GLS
UNIVERSITY
Promoted By Gujarat Law Society Since 1927

Faculty of Computer
Applications &
Information Technology

BCA | BSc(IT)
SPECIALIZATION

**Exclusive IT Programme for
Science & Commerce Stream**

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 30+ 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.

*

* Proposed new building

FROM PRESIDENT'S DESK

Dear Prospective Students,

Delighted to extend a warm welcome to you as you contemplate becoming a part of our vibrant academic community here at GLS University. As President, it is a matter of pride to lead an institution devoted to nurturing intellectual curiosity, personal development, and a dedication to excellence.

Selecting the right university is an important decision, and I want to assure you that GLS University is dedicated to providing an outstanding educational experience that will equip you for success in your future endeavours.

At GLS University, you will encounter a diverse and inclusive community of scholars, researchers, and students who are deeply passionate about effecting positive change in the world. Our faculty members are esteemed experts in their respective fields, and they are committed to assisting you in your academic and personal growth every step of the way. Whether your interests lie in the arts, sciences, business, or any other discipline, GLS University offers a broad spectrum of programs and opportunities for you to explore your passions. From leading-edge research to hands-on experiential learning, you will have access to resources and experiences that will empower you to realize your full potential.

In addition to academics, GLS University boasts a vibrant campus life with a plethora of extracurricular activities, clubs, and organizations to facilitate connections with peers who share your interests and values. From community service to cultural events and athletic competitions, there are boundless opportunities for you to engage and make meaningful contributions to our campus and beyond.

As you embark on this thrilling journey of higher education, I encourage you to discover all that GLS University has to offer. Take a tour of our campus, engage with faculty and students, and envision yourself as an integral part of our dynamic community. I am confident that you will find GLS University to be a place where you can flourish, excel, and forge enduring memories that will shape your future.

Thank you for considering GLS University for your academic aspirations. I eagerly anticipate welcoming you to our campus and providing support as you pursue your path to success.

Warm regards,
Sudhir Nanavati
President

FCAIT FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY

FCAIT is known for achieving excellence by inculcating educational, social, and ethical values in students for their holistic upliftment. The institute enhances comprehensive growth of students 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 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 acquiring domain expertise and life skills to sustain life outside the periphery of the classroom.

OUR MILESTONES, YEAR-AFTER-YEAR

Ranked **1st** for Academic Excellence in Gujarat in the All India Survey by **India Today**

Ranked amongst **Top 50** BCA Colleges of India in the All India Survey by **India Today, Outlook India & OPEN Magazine**

DISTINGUISHING FEATURES

- Legacy of 97 years
- Excellence in Education for over 20+ years
- Industry Aligned Curriculum
- State-of-the-Art Computer Labs
- Exclusive International Collaborations
- Modern and Well-Equipped Infrastructure
- Cutting Edge ICT Enabled Learning
- Highly Experienced Research Focussed Faculty Team
- Extensive Library with Vast Resources

SHAPING YOUR CAREER

Enhancing Practical Skillsets

Grooming Industry Ready Students

Accentuating Scientific Aptitude

Igniting Innovations & Creativity

Competency Building

Interdisciplinary Skill Development

Industry Academia Collaboration

FUTURE OPPORTUNITIES
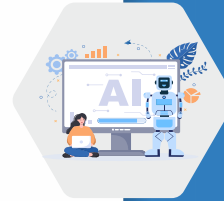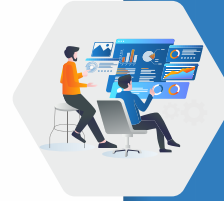
Robotics Engineer

AI & ML Engineer

Full Stack Developer

Information Systems Manager

Data Scientist

Business Intelligence Developer

Network Security Engineer

Information Technologist

BCA BACHELOR OF COMPUTER APPLICATIONS

The Bachelor of Computer Applications (BCA) programme with dual specialization in Artificial Intelligence & Machine Learning (AI & ML) and Web Development is designed to equip students with comprehensive knowledge and skills in two cutting-edge fields of computer science. This programme integrates theoretical knowledge with practical application to prepare students for a successful career in the rapidly evolving technology industry. The syllabi is updated as per the NEP 2020 to make student-centric education viable to all.

