

FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY





PIONEER IN COMPUTER SCIENCE EDUCATION





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

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.

Sudhir Nanavati President

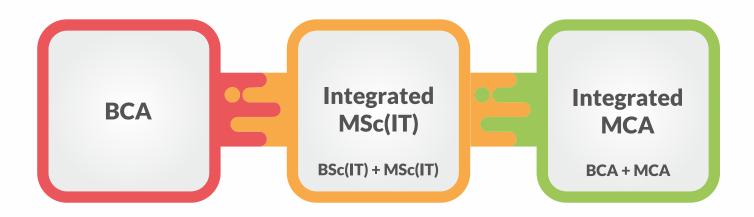
FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY - FCAIT

FCAIT is renowed 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.





PROGRAMMES OFFERED



OUTSTANDING MERITS

Grand Legacy of 96 years 01 Excellence in Education for 20+ years 02 **Industry Aligned Curriculum** 03 Well Developed Labs for Practical Skills 04 **Exceptional ICT Oriented Learning Techniques Updated & Resourceful Infrastructure** Highly Experienced & Research Driven Faculty Members Extensive Library with Books, E-Resources, Journals, Periodicals

SHAPING YOUR CAREER

Going Beyond Data Science

> Implementing Data Analytics

Perceiving Machine

Learning

Understanding Artificial Intelligence

Untangling Networking

Unfolding Data Designing

> Fathoming Internet of Things

Discovering Security

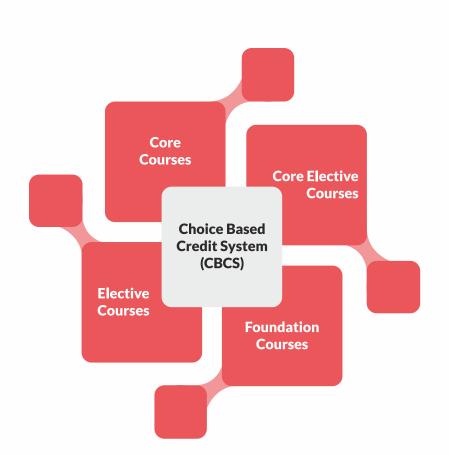
Instilling Programming Skill

> Elucidating Database Management

Developing Logical Thinking

BACHELOR OF COMPUTER APPLICATIONS BCA

Bachelor of Computer Applications – BCA Course is 3 years (6 semesters) Under Graduate Programme custom-made for students who are enthusiastic about the field of Computer Science and Applications. The curriculum is specially designed to cater to the need of the hour. The Programme offers a rich and comprehensive syllabus where students get exposure to various areas of computer applications including recent industry trends. The holistic approach of the syllabi makes the students market–ready by amalgamating the theoretical and practical knowledge of the subject. The course is an instructional package developed to suit the needs of students to keep pace with the developments in higher education and the quality assurance expected of it in light of liberalization and globalization in higher education.





Core Courses

- Computer Fundamentals & Information Technology
- Logic Development & Programming
- Introduction to HTML5. CSS & Javascript
- Mathematics for Computer Science I
- Practical on LDP
- Practical on HTML5. CSS and Javascript
- Publishing & Multimedia Tools

Foundation Course

Elective Course

Core Courses

- Introduction to Object Oriented Programming
- Mathematics for Computer Science II
- Database Management System I
- Computer Organization & Advanced Microprocessors
- Practical on IOOP
- Practical on DBMS I
- Practical on Angular

Foundation Course

Elective Course

Core Courses

- Core Java
- Data Structures
- Database Management System II
- Fundamentals of Operating System
- Practical on Core Java
- Practical on DS
- Practical on DBMS II

Foundation Course

Elective Course

Core Courses

- Advanced Java
- Introduction to XML
- Structured & Object Oriented Analysis & Design
- Data Communication & Networks
- Practical on Advanced Java
- Practical on XML
- Linux Shell Scripting (Practical)

Foundation Course

Elective Course

Core Courses

- Website Development using PHP & MySQL
- Information Security
- Introduction to Cloud Computing
- Practical on PHP
- System Development Project I

Foundation Course

Core Elective Course

Core Courses

- Introduction to Python
- Introduction to Artificial Intelligence
- Cross Platform Mobile Application Development
- Practical on Python
- System Development Project II

Foundation Course

Core Elective Course



My experience at GLS University was extremely wonderful, especially in the area of Software Development. Practical examples and cases, which were discussed in the class, are helping me a lot in the Industry. It has made me more disciplined & helped me to grow not only professionally but also holistically.

