

## CHANAKYA UNIVERSITY

Rooted in ideals • Ascending with ideas

# Let's revolutionize the future of life sciences

From Chanakya to the world: shaping life sciences

Welcome to The School of Bio Science Chanakya University, Bengaluru Rooted in ideals Ascending with ideas

A multi-disciplinary global university offering new age academic programmes with the integration of Indian knowledge systems to pioneer **the vision of NEP 2020** 



### Abundant Wisdom

Indian knowledge Systems will deeply inform all the knowledge endeavours of the institution.

Nurturing world-class scholarship with high impact research and practice.

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### **禁** icchā

### Indomitable Will

Teaching and developing youth with capabilities to be transformative leaders.

Committed to provide sustainable solutions through trans-disciplinary studies and research.

### द्भुः kriyā

### Meaningful Action

Building state-of-the-art knowledge repository and digital infrastructure to expand the horizon of knowledge.

Creating innovative educational ecosystem to foster engagement with the Business, Government and Society for building India.

# Building institutions for Nation-Building

Chanakya embodies a timeless philosophy of wisdom and action, guiding nation-building through pragmatic principles and participative actions.



### **About the university**

Chanakya University, located in the heart of the neo-global tech innovation hub of Bengaluru, the world's go-to destination for tech innovation, where global corporations are building the future. Founded and guided by visionaries and iconic leaders from across industries, Chanakya University is deeply committed to leveraging the power of education encompassing technology, liberal arts, and management to create a new generation of techno-minds who can serve global companies and make a positive impact, contributing to the worldwide industry and our nation/society at large.

### OUR PURPOSE



Create Knowledge and Transformative Leaders for Holistic development.





Academic Freedom

Team Spirit



Creativity



Humanism



VISION





Develop youth with capabilities to be inspiring leaders

🏌 Nurture world-class scholarship with high-impact research and practice

Facilitate transdisciplinary studies and research to provide sustainable solution for human and environmental challenges

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Building - of - the - art knowledge repository and digital infrasrtucture to expand the horizon of understanding among all



# Chanakya Edge –Building new India through knowledge renaissance



# School of **Biosciences**

### **School of Biosciences Overview**

- Guided by Dr Kiran Mazumdar-Shaw and funded by Mazumdar-Shaw Philanthropy
- State of the art research facility Internationally trained faculty members engaged in advanced research
  - Focus on cutting-edge research in thematic and emerging areas of
- biosciences with a translational aspiration.
  - Large collaborative research programmes providing opportunities
- \* for interdisciplinary research
  - Education programmes with innovative curriculum and pedagogy
  - Support innovation and disruptive solutions through the incubation of startups



### Dr. Kiran Mazumdar-Shaw

Dr. Kiran Mazumdar–Shaw is a pioneering entrepreneur and a visionary leader in the biotechnology industry. As the Executive Chairperson of Biocon Limited, she has played a crucial role in revolutionizing affordable healthcare and advancing biopharmaceutical research. Her contributions to the field have earned her global recognition, positioning her as a key advocate for innovation and accessibility in medicine.

Dr. Mazumdar–Shaw formally inaugurated the Chanakya School of Biosciences, reinforcing the university's commitment to cutting–edge scientific exploration. In her address, she emphasized the importance of interdisciplinary collaboration in shaping the future of biosciences. She highlighted the role of research and technology in providing effective solutions to global healthcare challenges and encouraged students and faculty to bridge industry expertise with academic knowledge. Drawing from her vast experience, she shared insights into the evolving pharmaceutical landscape, inspiring the next generation of scientists and researchers. Her presence and insights strengthened Chanakya University's vision of becoming a hub for pioneering bioscience research and education.