BCA (Dual Specialization)

Artificial Intelligence & Machine Learning

Web Development
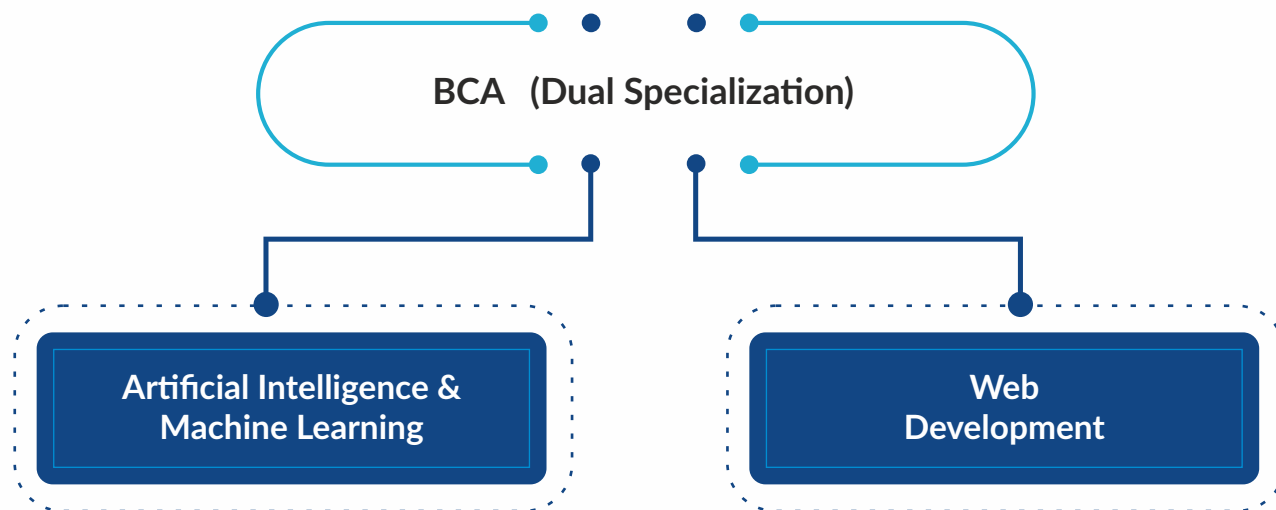
BCA (Dual Specialization) 3 Years with options to opt for

- BCA (Hons.) (4th Year)
- Integrated BCA + MCA (4th & 5th Year)

SEM 1

- Introduction to Programming & Problem Solving
- Fundamentals of Computer Organization
- Web Technologies
- Mathematics for Computer Science –I
- Publishing & Multimedia Tools
- Ability Enhancement Course – 1
- Value Added Course – 1

SEM 2

- Object Oriented Programming
- Computer Architecture & Systems Programming
- Database Design
- Mathematics for Computer Science – II
- Linux Programming
- Ability Enhancement Course – 2
- Value Added Course – 2

SEM 3

- Programming with Java
- Computer Networks
- XML
- Operating Systems
- Introduction to Embedded Systems
- Specialization Course – 1
- Ability Enhancement Course – 3
- Value Added Course – 3

SEM 4

- Python Programming
- Data Structures & Algorithms
- Object Oriented Analysis & Design
- Relational Database Systems
- Specialization Course – 2
- Ability Enhancement Course – 4
- Value Added Course – 4

SEM 5

- Cross Platform Mobile Application Development
- Information Security
- Programming with PHP
- Distributed Database
- Any One
  - o Management Information System
  - o Computer Graphics
  - o Design Thinking
- Specialization Course – 3
- Specialization Course – 4
- Specialization Course – 5

SEM 6

- Cloud Computing
- Software Engineering
- IoT Fundamentals
- Website Frameworks
- Capstone Project
- Specialization Course – 6
- Specialization Course – 7
- Ability Enhancement Course – 5

Artificial Intelligence & Machine Learning

- Introduction to Artificial Intelligence
- Introduction to Machine Learning
- Hands – on Machine Learning
- Tools & Techniques for Data Science
- Introduction to Natural Language Processing
- Image Processing
- Introduction to Data Science

Web Development

- Introduction to Web Services
- Web Development using Angular
- Web Development using React
- Full Stack Development
- Web Development using JAVA
- Hands – on Web Development using JAVA
- Introduction to Data Science

BSc(IT) BACHELOR OF SCIENCE (IT)

The Bachelor of Science in Information Technology (BSc.(IT)) programme with dual specialization in Artificial Intelligence & Machine Learning (AI & ML) and Cyber Security is designed to provide students with a strong foundation in IT fundamentals while allowing them to focus on two distinct yet interconnected fields of study. This programme aims to prepare students for careers in the rapidly evolving technology landscape by equipping them with specialized knowledge and skills relevant to AI & ML or Cyber Security. The updated syllabi follows NEP 2020 to offer students with most updated course content.