- Nirzari Parikh (Sr. Technical Analyst, Digital Services, Trantor Inc)

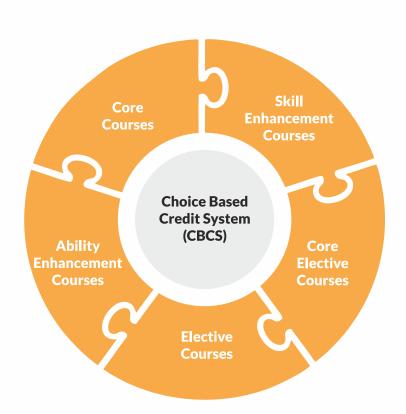


My experience at GLS has been a memorable one. The institute gave me an exposure to learn beyond curriculum. Apart from study, we were also encouraged to participate in various extra curricular activities. Faculties go out of their way to help students understand difficult concepts and address any doubts or concerns.

-Kinjal Akhani (Cloud Engineer, Web Application at Google)

INTEGRATED MASTER OF SCIENCE (IT) iMSc(IT)

Integrated MSc (IT) - iMSC (IT) is 5 years (10 semesters) Programme designed for students who wish to pursue a professional career in Information Technology. By joining this course, the students would attain a sound theoretical foundation, an ability to analyze, conceptualize, and design systems and competency in modern software design and development tools. The course has been specifically designed to suit the requirements of the IT industry, where individuals will be able to take up technical positions and can seek employment in many roles, including computer programmers, technical authors and research associates. The programme aims to indoctrinate crucial abilities as demanded by the industry through the interactive learning process. The programme imparts comprehensive knowledge with equal emphasis on theory and laboratory work in the field of Information Technology.





Core Courses

- Introduction to Information Technology
- Problem Solving through Programming
- Internet & Web Designing using HTML5
- Mathematics for Computer Science I

Skill Enhancement Courses

- Practicals on PSP
- Practicals on HTML5
 - Publishing & Multimedia Tools

Fundamentals of Networking

Practicals on Data Structures

Ability Enhancement Course

Elective Course

Core Courses

Core Java

Data Structures

Skill Enhancement Courses

Practicals on Core Java

Database Systems - II

Ability Enhancement Course

Data Science

Elective Course

Core Courses

- Advance C
- Mathematics for Computer Science - II
- Database Systems I
- Fundamentals of Computer Organization

Skill Enhancement Courses

- Practicals on Advance C
- Practicals on Database Systems I
- Practicals on DHTML
- **Ability Enhancement Course Elective Course**

Core Courses

- Introduction to Python
- **Object Oriented Analysis** & Design
- Multimedia Systems
- Programming with PHP

Skill Enhancement Courses

- Practicals on Python
- Practicals on Multimedia

Ability Enhancement Course

Practicals on PHP

Core Elective Course

- Cryptography and Network Security
- **High Performance Computing** with Python
- Advanced Data Science
- Advanced Data Science with R (Practical)
- Machine Learning with Python (Practical)
- App Development using Cross Platform Technology (Practical)
- Capstone II (Practical)

Core Courses

- Object Oriented Programming
- Microprocessor & Assembly Language
- Introduction to XML
- Fundamentals of Operating System

Skill Enhancement Courses

- Practicals on Object Oriented Programming
- Practicals on XML
 - Practicals on Operating System
 - Ability Enhancement Course **Elective Course**

Core Courses

- Artificial Intelligence
- Machine Learning
 - Software Engineering
 - Information Security
- **Skill Enhancement Courses**
- Practicals on Machine Learning
- Dissertation / Mini Project

Ability Enhancement Course

Core Elective Course

Advanced Networking

- Design and Analysis of Algorithms
- Agile Software Development
- **Enterprise Computing with Cloud**
- Web Programming using JAVA (Practical)
- Web Programming using Python (Practical)
- Capstone I (Practical)

