



FACULTY OF COMPUTER  
APPLICATIONS &  
INFORMATION TECHNOLOGY

PIONEER  
IN  
COMPUTER  
SCIENCE  
EDUCATION

**BCA**  
**(HONS.)**

# ABOUT

## GLS UNIVERSITY



The zenith value of GLS University is to provide an ideal and innovative learning environment and continue the tradition of excellence in the education of the sponsoring body of the University, viz... Gujarat Law Society (GLS). GLS established in the year 1927, is one of the largest and oldest educational institutions in the state of Gujarat. GLS was promoted by luminaries Sardar Vallabhbhai Patel, Shri Ganesh Mavlankar, the first Speaker of the country, and Shri I. M. Nanavati with the vision of Excellence in Education. GLS University was established in April 2015 under Gujarat Private University Act-2009. In a short span, GLS University has become a Prestigious University with 15,000+ students 10+ departments, and 20+ programs in diverse disciplines like Business Management, Design, Law, Computer Application, Engineering, Commerce, Performing Arts, and Research at Undergraduate and Post Graduated levels which provides enhanced learning experiences through their excellent academic quality, well-equipped infrastructure, innovative teaching methods, creative curricular design, experienced faculty, and industry-oriented programs.

GLS University is a modern organization that retains the cultural & heritage values of providing a creative learning environment in a manner that is nationally entrenched, regionally recognized, and globally relevant. GLS University is a safe and inviting space with student-centric infrastructure located in the heart of Ahmedabad. Within the lush green campus of the University, students avail all the facilities of learning and recreation such as modern classrooms, computer labs, library, indoor and outdoor sports areas, gym, seminar halls, auditorium, canteen, and so on.

With its heritage in Gujarat's pioneering education field, GLS University has been an innovative force in education for many years. Our strong relationships with industry and impeccable career services complement high-quality teaching to ensure GLS students gain the knowledge and skills they need to match their ambition. Our academicians are experts in their fields and driven to deliver research that makes a meaningful social and environmental impact on the nation.

GLS University is also known as an education hub with liberal thoughts and rigorous learning along with policy from NEP - 2020. We offer flexible entry-exit options in relevant programs and also a dual degree program to accelerate the multi-discipline approach for students. GLS University also aligns with an industry-oriented curriculum and offers an industry apprenticeship program through various corporate collaborations which leads the university to focus on experiential learning.

Our new strategic plan is supported by three key pillars which provide a foundation for GLS University to focus on and expands over the next 10 years through meeting societal needs; expanding GLS University's global presence; and promoting skill-based education.

GLS University offers students a high-quality educational experience that prepares them for success in life, as well as research that addresses society's most persistent challenges. Our creation and transfer of knowledge contribute every day to our country's global competitive advantage and make the world a better place.



FROM

## PRESIDENT'S DESK

**Sudhir Nanavati**  
President

Dear Prospective Students,

Greetings from GLS University!!!!

We are a dynamic university established in 2015 and uniquely located in the heart of Ahmedabad. Our goals are to pursue high levels of excellence, promote innovation and nurture creativity to improve people's lives. In a city where East meets West, our vision is to become globally recognized for professional education, one that emphasizes the mutual enrichment of different cultures and intellectual traditions, and for research that makes a real difference.

In keeping with this vision, since its inception in 1927, Gujarat Law Society the sponsoring body of GLS University has distinguished itself by its excellent academic program delivery, faculty acquaintance, Corporate Partners, Global Strategic Alliances, and Visionary Leaders. Our alumni are making significant contributions across sectors and around the world and thousands of professionals opted for their education at our university.

As a globally acclaimed university, we emphasize diversity, intercultural learning, and a global vision. Our distinguished faculty are recruited from all over the nation. We have established an excellent international network of academic collaborations and developed our curriculum in collaboration with numerous international education institutes.

We have built world-class amenities and facilities for all the University's stakeholders, providing an adequate environment for innovative learning experiences and space for originality. GLS University always believes in revolutionizing its infrastructure as per the requirement of time in this innovative ecosystem of education.

GLS University is a pioneer in its focus on providing education at par with the best in the world. We aim to help students become well-rounded individuals who can think significantly about issues from multiple points of view, communicate effectively, and become leaders with a commitment to public service.

GLS University's education strongly emphasizes foundational knowledge, thorough academic research based on rigorous pedagogy, innovative curriculum, and hands-on experience with real-world challenges. It prepares students to be ethical leaders in a diverse and complex world. We know the industry requirement regarding skills and the ability to groom the student by focusing on the Intelligence quotient, Emotional quotient, Analytical quotient, & Creative quotient.

