

- Training and placement cell at the university helps to place students for their internships and have a record of achieving 100 percent placements in the already ongoing courses like M.Sc Chemistry.
- Highly qualified faculties, mentors who have a vast experience of more than 40 years of research and academics, industry experts who shall constantly prepare students for their specialized roles in different sectors of industry and research organizations.
- Summer projects and hands on training shall be the focus.
- Guidance for Doctoral studies and competitive exams like CSIR NET, IFS, IAS, UPSC etc shall also be provided as and where needed.
- Special emphasis on regulatory affairs for those aspiring to work in pharmaceuticals.
- Need based expert inputs to allow students to be what they want to be.
- Structure has provision for extra credits for areas of special interest to students.
- State of art infrastructure
- Opportunity to work on ongoing projects and on novel unexplored areas

**Eligibility:** Candidates who have completed 10+2 in Science stream (All Boards) with minimum 55% are eligible for admission to BSc. Admission Procedure: Eligible candidates are required to appear for an interaction with experts of the School of Liberal Studies and Education.

**Hostel:** Limited accommodation facilities available for outstation students.



## BE WHAT YOU WANT TO BE

At NUV, we believe that students must achieve a good balance of academic productivity and collegial delight through an experience that connects what they do inside and outside the classroom. Students have plenty of opportunities to pursue personal interests with friends while undergoing a rigorous education, and make time at the University rich, substantial and fulfilling.

Student life at Navrachana University is vibrant and thriving with a variety of events round the year. In addition to academics, field trips and educational tours, NUV students are active around and beyond campus. Whether students are playing through the NUV Sports Club or cheering for friends, they are always busy participating and directing cultural events, organizing and attending Guest Lectures, participating and managing Workshops, administering and directing Quizzes, or participating, managing and organizing Extra-curricular activities – they are always busy.



'Educating the mind without educating the heart is no education at all'  
- Aristotle

To pursue personal interest, there are several student-run clubs like the Automates@NUV, Business@NUV, Engineering@NUV, Management@NUV, ScienceIT@NUV, Music@NUV, Dance@NUV, Theatre@NUV, Computers@NUV and Design@NUV that allow education to flourish with other interests.

**SCHOOL OF BUSINESS AND LAW**  
**SCHOOL OF ENGINEERING AND TECHNOLOGY**  
**SCHOOL OF LIBERAL STUDIES AND EDUCATION**  
**SCHOOL OF ENVIRONMENTAL DESIGN AND ARCHITECTURE**

For admissions inquiries and application forms, please contact 0265-3020 100, 2255 520/ 30/ 40 or write to us at [admission@nuv.ac.in](mailto:admission@nuv.ac.in) or visit [www.nuv.ac.in](http://www.nuv.ac.in) or meet us at **Admissions Office, Navrachana University, Vasna-Bhayli Road, Vadodara 391 410**  
Follow us at [www.facebook.com/nuvofficial](http://www.facebook.com/nuvofficial)



**B.Sc-M.Sc**  
**BIOMEDICAL SCIENCE**  
**Cell and Molecular Biology**



**School of Liberal Studies and Education**



# NAVRACHANA UNIVERSITY

Navrachana University is a UGC approved University meeting norms and requirements of UGC and AICTE. Navrachana University comprises four schools offering a variety of under-graduate, post-graduate and doctoral programs. Some of the salient features are:



Student-centric education with a focus on inter-disciplinary learning, research, practical learning and hands-on education



Strict adherence to academic schedule and on-time examinations



Develops students with breadth of understanding through inter-disciplinary education and a depth of knowledge through focused disciplinary education



State-of-the-art infrastructure facilities: Wi-Fi enabled campus; well-equipped library; modern laboratories for computer, engineering, and sciences; workshop facility for engineering, architecture and design students; well-equipped studios for design and architecture students; a computer-aided language laboratory; moot court for law students; amphitheatre and cafeteria.

## School of Liberal Studies and Education

Programs offered under Liberal Studies are Bachelor of Arts (Journalism & Mass Communication), Bachelor of Science (BSc+), Master of Science (Chemistry) and Master of Social Work (MSW). Under Teacher Education programs offered are: Bachelor of Education (BEd.), Master of Education (MEd.), Post graduate Diploma in Early Childhood Care and Education (ECCE) and Ph D (Education).