Blockchain Technology **Unstructured Databases**

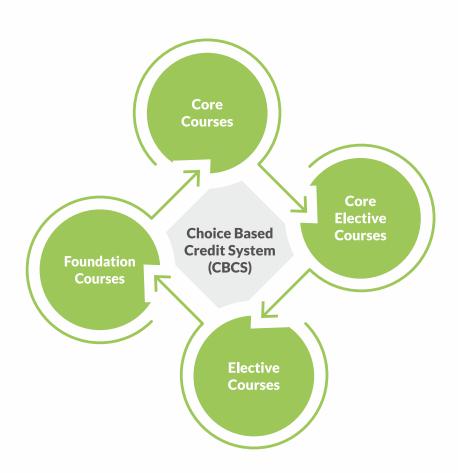
- **Human Computer**
- Interaction
- Big Data Analytics
- **Robotic Process Automation**
- SEMESTER Big Data Analytics using Hadoop (Practical)
 - Web Development using MERN Framework Practical)

Industry Internship



INTEGRATED MASTER OF COMPUTER APPLICATIONS IMCA

Integrated Master of Computer Applications – iMCA is 5 years (10 semesters) Programme that offers syllabus aligned to industry demands and the latest developments. The curriculum is designed to enhance the professional competence of students in computer applications and their implementations. The course provides a strong foundation in the field of computers & IT through a blend of traditional and contemporary subjects. It offers theoretical grounding and practical expertise for students to learn the technical know-how and implement their knowledge in the real world. The programme develops computer professionals with strong fundamental knowledge, an understanding of recent development tools used in the computer industry and also creates the foundation for future research.







Core Courses

- **Fundamentals of Computer** Organization
- **Fundamentals of Programming Techniques**
 - Web Technologies using HTML5, CSS and Java Script
- Mathematics for Computer Science I
- **Practicals on Programming Techniques**
 - Practicals on Web Technologies
 - Publishing & Multimedia Tools
- **Foundation Course Elective Course**



- Web Development using PHP
- **Data Structures**
- Structured Object Oriented Analysis and Design
- Statistics for Data Analysis
- Practicals on PHP
- Practicals on Data Structures
- Database Management Systems II

Foundation Course

Elective Course

- **Data Science**
- Computer Networks
- **Cloud Computing**
- Al and Applications
- Practicals based on Data Science (Python)
- Web Development using Python Framework
- Practicals of Advanced RDBMS -MOOC

Core Courses

- Advanced Programming **Techniques**
- Mathematics for Computer Science - II
- Database Management Systems I
- **Advanced Computer Organization**
- Practicals on Advanced
- **Programming Techniques** Practicals on DBMS - I
- Extensible Markup Language (XML)
- **Foundation Course Elective Course**

Core Courses

- Introduction to Python
- Web Technologies using Java
- Fundamentals of Network Security
- Cross Platform Mobile Application Development
- Introduction to Artificial Intelligence
- Practicals on Python ŭì
 - Practicals on Web Technologies OR
 - Practicals on Network Security Practicals on Cross Platform Mobile Application Development
- **Foundation Course** Core Elective Course
- Machine Learning
- Block Chain Technology
- **Design Patterns**
- Practicals based on Machine Learning with Python
- ш. FullStack Development
- Cross Platform App Development
- Mini Project I
- Elective I
 - Ethical Hacking
 - Distributed Database Systems
 - Software Testing

Core Courses

- **Object Oriented Programming** using Java
- Data Communication and
- Networking STEI -
- Numerical Methods
- **Fundamentals of Operating System**
- <u>й</u> і Practicals on Object Oriented Programming
- Practicals on Numerical Methods
 - Practicals on OS & Networks
- **Foundation Course Elective Course**

Core Courses

- Introduction to Machine Learning
- Introduction to Cloud Computing
- Cyber Security and Techniques
- Fundamentals of IoT
- Practicals on Machine Learning
- Dynamic Web Application Development using Angular
- System Development Project
- **Foundation Course** Core Elective Course
 - Big Data Technologies **Embedded Systems**
- Cryptography and Security
- Practicals based on Big Data Technologies
- Practicals based on Advanced Java Framework
- نت Mini Project - II
- Elective II
 - Image Processing
 - Human Computer Interaction
 - Robotics