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# Programme Highlights

- Comprehensive and contemporary curriculum relevant to Industry and academia
- بالمان Flexible and multidisciplinary program structure with a uniquecombination of majors and minors
- Hands-on learning with lab and tutorial courses
- Specialized courses in the emerging areas of biology such as genome editing, computational biology, bioengineering and bioentrepreneurship
- Minor and major research projects to solve real-world biological problems
- Wetwork with experienced industry and academic partners



### Why Choose the Bio Sciences Programme at Chanakya University?





### A Unique blend of timeless wisdom and modern ideas:

Our B.Sc. (Hons.) and M.Sc. programmes combine Chanakya's enduring teachings with Higher focus on core subjects to develop in-depth fundamental knowledge of the subject.



#### **Strong ethical foundation:**

We balance core business skills with specialized knowledge while nurturing ethical leadership and entrepreneurial spirit. Students learn to do more, think laterally, and act with integrity in today's fast-changing business world.

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### **Global exposure from Bengaluru:**

Located in Bengaluru, India's tech hub, we offer unparalleled industry exposure, mentorship from professionals, and hands-on learning to prepare students for a digital-first, global business environment.



### World-Class with Global and Indian Insights:

Our curriculum integrates Indian Knowledge Systems (IKS) alongside global best practices, providing a well-rounded education that equips students to tackle real-world challenges with ethical wisdom and practical insights



## **Courses Offered**

### **UG Programmes**

- B.Sc.(Hons) in Biotechnology
- B.Tech in Biotechnology and Bioengineering

### **PG Programmes**

M.Sc. in Bioinformatics and Biotechnology

### Eligibility:

- UG: 65% in 12th grade or equivalent.
- PG: Bachelor's degree in relevant fields with a minimum of 50%





# B. Sc.(Hons) Biotechnology

# What is common : 60%

- Foundation courses in basic science including biology, mathematics, bioinformatics and computer programming to prepare the students for this program (15–20%)
- Professional core courses to develop deep knowledge in the area (40–50%)
  Molecular biology, cell biology, biochemistry, structural biology, genetics, immunology, microbiology
  Programming, bioinformatics, computational biology
- Ample choice of courses to select in open electives to develop specialization and career options (15–20%)
- University foundation courses for holistic development (20%)





# What is **Better**

- Balanced curriculum with a mix of theory and practical classes, emphasizing hands-on learning through state-of-the-art research facilities and high-end equipment.
- Internationally trained faculty and innovative teaching methods, including selfstudy, group discussions, quizzes, and field visits.
- Skill-focused curriculum covering experiment design, data analysis, problemsolving, and real-world capstone research projects under faculty guidance.
- Strong emphasis on core biological courses (e.g., molecular biology, cell biology, biochemistry, microbiology) to build in-depth foundational knowledge.
- Enhanced credits for practical sessions and experimental learning.
- Integration of bioinformatics and computational biology throughout the curriculum to meet industry demands.
- Opportunities for industry interactions and exposure to cutting-edge technologies.

# What is Unique?

- Unique combination of major and minor subjects to provide broader career option to students such as biotechnology with entrepreneurship or data science or pharmaceutical chemistry
- Professional core courses to introduce students to emerging areas that are in high demand, such as synthetic biology, genetic engineering, entrepreneurship, application of AI/ML in biology
- Unique set of open electives to develop deeper expertise in emerging areas and technologies such as biotechnology, bioprospecting, forensic science, computational biology and drug discovery
- One project focusing on new ideas and testing Students to come up with new ideas
- Option to do one full semester project or internship at academia or industry
- University foundation courses for holistic development
- Research projects in multiple semesters





# M.Sc. Bioinformatics and Biotechnology What is common : 60%

- Foundation courses in biology, mathematics, statistics and programming to prepare the students for this program (15–20%)
- Professional core courses to develop deep knowledge in the area (40–50%)
  - Molecular biology, cell biology, biochemistry, structural biology, genetics, immunology, microbiology
  - Programming, bioinformatics, genome informatics, computational biology
- Ample choice of courses to select in open electives to develop specialization and career options (15–20%)
- University foundation courses for holistic development (20%)

# What is Better

- All core courses designed to develop conceptual knowledge as well as practical experience.
- Consequently there is greater emphasis on hands-on, experimental learning with increased credits for practical sessions.
- Strong integration of bioinformatics and computational biology throughout the curriculum which is very essential for several industries.
- State of the art research facility, including high end equipment, computational facility for hands on training, not mere demonstrations. Students will get an opportunity to operate high end equipment and learn by doing.