Well-known for its programs in teacher education which are NCTE approved, the School has a well-earned reputation in the field of teacher education due to its high quality curriculum, practice teaching and faculty research. The university, which has its roots in top quality schools, is well connected with the local education community and ensures that the knowledge and skills essential for a modern day teacher are adequately developed through its courses and successfully applied to the needs of schools and society. BEd has an excellent record (100%) in placement over the last eleven years.

## B.Sc-M.Sc Integrated in Biomedical Science: Cell and Molecular Biology

21st century belongs to the Science of life. One shall witness tremendous growth in sectors like Biotechnology, Pharmaceutical, Clinical Data Management, Molecular Diagnostics, and Biomedical Industries. Master's in Biomedical Science shall focus on cellular and molecular approaches by providing an understanding of basic concepts with holistic view to provide a broad thorough and intellectually challenging approach in the areas of Biological Science. The focus will be on training the students in both theory and applications of specialized areas. This course is specially designed for students interested in medical and clinical aspects of Biology. As on other areas of Biology, the cutting edge of research in medicine is primarily focused at molecular level. Looking into the trends in current applications for such

programs in research and industry, specializations are offered in **Molecular medicine, Drug discovery and design, Reproductive Biomedicine and Human Genetics**. This course is thereby tailor made to suite the demands of the ever expanding science of molecular biology and is one of its kinds to be offered in Gujarat.

The Masters Course lays emphasis on the overall development of laboratory skills of a research student coupled with an expansion of his/her knowledge base through specialized inputs for the course. The course work comprises of lectures and practicals along with skill building through technical and research oriented programs. The course is reviewed regularly in consultation with our Academic Advisory Board, which comprises of experts from academia, research institutions and industry from all over India. Thus, the course is tailor made to fulfill the requirements needed to compete with the current developments in scientific research. Along with the permanent faculties, the regular lectures are also conducted by visiting faculties who are experts in their respective fields. Apart from the course work, the Faculty also conducts Guest lectures by eminent academicians and scientists and paper presentations (Journal Club) to ensure learner centric environment. In addition, methods like quiz, discussions, tutorials, Industry visits etc. are also envisaged by the faculty to benefit the students. There is state-of-art infrastructure and advanced laboratories with modern instrumentation needed for pursuing quality research and training.

The B.Sc-M.Sc Integrated in Biomedical Science: Cell and Molecular Biology Program places special emphasis on development of analytical skills, communication skills, and entrepreneurship. The use of ICT tools is unique to the program. Choice-based electives from different Programs of the University offer opportunity to explore diverse interests in an interdisciplinary manner and enlarge the educational space. Social connect and know-your-community is achieved through a hands-on project KHOJ, wherein students from many majors across the university work collaboratively and apply disciplinary education in an interdisciplinary manner to solve complex social problems and bring about social innovation. A capstone project grounded in science and its application offers opportunity to demonstrate knowledge and proficiency in the sciences.

## Course Structure:

| Semester                     | I&II | III&IV | V&VI          | VII&VIII                   | XI                         | X                                  |
|------------------------------|------|--------|---------------|----------------------------|----------------------------|------------------------------------|
| Core Courses/<br>Semester    | Four | Four   | Four          | Four                       | Three                      | Industrial<br>Training/<br>Project |
| Interdisciplinary<br>Courses | One  | One    | One           | Elective<br>Courses<br>Two | Elective<br>Courses<br>Two |                                    |
| Skill based<br>courses       | One  | One    | One<br>(KHOJ) | One                        | One                        |                                    |
| Practical Courses            | Two  | Three  | Three         | Three                      | Two                        |                                    |
| <b>Total Credits</b>         | 22   | 24     | 22            | 23                         | 23                         | 20                                 |

## Program Highlights

- Suited for students interested in Medical and Clinical aspects of Biology
- Study in Life Sciences and subjects allied to Medicine
- Interdisciplinary focus: Bioinformatics, Biostatistics and Biotechnology
- Contemporary curriculum to meet the needs of the Industry (Biotech, Pharma, Clinical data management, Molecular diagnostics)
- Value added education
- Extensive lab based practical modules to facilitate contemporary research in Biomedical Science.
- Journal article presentations (current state of the art research papers).
- Industrial training: Two month (summer training) and six month (live research projects)
- State-of-the-art exposure to: Cell culture lab, Real time PCR, HPLCs etc.
- Holistic development of students (analytical and cognitive skills) with overall personal development.
- Social Involvement Program (KHOJ) for inculcating leadership, community awareness, and social-sensitivity
- Careers in academia, R&D and Industry.