacy (D.Pharm)

Approved by Pharmacy Council of India

Diploma in Pharmacy (D.Pharm) is a two-year academic program streamlined to endow in-depth knowledge of science and technique behind the formulation of Pharmacy Practice and Medicines Management. The program fundamentally provides an overview of the conjecture principles and practices implicated in the science of Pharmacy, including core subjects like Pharmaceutical Chemistry, Pharmacognosy, Pharmacology and Pharmaceutics.

The curriculum and syllabi for the program are as per the Pharmacy Council of India (PCI) the statutory body governing pharmacy profession in India. In this program students will gain insights into the chemical and physical properties chemical structure and uses of Pharmaceutical formulae. The program encompasses knowledge about the natural medicines which are obtained from plants, animals, marine and biological sources.

In addition, the program focuses on imparting knowledge about drugs used for different diseases, dosage absorption, mechanism of action, drug action, drug interaction and adverse reaction. Candidates seeking advance knowledge in the discipline can apply for higher education.

Some basic courses covered in D.Pharm program are:

- Introduction to Pharmaceutics
- Introduction to Pharmaceutical Chemistry
- Introduction to Pharmacognosy
- Biochemistry & Clinical Pathology
- Human Anatomy & Physiology
- Health Education & Community Pharmacy
- Pharmacology & Toxicology
- Pharmaceutical Jurisprudence
- Drug Store and Business Management
- Hospital and Clinical Pharmacy

Career paths you can choose after completing D.Pharm are:

- Scientific Officer
- Quality Analyst
- Production Executive
- Medical Transcriptionist



2-Year Master of Pharmacy

For this academic year we are offering the following 2-Year Master Degree Programs:

- M. Pharm (Pharmaceutics)
- M. Pharm Pharmaceutical Technology)
- M. Pharm (Pharmacology)
- M. Pharm Pharmacy Practice (Clinical Research and Clinical Pharmacology)

M. Pharm (Pharmaceutics) and M. Pharm (Pharmaceutical Technology)

The M. Pharm (Pharmaceutics) and M. Pharm (Pharmaceutical Technology) Programs lead to specialisation in formulation development, manufacturing technology, and process development areas, which are essential specialisations for manufacturing of traditional and novel drug delivery systems.

The first year involves theoretical and practical sessions in the following areas: dosage form design; advanced pharmaceutical methods of analysis; drug regulatory affairs; Biopharmaceutics and Pharmacokinetics; dosage form technology; advances in industrial pharmacy; and novel drug delivery systems. The second-year projects touch upon formulation development, stability studies, and process validation for traditional and novel drug delivery systems.

Some of the areas that have been taken-up by various batches since 2009 include Hydrogels, Microemulsions, Microspheres, Nanospheres, Nanosuspensions, Gastroretentive systems, solid-solid and solid-liquid dispersed systems, and development of modified excipients.

Continuous interaction with industries including Nectar life Sciences, Abbott Healthcare, Unichem, Jubilant Clinsys, Arbro Pharma, Dr Reddys Labs and other organisations for academic, conferences and placements is a special feature during the course.



M. Pharm (Pharmacology)

This program leads to specialisation in Pharmacology, which is an integral part of the drug discovery and drug design processes. These processes deal with the identification of lead molecules that could have potential therapeutic activity due to specific molecular and receptor affinity, and analogous structure to specific sites and proteins in the body.

In the first year, the Program covers theoretical & practical sessions in the subjects molecular pharmacology; general Pathophysiology; Pharmacology and Pharmacotherapeutics I and II; clinical research methodologies; advanced Pharmaceutical Methods of Analysis; Drug Regulatory Affairs; Quality Assurance and Biostatistics; and other subjects.

In the second year of the program students take-up several projects that are aimed at developing and exploring novel receptor targets, and mechanisms for drug action in the pathophysiological stages of the disease.

M. Pharm Pharmacy Practice (Clinical Research and Clinical Pharmacology Branch)

This program offers a specialisation in the Clinical Drug Development methodologies, its regulations, and control. Once the safety and efficacy of a novel chemical entity is established for a drug compound in preclinical animal studies, it is put through the process of clinical development. This is where the drug is studied for safety, efficacy and dosing in increasing numbers of human population setting through Phase I-IV clinical trials.

The branch offers exposure to subjects on principles of Pharmacology & Therapeutics; Clinical Research Methodologies; Clinical Drug Development; Advanced Pharmaceutical Methods of Analysis; Drug Regulatory Affairs; Recent Advances in Pharmacology; Quality Assurance & Biostatistics; and other subjects. The second-year clinical projects are done in hospital inpatient /outpatient settings, either in association with a clinical research organisation or a pharmaceutical company.