GLS University follows the National Education Policy (NEP) 2020, which aims to make the education system holistic, flexible, multidisciplinary, and aligned to the needs of the 21st century and works towards the 2030 Sustainable Development Goals. The intent of policy seems to be ideal in many ways, but it is the implementation that lies the key to success.

Our vision for the next decade is to provide a holistic environment in terms of infrastructure, faculty, learning & development environment, research orientation, innovation capability, and international outreach to the students which will ensure their overall grooming and development enabling them to compete in national as well as international scenarios.



# FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY

## FCAIT

FCAIT is renowned for achieving excellence by inculcating educational, social, and ethical values in students for their holistic upliftment. The institute enhances the students' comprehensive growth by exposing them to latest technological developments and making them aware of the current trends of the field. Imparting outcome-based education is the prime motto of the institute. The institute constantly provides enormous opportunities to the students and equips them with the skills, opportunities, and knowledge that hold significance for life-long learning and accolades. The focus of the institute is to motivate students for achieving excellence and acquiring life skills to sustain life outside the periphery of the classroom.





# DISTINGUISHING

## FEATURES

Grand Legacy  
of 96 years

Industry  
Relevant  
Curriculum

Capstone  
Projects  
for Real - Life  
Learnings

Exceptional ICT  
Enabled  
Pedagogies

Highly  
Experienced  
& Research Driven  
Faculty  
Members

Academic  
Excellence  
of 20+ years

Progressive  
Specialised  
Tracks

Well Developed  
Labs for  
Practical Skills

Well Resourced  
Infrastructure

Extensive  
Library with wide  
collection of  
books & access  
to reputed  
e-publications

# BACHELOR OF COMPUTER APPLICATIONS

## BCA (HONS.)

Bachelor of Computer Applications (BCA) Honors Programme, is 3 years (6 semesters) Under Graduate Programme based on the Choice Based Credit System (CBCS) specially formulated for the students who are enthusiastic about the field of Computer Science and Applications. The curriculum has the potential to cater the need of the hour and it offers a scope to create a dream career in the area of Computer Applications by introducing the latest trends in the form of specializations. The specialized knowledge helps students to navigate through the various fields of Computer Applications and IT. The course imparts practical and industry-focused education that attracts aspiring students across the country. The curriculum of the BCA Honors programme is designed in order to help the students to emerge as successful and ethical professionals as well as responsible human beings. The BCA Honors Programme is an amalgamation of theoretical and practical training through classroom teachings, discussions, group presentations, practical problem solving, and software experimentation.

Artificial  
Intelligence &  
Machine  
Learning

BCA (HONS.)  
Specialisation

Web  
Development

Knowledge  
Enhancement  
Project

Software  
Exploration  
Project

Capstone  
Project

FIRST YEAR

SECOND YEAR

THIRD YEAR

**SEM. I****Core Courses**

- Introduction to Computer Science
- Mathematics for Computer Science – I
- Introduction to Programming & Problem Solving
- Web Technologies
- Programming – Practicals
- Web Technologies – Practicals
- Publishing Tools – Practicals

**Foundation Course**  
**Elective Course**

**SEM. II****Core Courses**

- Introduction to Computer Architecture & Systems Programming
- Mathematics for Computer Science – II
- Object Oriented Programming
- Database Design
- Object Oriented Programming – Practicals
- Database Design – Practicals
- Multimedia Tools – Practicals

**Foundation Course**  
**Elective Course**

**SEM. III****Core Courses**

- Java Programming
- Operating Systems
- Computer Networks
- Java Programming – Practicals
- Operating Systems – Practicals
- XML – Practicals

**Specialisation Course – 1**  
**Foundation Course**  
**Elective Course**

**SEM. IV****Core Courses**

- Python Programming
- Data Structures & Algorithms
- Object Oriented Analysis and Design
- Python Programming – Practicals
- Data Structures & Algorithms – Practicals
- Relational Database Systems – Practicals

**Specialisation Course – 2**  
**Foundation Course**  
**Elective Course**

**SEM. V****Core Courses**

- Programming with PHP
- Cross Platform Mobile Application Development
- PHP – Practicals
- Capstone Project – I

**Specialisation Course – 3**  
**Specialisation Course – 4**  
**Foundation Course**

**SEM. VI****Core Courses**

- Introduction to Cloud Computing
- Software Engineering
- Capstone Project – II

**Specialisation Course – 5**  
**Specialisation Course – 6**  
**Specialisation Course – 7**  
**Foundation Course**

**ARTIFICIAL INTELLIGENCE & MACHINE LEARNING**

- Introduction to Machine Learning
- Machine Learning Practicals
- Introduction to Artificial Intelligence
- Introduction to Natural Language Processing
- Introduction to Data Science
- Tools and Techniques for Data Science
- Image Processing