- Entrepreneurship
- Industry Internship

Core Elective Courses

- Software Engineering
- Emerging Technologies
- Introduction to NoSQL Database
- Full Stack Development
- Parallel Processing
- Computer Graphics
- Operations Research
- Digital Image Processing
- System Software
- Software Testing
- Introduction to IoT
- Augmented Reality / Virtual Reality

Elective Courses

- Design Thinking
- Digital Marketing
- IT in Healthcare
- Green Computing
- Health Education
- Disaster Management
- Principles of Management
- Stories from English Literature
- Renowned Scientists of the World
- Indian Constitution
- Gandhian Movement
- Environmental Studies
- Ethical & Moral Values
- History of Gujarat & its Culture
- Learning from World Leaders
- Moral Values through Stories

Foundation / Skill Enhancement Courses

- Web Security
- Foreign Language
- Cloud Computing
- Numerical Methods
- Embedded Systems
- Soft Skills Development
- Fundamentals of Accounting
- Professional English
- History of Computing
- Statistics for Data Analysis
- E Governance & E Commerce
- Introduction to Data Analytics
- Introduction to Web Services
- Enterprise Resource Planning
- Management Information System
- Customer Relationship Management
- Website Frameworks using Joomla
- Website Frameworks using ROR
- Website Frameworks using Drupal
- Communication & Presentation Skills
- Technical and Professional Communication
- Introduction to Electronics, Digital Logic & Circuits



GLS university has provided me with a solid foundation in computer applications that has played a pivotal role in shaping my career in the field of technology. Apart from formal education, GLS university provided us with several opportunities to gain practical experience through field tours and volunteering opportunities. The field tours allowed us to see how computer applications were used in industry, giving us a practical understanding of the concepts, we learned in class. Overall, my experience at GLS was truly enriching.

-Shraddha Jadawala (Data & IT Specialist, Q & C Services Inc)





Application
Oriented
Pedagogies



Stimulating
Critical
Thinking



PEDAGOGY









TOWARDS ACADEMIC EXCELLENCE

Software Experimentation Projects

Knowledge
Enhancement Presentations

Digital
Learning Resources

Supportive Learning Environment

Embedded
Systems Exploration

Student Mentorship & Guidance

Preparatory
Bridge Courses





HACKATHON CLUB



ISR / NSS

SEMINARS & WORKSHOP





































INDUSTRIAL VISITS

CULTURAL FESTIVAL TECH TALKS

LITERARY CLUB

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.



3rd 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

PLACEMENTS

The Placement cell bridges the gap between the learning and finding an appropriate place to exhibit those skills in practicality. With holistic development, the students are prepared for the most renowned and reputed companies according to their skillset.



Resume Building



Interview Preparation



Presentation Skills



Career Guidance



Connecting Alumni



Counselling & Mentoring



Industry
Interactions



Placement Support

























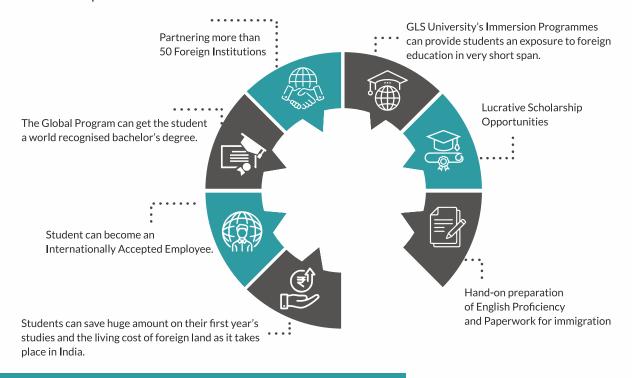






SCHOOL OF INTERNATIONAL STUDIES

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

INTERNATIONAL COLLABORATIONS



































INFRASTRUCTURE















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	Study Table
Coffee Machine	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, leam 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%



Faculty of Computer Applications & Information Technology BCA | Integrated MSc(IT) | Integrated MCA

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