# What is Unique?

- Unique program to develop expertise in dual areas of bioinformatics and biotechnology, which is in very high demand in pharma, data analytics and IT industries
- Core courses to introduce students to emerging areas that are in high demand, such as synthetic biology, genomic data analysis and application of AI/ML
- Advanced open elective courses in emerging areas of bioinformatics and biotechnology such as bioprospecting, forensic science, Big data analysis, bio-entrepreneurship
- Regular advanced seminars by eminent scientists from academia and industry
- Workshops on industry relevant topics such as clinical trial data analysis, conducted by industry experts

University foundation courses for holistic development



# B.Tech Biotechnology and Bioengineering What is common : 60%

- Foundation courses in science, engineering, biology, mathematics, and bioinformatics (15–20%).
- Core courses in molecular biology, cell biology, biochemistry, genetics, immunology, microbiology, bioinformatics, and computational biology (40-50%).
- Electives for specialisation and career options (15–20%).
- University foundation courses for holistic development (20%)

# What is Better

- Focus on molecular biology, cell biology, biochemistry, and microbiology for a strong foundational understanding.
- Combines theoretical knowledge and hands-on experience across all core courses.
- Practical sessions with Internal Credits to promote experimental learning.
- Integrate engineering, bioinformatics, and computation throughout the curriculum.
- Students gain hands-on experience in a state-of-the-art research facility with advanced equipment and computational tools, learning by doing.
- Internationally trained faculty members
- Focus on in-demand skills like experiment design, data analysis, problem-solving
- Innovative pedagogy like self-study, group discussions, quizzes and field visits
- Faculty-engaged research projects with advanced research
- Industry interactions



# What is Unique?

- Professional core courses to introduce students to emerging areas that are in high demand, such as synthetic biology, genomic data analysis, genome editing, tissue engineering
- Unique set of tailored electives to develop deeper expertise in biotechnology areas or biomedical engineering or computational biology and drug discovery
- Advanced open elective courses with emphasis on emerging areas and technologies such as bioprospecting, forensic science, Biosensors, IoT, application of AI/ML in biology, IPR
- One project focusing on new ideas and testing Students to come up with new ideas
- University foundation courses for holistic development including courses in research methodologies, scientific writing, and presentation skills.
- Cutting-edge core courses in synthetic biology, genomic data analysis, genome editing, and tissue engineering.
- Electives in biotech, biomedical engineering, computational biology, and drug discovery.
- Advanced electives covering bioprospecting, forensic science, biosensors, IoT, AI/ML in biology, and IPR.
- Innovation-driven projects to test and develop new ideas.
- University foundation courses in research methods, scientific writing, and presentation skills for holistic growth.





### The Art of Learning and Heart of Becoming

At Chanakya University, we equip students with the knowledge, skills, and competencies to achieve their aspirations through a distinctive 3-level approach:

### **1. Foundation Courses**

Our Foundation Courses lay a strong academic base and provide transformative experiences, helping students:

- Master languages and communication skills.
- Explore India Orientation through Indian Knowledge Systems (IKS) and connect Indian wisdom to global solutions.
- Engage in Beyond Classroom Learning through experiential programmes that build practical skills and personal growth.

### 2. Learning and Mentoring

Students learn from accomplished faculty across our six Schools of Academic Excellence, bringing decades of experience from institutions like NIT, IIT, FLAME University, JNU, IISc, IIM, OP Jindal, and NLSIU. Our mentoring system includes:

- Academic Mentors for guidance toward academic success.
- Industry Mentors to shape career pathways and professional growth.





### 3. Career Progression

We prepare students for successful careers by aligning their passion, competence, and personality through:

- Personalized career guidance.
- Training for placements and corporate skills.
- Support to build strong professional profiles.
- At Chanakya University, every student's journey is one of transformation and achievement, emerging as confident leaders and global citizens.

