UNDERGRADUATE PROGRAM

Bachelor of Science

Chemistry, Zoology / Honours / Honours with Research

WITH MINOR IN FORENSIC SCIENCE

DURATION & MODE

3 Years (6 Sems) / 4 Years (8 Sems)

Day Scholar, Full-Time

PROGRAMME OVERVIEW

This programme combines core chemical sciences and animal biology with a Minor in Forensic Science, providing students with a strong conceptual foundation alongside hands-on practical training. The curriculum builds core skills in qualitative and quantitative analysis, microscopy, toxicology, ecology, and physiology. It pairs specialised Chemistry and Zoology coursework with forensic modules covering crime-scene examination, evidence collection, and analytical testing.

Graduates are prepared for roles in forensic and diagnostic laboratories, environmental agencies, wildlife conservation organizations, and the pharmaceutical industry, or for advanced study in Chemistry, Zoology, or Forensic Science.

PROGRAMME HIGHLIGHTS

- Interdisciplinary double-major structure integrating Chemistry and Zoology with a Minor in Forensic Science.
- Strong laboratory and research exposure from the early semesters through practical courses, research methodology, and dissertation projects.
- NEP-based flexible curriculum with Honours or Honours-with-Research pathways, interdisciplinary electives, minors, and skill-enhancement courses.
- Early Research Exposure / Undergraduate Research Immersion Programme (UGRIP) and a three-month industrial training and internship.
- Strong progression opportunities into postgraduate study, research careers, biotechnology and pharmaceutical industries, wildlife biology, forensic science, and competitive examinations.

PROGRAMME OUTCOMES (POS)

PO1

Fundamental Knowledge: Apply the fundamental principles, concepts, and methods in key areas of science and multidisciplinary fields.

PO2

Critical Thinking and Problem-solving Skills: Develop critical thinking with a scientific temper to evaluate evidence and address real-world issues.

PO3

Research Skills: Demonstrate research culture and uphold scientific integrity and objectivity.

PO4

Professional skills: Demonstrate effective science communication, sustainable technology use, and a strong commitment to professional ethics and scientific social responsibility.

PO5

Lifelong Learning: Engage in continuous reflective learning in the context of technological and scientific advancements.

ACADEMIC ROADMAP

Programme Structure

BSc Chemistry (Semesters I – VI)

Semester I — Core Foundations

- CHE101-1: General Chemistry
- CHE111-1: Chemistry Practicals I
- CHE161A-1: Cosmetic Chemistry (Elective)
- CHE161B-1: Soil and Water Analysis (Elective)
- HED-NEP181-1: Holistic Development

Semester II — Core Foundations

- CHE101-2: Inorganic Chemistry-I: Coordination Compounds and Environmental Chemistry
- CHE102-2: Physical Chemistry-I: Fundamental Concepts
- CHE111-2: Chemistry Practicals-II
- CHE112-2: Chemistry Practicals-III
- HED-NEP181-2: Holistic Development

Semester III — Intermediate

- CHE201-3: Organic Chemistry-I: Monofunctional Compounds
- CHE211-3: Chemistry Practicals-IV
- ACL201-3: Artificial Intelligence in Biology and Chemistry
- HED-NEP181-3: Holistic Development

Semester IV — Intermediate

- CHE201-4: Analytical Chemistry-I: Fundamental Principles
- CHE202-4: Organic Chemistry-II: Fundamentals and Applications
- CHE211-4: Chemistry Practicals-V
- CHE212-4: Chemistry Practicals VI
- CHE281-4: Fostering Scientific Social Responsibility and Community Engagement through Chemistry
- HED-NEP181-4: Holistic Development

Semester V — Advanced

- CHE301-5: Physical Chemistry-II: Electrochemistry and Molecular Spectroscopy
- CHE302-5: Inorganic Chemistry-II: Inorganic and Organometallic Chemistry
- CHE311-5: Chemistry Practicals-VII
- CHE381-5: Internship

Semester VI — Advanced

- CHE301-6: Molecules of Life
- CHE302-6: Nanomaterials for Energy Applications
- CHE303-6: Organic Chemistry-III: Natural Products and Organic Spectroscopy
- CHE311-6: Chemistry Practicals VIII
- CHE312-6: Project Practical

BSc Chemistry Honours / Honours with Research (Semesters VII – VIII)