**WEB DEVELOPMENT**

- Introduction to Web Service
- Introduction to Data Science
- Web Development using JAVA
- Web Development using React
- Web Development using Angular
- Web Development using Node JS
- Web Development using JAVA Practicals

**ELECTIVE COURSES**

- Startup & Entrepreneurship
- Foreign Language (Spanish)
- IT in Healthcare
- Green Computing
- IT Leaders
- Workplace Communication
- Learning Values through Literature
- Indian Constitution
- Ethics & Morals: Value Education
- Principles of Management
- Environmental Studies
- Gujarat: Culture & Tradition
- Gandhian Thoughts
- Lessons from World Leaders

**FOUNDATION COURSES**

- Augmented Reality / Virtual Reality
- Introduction to NoSQL Database
- Introduction to Embedded Systems
- Software Project Management
- Management Information System
- Operation Research
- Computer Graphics
- Website Frameworks
- E-Governance
- Design Thinking
- Digital Marketing
- Foreign Language (French)
- Principles of Accounting
- History of Computing
- Communication Skills for IT
- Technical and Professional Communication



# SMART SOLUTIONS FOR A BETTER

## TOMORROW !!!

The institute encourages students to explore new possibilities in incipient technologies and provides a platform to engrave engineering and industry skills. Students experiment and develop various IoT based projects on a Single Board Computer - Raspberry Pi, and Microcontrollers - Arduino, Photon Particle, and Node MCU through live models such as **Magic Mirror, ChessMate, Dam Overflow Monitoring System, Indoor Navigation System, Smart Trolley, and many more...**



**EXPLORE...  
CODE... INNOVATE...**

**@ HACKATHON**

**Hackathon** is a pioneering series of competitions held at International, National and Regional levels to promote and leverage the technical skills of the students. Students of FCAIT have proposed various "Out of the Box" solutions for Multidisciplinary fields of Social Relevance like Indoor Mapping and Navigation, Appointment Management for Government Officers, IoT Based Notice Board, Vehicle Monitoring System With Anti-Theft and Security, SMART Transportation and Pollution Control