2-YEAR MASTER (M.Sc) IN PHARMACOVIGILANCE & CLINICAL RESEARCH

INTRODUCTION TO PHARMCOVIGILANCE

One sector that would always boom and is recession proof is Healthcare and Pharmaceuticals. With many drugs hitting the market, there is a growing need for vigilance to prevent and monitor the adverse effect of drugs. There is a complete science to it. It is called Pharmacovigilance.

Pharmacovigilance also known as Drug Safety, is the Pharmacological Science relating to the collection, detection, assessment, monitoring, and prevention of adverse effects with pharmaceutical products. As such, Pharmacovigilance focuses on adverse drug reactions, or ADRs, which are defined as any response to a drug which is noxious and unintended, including lack of efficacy. Medication errors such as overdose, misuse and abuse of a drug, as well as drug exposure during pregnancy and breastfeeding, are also of interest, even without an adverse event, because they may result in an adverse drug reaction. Simply put, Pharmacovigilance, is drug safety. It can be defined as the study and prevention of adverse effects caused by pharmaceutical products.

Pharmacovigilance is the reason because of which many drugs are withdrawn from or are not even brought into the market at times. The government supports and helps to implement courses in Pharmacovigilance as their primary goal is to ensure students of medicine are aware of the adverse effects of certain drugs.

Pharmacovigilance makes it possible to implement quality systems in all pharmaceutical companies that manufacture large amounts of medicine. Information received from patients and healthcare providers via Pharmacovigilance Agreements (PVAs), plays a critical role in providing the data necessary for Pharmacovigilance to take place. In fact, in order to market or test a pharmaceutical product in most countries, adverse event data received by the license holder must be submitted to the local Drug Regulatory Authority. Ultimately, Pharmacovigilance is concerned with identifying the hazards associated with pharmaceutical products and with minimising the risk of any harm that may come to patients. Companies must conduct a comprehensive drug safety and pharma audit to assess their compliance with worldwide laws, regulations, and guidance.

PROGRAM OVERVIEW

The 2-year Masters program in Pharmacovigilance is aimed at creating skilled and competent Pharmacovigilance professionals who can work effectively at different levels in Pharmacovigilance departments of leading Pharma companies and Clinical Research Organizations (CROs) worldwide. This program lets the students learn from industry experts to get Internationally Compliance Pharmacovigilance training based on defined Pharmacovigilance Competency Frameworks (PCF).

The curriculum includes in-depth study of Pharmacovigilance related processes, complimented with hands-on training on ICSR processing, quality management, aggregate report (PSUR/ PBRER/ PADER etc.) writing and compliance management, and in turn help students develop internationally accepted competencies to become world-class Pharmacovigilance Professionals.

PROGRAM HIGHLIGHTS

For the current academic year, we are offering the following 2-Year Master in Pharmacovigilance with specialisations in:

- Advanced ICSR Processing
- Pharmacovigilance Quality
- Pharmacovigilance Medical Safety Writing
- Pharmacovigilance Compliance Management

OUTCOMES

- You can make a career in creating Individual Case Safety Reports (ICSRs), PSUR (Periodic Safety Update Reports), Signal Detection, Risk Management, Medical Coding, and Medical Writing.
- An entry-level job in this field is DSA (Drug Safety Associate). DSAs are mainly involved in case creation, checking for MSI (Minimum safety information — a patient, a reporter, a suspect drug and an adverse event), reconciliation and follow-up process, data entry of all information available in the document and medical coding.
- Once a candidate has 2-3 years' experience and builds the required skill set (medical coding, narrative and scientific writing, good understanding of medical terms and basic understanding of regulatory affairs, ICH-GCP and compliance) he can go on to become a DSS (Drug Safety Scientist).
- At present, India is the fourth largest producer of pharmaceuticals in the world, with more than 6,000 licensed drug manufacturers and over 60,000 branded formulations. India offers unique advantages for the growth of Pharmacovigilance that include rapid induction of New Chemical Entities (NCEs) and high technology pharmaceutical products in the market, an abundance of patients with genetic diversity, presence of lakhs of formulation in the domestic market and a large world-scale Adverse Drug Reaction (ADR) database. All this makes it a thriving platform for a career in Pharmacovigilance.

CAREERS IN PHARMCOVIGILANCE

The field offers a great career scope for Life Science and Pharmacy graduates. It is a scientific discipline that is primarily concerned with reporting and analysing of drug side effects. It is primarily due to the work of these professionals that the drugs in the market that we consume are mostly safe, and those that are found harmful are taken off the market.