### **Our Placement and Internship Partners**



# **Opportunities**



### Scientific Advisory Board



**Prof. H.S. Subramanya** Chairman, Director IBAB & Biocon Chair



**Dr. Shekhar Mande** Member, Fmr. Director General, CSIR



**Prof. Ramaswamy Subramanian** Member,Professor of Biological Sciences, Purdue University



**Dr. Vipin Chaturvedi** Member, Professor of Medicine, University of California, San Diego



**Dr. Rishikesh Pandey** Member, Chief scientist, Cytoveris



**Dr. Abhigyan Satyam** Member, Assistant Professor, Harvard University



**Dr. Anurag Mairal** Member,Adjunct professor of Medicine, Stanford University



### **Board of Governers**



Padma Shri M. K. Sridhar Founder Chancellor President, CESS



Sri Kris Gopalakrishnan Chairman Axilor Ventures Co-founder Infosys



**Sri M.P. Kumar** Founder Pro- Chancellor Founder & Ex-CEO, Global Edge



**Sri Mohandas Pai** Chairman Aarin Capital



**Prof. Yashavantha Dongre** Vice- Chancellor Chanakya University



**Dr. Sushant Joshi** Chairman Axilor Ventures Co-founder Infosys



Justice A. V. Chandrashekhar Former Judge High Court of Karnataka



**Prof. L. Gomathi Devi** Vice – Chancellor Maharani Cluster University



Prof. B. Mahadevan Professor IIM -B, Bangalore



**Sri Nagaraj Reddy** Chief Operating Officer Chanakya University



**Principal Secretary** Department of Higher Education, GoK

### **International Advisory Council**



Dr. K. Kasturirangan

Former Chairman ISRO



**Dr. Sitaram Jindal** Chairman and MD Jindal Aluminium Limited



Dr. Kiran Mazumdar-Shaw Executive Chairperson Biocon Limited



**Prof. S. Sadagopan** Former Director IIIT, Bangalore



**Prof. Manjul Bhargava** Professor Princeton University



**Prof. Bhushan Patwardhan** Former Vice Chairman University Grants Commission



**Prof. Kapil Kapoor** Chairman IIAS



Sri Manish Sabharwal Chairman Teamlease Services



Sri S. V. Ranganath, IAS

Former Chief Secretary Government of Karnataka



Smt. Sonal Mansingh Renowned Dancer Member-Rajya Sabha



Prof. Bhimaraya Metri Director IIM-Nagpur



**Prof. Vasudha Kamat** Chairperson, Governing Board CEC



**Sri Harish Bijoor** Brand Guru & Founder Harish Bijoor Consults Inc



**Prof. Sunaina Singh** Former Vice Chancellor Nalanda University



Sri Hari Kiran Vadlamani Founder Indic Academy



Dr. Chandraprakash Dwivedi Renowned Film Director Member – IGNCA



**Prof. Subhash Kak** Computer Scientist & Historian Oklahoma University



**Sri Anurag Behar** Chief Executive Officer Azim Premji Foundation



**Prof. Michel Danino** Visiting Professor IIT, Gandhinagar



Sri Prakash Belawadi Co-Founder Centre for Film & Drama



Sri Amish Tripathi Author and Former Diplomat



**Prof. Narendra Ahuja** Indian American Computer Scientist



Justice Sharad Arvind Bobde Former Chief Justice of India

### **School of Bio Science**

### Prof. H.S. Subramanya

Dean, School of Biosciences Ph.D., Indian Institute of Science, Bengaluru; Post-doc, Oxford University, UK

### Faculty

### Dr. Krishna Kurthkoti

Associate Professor, School of Biosciences Ph.D., Indian Institute of Science, Bengaluru; Post-doc, Rutgers University

### Dr. Roshni.M

Ph.D., University of Agricultural Sciences, GKVK, Bengaluru, India

#### **Dr. Shilpee Jain**

Assistant Professor, School of Biosciences Ph.D., IIT Kanpur

#### Dr. Priyadarshan Kinatukara

Assistant Professor, School of Biosciences Ph.D., CSIR

### Dr. Shubhada Hegde

Associate Professor, School of Biosciences Ph.D., CDFD Hyderabad; Post-doc, Indian Institute of Science, Bengaluru