**FCAIT  
Did It Again !**

**3<sup>rd</sup> Prize**

**@**

**Azadi ka Amrit Mahotsav  
Hackathon - 2022**

**organized by  
Education Department - Govt. of Gujarat**

**200+  
PARTICIPANTS**

**20+  
HACKATHON  
EVENTS**

**60+  
TEAMS AND  
MENTORS**

**11+  
WINNER TEAMS**



# PROFESSIONAL

## ENRICHMENT

**Accentuating  
Scientific Aptitude**

**Enhancing  
Practical Skillsets**

**Making Students  
Industry - Ready**

**Competency  
Building for Career  
Enhancement**

**Fostering the  
Innate Capabilities**

**Inculcating Moral  
& Ethical Values**

**Nurturing Student's  
Interests in  
Multi-Disciplinary  
Domains**

**Project  
Based Learning**



# FUTURE

## OPPORTUNITIES



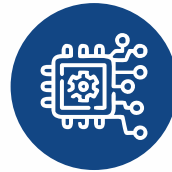
Data Scientist



Database Administrator



AI & ML Engineer



Information Systems Manager



Data Analyst



Computer Programmer



Web Designer



Full Stack Developer



Business Intelligence Developer



System Analyst



Network Architect

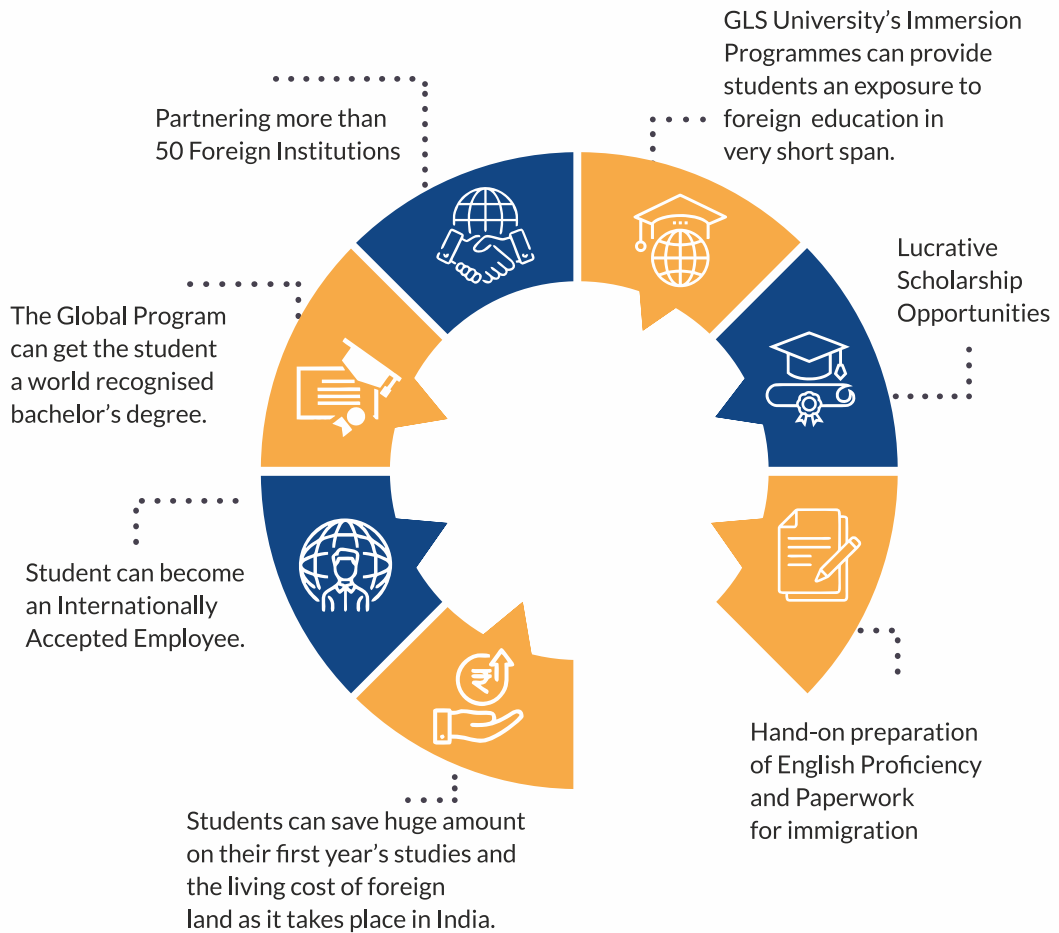


Software Engineer

# SCHOOL OF

## INTERNATIONAL STUDIES

GLS University's School of International Studies prepare and nurture the students for the Global Exposure. The department offers various global, pathway, and immersion programmes through our well-established arrangements and relations with other foreign institutions of repute.



Contact No : +91-9998552369 • Email: [international@glsuniversity.ac.in](mailto:international@glsuniversity.ac.in)

# INTERNATIONAL

## COLLABORATIONS



# ACCOMMODATION AND

## EXTENDED FACILITY



Elevate your student living experience with affordable luxury only at **The Hive Hostels**

At The Hive Hostels, we have curated every space and experience to suit your ever-changing moods and needs!

We strongly believe that your hostel should be a place that enables you to relax, unwind and refuel- so you have the power to win the world!

Everything and More - You Just Name It!

Comfy Bed  
Coffee Machine

Study Table  
Pick-up & Drop Service

Spacious Cupboard  
Laundry Service

High-Speed Wi-Fi  
Delicious Meals and Whatnot!

### A Place where you Inspire and Be Inspired

The Hive Hostels is more than just a roof and 4 walls-it's your comfort zone, a habitat, your own space where you can meet like-minded people, learn from them, and teach them a thing or two. Here you can express your vision and talk about your dreams and goals without being judged.

### When you are here, you are Never Bored

The Hive Hostels, in simple words, is a junction of functions. From the sacred fires of Holi and Lohri to the joys of Diwali, Eid, and Christmas and even the thrills of Cricket and Football - we just need a chance to put your best clothes on and get partying!



Contact : +91 95826 74319, 1800-572-0709

\*GLS University has collaborated with The Hive Hostels for hostel facilities where hostel is not managed and owned by GLS University

# ELIGIBILITY

## CRITERIA

- The applicant must have passed the Gujarat Higher Secondary Education Board(GHSEB)/ Central Board of Secondary Examination (CBSE) / Indian Council of Secondary Examination (ICSE) or its equivalent under the 10+2 pattern in General or Science stream during the current year with the following subjects:
  - (1) English and
  - (2) Any one of the following subjects:
    - Mathematics • Statistics • Physics • Business Mathematics • Accountancy • Computer
    - Accounting and Bookkeeping
- The candidate must have obtained the following minimum percentage of aggregate marks (i.e., total marks obtained divided by the maximum total marks admissible, including marks of all subjects , theory and practical):
  - For Open category candidates: 45%
  - For Reserved category candidates: 40%



# INFRASTRUCTURE



LIFE @CAMPUS





## Faculty of Computer Applications & Information Technology BCA (HONS.)

📍 GLS University Campus, Ellisbridge, Ahmedabad – 380006.

☎ 079-26447638, 9904086377, 8866106226

🌐 [www.glsufcait.org](http://www.glsufcait.org), [www.glsuniversity.ac.in](http://www.glsuniversity.ac.in)

✉ [admissions@glsica.org](mailto:admissions@glsica.org)

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