After a drug side effect is reported, these professionals enter the event in relevant databases, follow up with the case to gather more information and forward these reports to regulatory authorities and other applicable bodies. Pharmacovigilance professionals identify signals in data that may point towards a potential side effect and probe the case further.

JOB RESPONSIBILITIES

- Recording and reporting adverse reactions received from healthcare professionals and consumers.
- Conducting in-depth interviews with patients and healthcare professionals.
- Developing a thorough knowledge of products.
- Completing periodic safety update reports on drugs and other treatments.
- Writing and reviewing serious adverse effects report and forms.
- Flagging early warning signs of adverse effects of drugs.
- Minimising the risk of serious side effects.
- Completing safety audits.



PHARMACEUTICAL INDUSTRY IN INDIA

Pharmaceutical Management is one of the fastest growing fields that aids in developing skills in acquiring operating and planning management skills, consultancy skills and resolving management issues. The MBA in Pharmaceutical Management program at Chitkara University trains students and helps them develop skills required in the field to take up the challenging roles in the future. Some key observations of the growing sector include:

- As per the sectoral report developed by India Brand Equity Foundation, the Indian pharmaceutical market size is expected to grow to US\$ 100 billion by 2025, driven by increasing consumer spending, rapid urbanisation and rising healthcare insurance, among others.
- As per Equitymaster reports, the Indian Pharmaceutical market is the third largest in terms of volume and value respectively. The Indian pharmaceutical industry is expected to grow by 15% every year between 2015-20, according to the India Brand Equity Foundation (IBEF). As stated by Pharmaceuticals Export Promotion Council of India (PHARMEXCIL), the Indian pharmaceutical export will witness a staggering 30% increase from US\$ 16.4 billion to US\$ 20 billion before 2020.

These numbers in itself speak volumes about the opportunities which the Indian Pharmaceutical industry is providing. The industry not only needs highly qualified researchers, chemist, technical people but also requires skilled sales and marketing managers who can take the industry forward by managing and taking the complex decisions which are imperative for the growth of the industry.



CAREER OPTIONS

Blue Chip Multinational and National Pharma companies including Ranbaxy Labs Ltd, Cipla, Pfizer Ltd and Eli Lilly have been the leading campus recruiters for our Pharma graduates since 2009.

With a good placement record for the batches graduating since 2009, and many students opting for higher qualifications (M Pharm/MBA either in India or abroad), it is clear that our Pharma programs have managed to carve "a niche of its own". We have established an unassailable reputation for providing on-campus recruitment opportunities in diverse areas in the Pharma field including Production, QA, Marketing/ Retail and Hospital Pharmacy, and on our sheer virtue of intensive focus on making all our graduates "industry ready".

A career in Pharmacy unfolds a vista full of opportunities leading to a golden future for young aspirants.

● Research & Development

Mainly M. Pharms & PhDs are in great demand in the various areas of Pharmaceutical R&D. Areas where professionals are required are:

- **New Drug Discovery Research (NDDR)**
 - Discovering a new drug has assumed prime importance in the post-GATT era where a pharmaceutical company has to ensure that it is selling original research products.
- **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)**
 - The success of any pharma company lies in the quality of its products, i.e., its formulations & dosage forms and constant research is required to develop new products that are more patient compliant. Formulation development ensures this.
- **Clinical Trials, Bioequivalence studies, 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.

- **Production & Manufacturing**

A Pharmacy professional can work as a production person, involved in the production of bulk drug and intermediates or formulations and dosage forms. Industries in the cosmetics, soaps, toiletries segment, dental products, blood and plasma products also hire pharmacy professionals.

- **Analysis & Testing**

Quality Control (QC) and Quality Assurance (QA) are the most integral areas of the drug and pharmaceutical industry. Highly specialised and trained staff is required to handle sensitive analytical procedures & sophisticated equipment.

- **Marketing**

The Pharma Sales & Marketing is a highly technical field & offers excellent opportunities for the pharmacy graduates. Pharmacy graduates are absorbed as product executive or managers and can progress through group product manager and brand manager positions and rise to national level manager status.

- **Hospital Pharmacy**

Another opening for a Pharmacy professional is "Registered Pharmacist" in the hospitals or drug stores. This is a very sought after profession especially in countries like the U.S.A., Canada, Middle East and European countries. This is a key position and the Pharmacist plays an important role from preparing prescription to the patient's medical history after the medical doctor has diagnosed the disease.