### Dr. Abrar Rizvi

Research Scientist, School of Biosciences PhD, FIRC Institute of Molecular Oncology, Milan

### Dr. Meenakshi Iyer

Assistant Professor, School of Biosciences Ph.D., NCBS, TIFR; Post-doc, NCBS, Bengalur

#### Dr. Deepthi Hebbale

Assistant Professor, School of Biosciences Ph.D., IISc, Bengaluru

### The League of Exceptional Mentors

Spaces that facilitate Cognitive exploration, Creative Expression, Sporting Excellence and Cultural Engagement. The Joy of being, the journey of becoming and the experience of Learning is an everyday Celebration.



**Dr. K. Kasturirangan** Former Chairman, ISRO

Chairman, International Advisory Council, Chanakya University



**Prof. Manjul Bhargava** Professor, Princeton University

Member, International Advisory Council, Chanakya University Speaker, Chanakya Distinguished Lecture Series

> **Prof. Jean – Louis Arcand** Professor, Graduate Institute (Geneva)

Teaches Economics of Development at Chanakya Fellowship Program Speaker, Chanakya Distinguished Lecture Series





**Dr. S. Somnath** Chairman, ISRO

Advises our Engineering programs and guides initiatives on Aerospace



**Dr. Bibek Debroy** Padmashri Awadee

Chairman – Economic Advisory Council to Prime Minister, Government of India

Chairperson – Advisory Council, Chanakya Fellowship Program

Speaker, Chanakya Distinguished Lecture Series



Amb P.S. Raghavan Former Ambassador

Chairperson Advisory Council, Subash Chandra Bose Chair on International Studies



#### Prof. Subbanna Ayyappan

Former Secretary, DARE, Gol & Director General, ICAR Chancellor, Central Agricultural University, Imphal

> Chairperson, Advisory Council Chanakya Centre for Sustainability





Prof. Nikolai G. Wenzel Professor and Director, Universidad de las Hespérides (Spain)

Faculty - Chanakya Fellowship Programme Teaches Foundations of Political economy



Prof. Walter Russell Mead Professor Bard College Speaker, Chanakya **Distinguished Lecture Series** 



### Sri Sridhar Vembu

CEO of Zoho Corporation

Interacts with our Students and StaG. Emphasised the importance of being rooted to achieve success.

**Prof. Harsh Pant** Professor King's College London Faculty, Chanakya Fellowship Programme

Member, Advisory Council, Subash Chandra Bose Chair on International Studies



Prof Y. Narahari Director, Centre for Brain Research, **IISc Bangalore** 

Member Advisory Council, School of Engineering



## Unparalleled Infrastructure





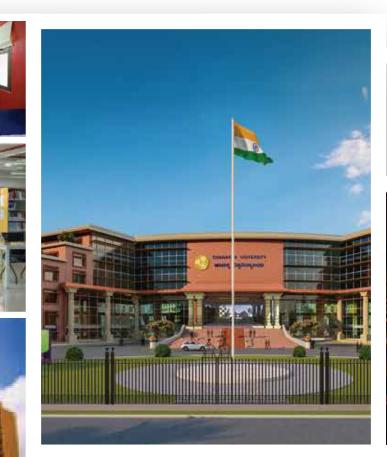






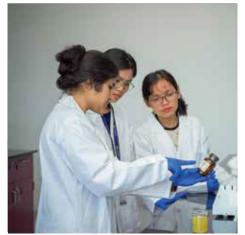


















Your pathway to Chanakya Admission



**CUPP** Chanakya University Pravesha Pareeksha

Personal Interviews

Enroll



For Admission Enquiries Contact +918550855092/94 admissions@chanakyauniversity.edu.in

Chanakya University Global Campus NH - 648, Haraluru - Polanahalli, Near Kempegowda International Airport Devanahalli, Bengaluru - 562165



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