Semester VII — Specialization Track

- CHE401-7: Design Principles in Inorganic and Bio-Inorganic Systems
- CHE402-7: Organic Reaction Pathways and Biomolecules-I
- CHE403-7: Principles of Quantum Mechanics and Chemical Kinetics
- CHE404-7: Research Methodology
- CHE405-7: Simulations in Chemistry with AI (For Honours only)
- CHE411-7: Physical Chemistry Practical (For Honours only)
- CHE412-7: Inorganic Chemistry Practical (For Honours only)
- CHE481-7: Research Project/Dissertation (For Honours with Research only)

Semester VIII — Advanced Research & Projects

- CHE401-8: Symmetry and Spectroscopy of Molecules
- CHE402-8: Modern Analytical Techniques for Chemistry Research
- CHE403-8: Organic Reaction Pathways and Biomolecules-II
- CHE404-8: Inorganic Reactions and Catalysis
- CHE481-8: Project/Dissertation

FUTURE PROSPECTS

Career Paths

CHEMICAL & INDUSTRIAL ROLES

- ✓ Quality Controller
- ✓ Production Officer
- ✓ Analytical Chemist
- ✓ Lab Technician
- ✓ Food Safety Officer
- ✓ Cosmetic Scientist

BIOLOGICAL & FORENSIC OPPORTUNITIES

- ✓ Wildlife Conservationist
- ✓ Soil & Water Scientist
- ✓ Toxicologist
- ✓ Drug Inspector
- ✓ Diagnostic Lab Technician
- ✓ Educator

HIGHER EDUCATION & PROGRESSION

- ✓ Postgraduate studies (MSc/PhD) in Chemistry, Zoology, or Forensic Science

ENROLLMENT GUIDE

Admission Process

STEP 1

Register

Register with your Email ID and log in to the Admission Portal.

STEP 2

Apply Online

Fill the application form and pay the application fee.

STEP 3

Selection Process

Appear for the entrance test (if applicable), Skill Assessment, Micro Presentation and Interview.

STEP 4

Result

Check the login page for results; if selected, an offer letter is attached.

STEP 5

Fee Payment

Pay the course fee online and complete the admission process.

REQUIREMENTS

Eligibility & Selection Process

ELIGIBILITY CRITERIA

Eligibility: Pass in Class 12 (10+2) from a recognised Board (Karnataka PUC | ISC | CBSE | NIOS | other State Boards), having studied any two of Biology (Botany/Zoology) and Chemistry at the Class 12 level. Candidates writing the +2 examinations in March-May 2027 may apply with their Class X and XI marks.

APPLICANTS PURSUING INTERNATIONAL CURRICULUM MUST NOTE THAT ELIGIBILITY IS ACCORDING TO AIU STIPULATIONS:

IB Curriculum must have 3 HL and 3 SL with 24 credits | **GCE/Edexcel** must have minimum of 3 A levels with grade not less than 'C'.

SP PROCESS	SP PARTICULARS	SP TIME	SP MODE
Skill Assessment (SA) | Micro Presentation (MP) | Personal Interview (PI) & Academic Performance (AP)	**Skill Assessment (SA):** Candidate will be given a topic to write. **Micro Presentation (MP):** Candidate should be able to talk for 90seconds, on a topic given by the panel. **Personal interview (PI):** duration: 10 minutes **Academic Performance (AP):** Assessment of past performance in class 10 and class 11/12 *The selection process (SA_MP_PI) will be held in person at the venue and date selected while submitting the application form online.*	As per E Admit Card	Venue Based SA_MP_PI

Documents: Applicants must upload all qualification-related documents (Class 10 and Class 11 final report cards, or the Class 12 Board examination results) through the link provided while submitting the online application form. Failure to upload the required documents will result in the rejection of the application.

Note: *Applications submitted without mark sheets/report cards, or with unclear or illegible scanned copies, will be rejected and marked as Not Eligible.*

Note: For NOTE ON CURRICULUM AND CREDIT FRAMEWORK FOR UNDERGRADUATE PROGRAMMES - visit our website: **www.christuniversity.in**.

Christ University Admissions Portal

Office Timings: Monday to Friday: 09:00 AM to 04:00 PM, Saturday: 09:00 AM to 12:00 PM (Office remains closed on Sundays, Third Saturdays, Government Holidays and Any special events)