- **Academics**

Excellent opportunities for the professionals are available in teaching profession also. Besides teaching academic related opportunities involve positions on Research Posts and Training programs, Documentation, Library Information Services and Pharma Journalism.

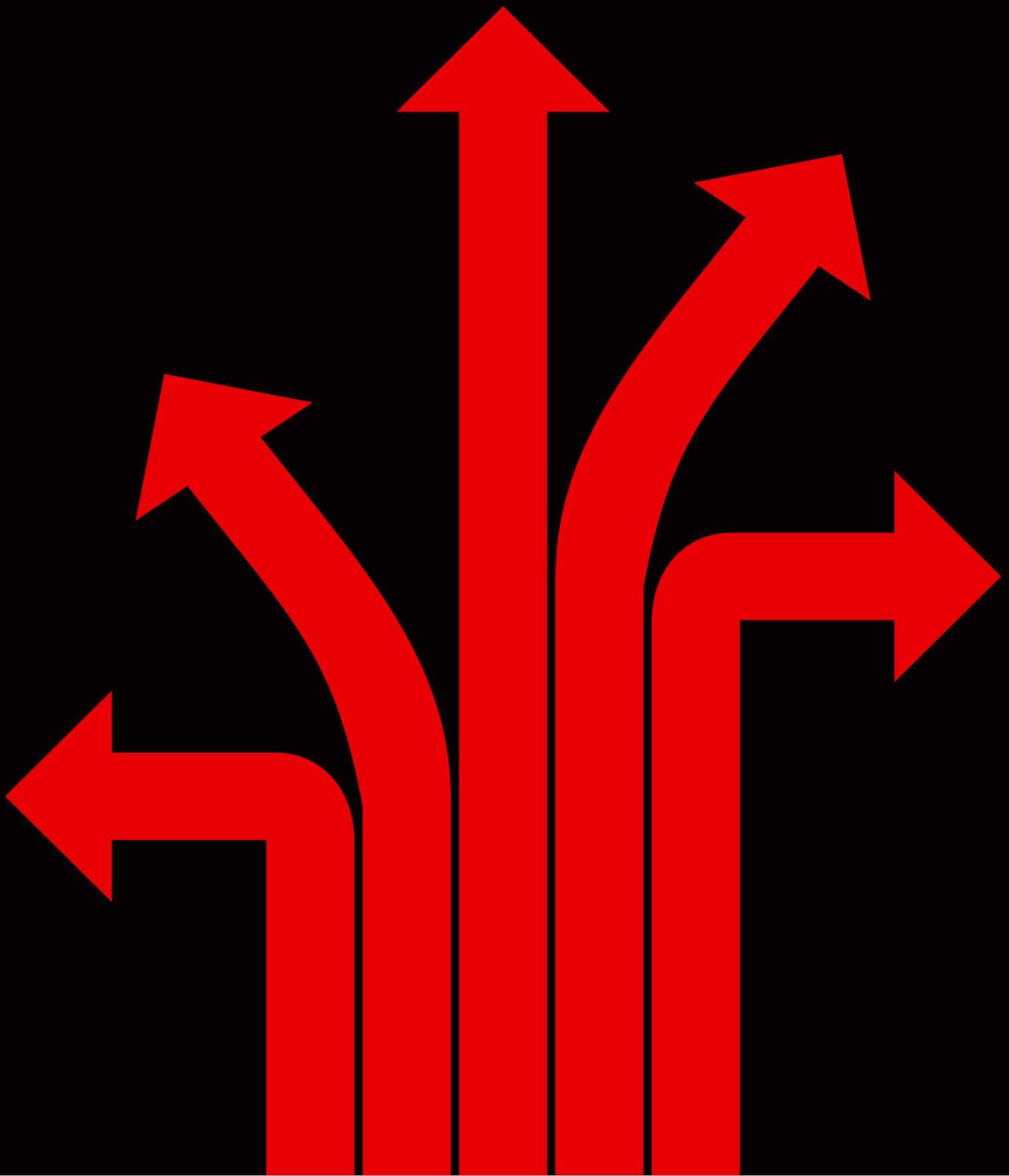
- **Entrepreneurship Opportunity**

All Pharmacy graduates (B. Pharm, Pharm. D.) are entitled by PCI Registration and FDA Licence to take up manufacturing, wholesale and retail business.

CAMPUS RECRUITMENT

Following companies regularly hire our Pharmacy graduates for internship and full time positions-

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|  Abbott A Promise for Life |  |  |  |  |  |
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