BSc(IT) (Dual Specialization)

Artificial Intelligence & Machine Learning

Cyber Security
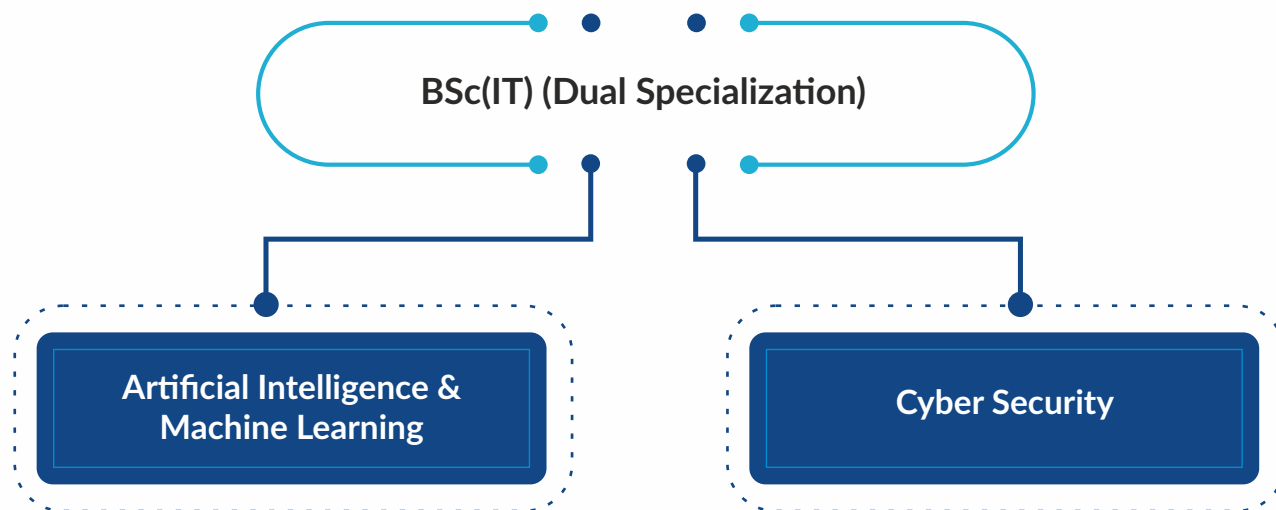
BSc(IT) (Dual Specialization) 3 years with options to opt for

- **BSc(IT) (Hons.) (4th Year)**
- **Integrated BSc(IT) + MSc(IT) (4th & 5th Year)**

SEM 1

- Problem Solving through Programming
- Fundamentals of Information Technology
- Web Technologies
- Mathematics for Computer Science – I
- Publishing & Multimedia Tools
- Ability Enhancement Course – 1
- Value Added Course – 1

SEM 2

- Object Oriented Programming
- Fundamentals of Computer Organization
- Database Systems – I
- Mathematics for Computer Science – II
- Shell Scripting
- Ability Enhancement Course – 2
- Value Added Course – 2

SEM 3

- Java Programming
- XML
- Fundamentals of Operating Systems
- Microprocessor & Assembly Language
- Any One
  - o Introduction to Electronics, Digital Logic & Circuits
  - o Numerical Methods
- Specialization Course – 1
- Ability Enhancement Course – 3
- Value Added Course – 3

SEM 4

- Programming with Python
- Data Structures
- Computer Networks
- Embedded Systems – I
- Specialization Course – 2
- Ability Enhancement Course – 4
- Value Added Course – 4

SEM 5

- Cloud Computing
- Programming with PHP
- Object Oriented Analysis & Design
- Database Systems – II
- Any One
  - o Embedded Systems – II
  - o Multimedia Systems
  - o Design Thinking
- Specialization Course – 3
- Specialization Course – 4
- Specialization Course – 5

SEM 6

- Cross Platform Mobile Application Development
- Fundamentals of IoT
- Software Engineering
- Website Frameworks
- Capstone Project
- Specialization Course – 6
- Specialization Course – 7
- Ability Enhancement Course – 5

Artificial Intelligence & Machine Learning

- Introduction to Artificial Intelligence
- Introduction to Machine Learning
- Hands – on Machine Learning
- Tools & Techniques for Data Science
- Introduction to Natural Language Processing
- Image Processing
- Data Science

Cyber Security

- Essentials of Cyber Security
- Cryptography & Network Security
- Hands – on Cryptography & Network Security
- Digital Forensics & Legal Perspectives
- Tools & Techniques of Cyber Security
- Intrusion Detection & Ethical Hacking
- Data Science

ABILITY ENHANCEMENT COURSES

- Parallel Processing
- Software Testing
- System Software
- Operation Research
- Communication Skills
- Foreign Languages
- Creative Writing
- Ethics & Moral Values
- Workplace Communication
- Personality Development Skills
- Stories from English Literature
- Learning Values through Literature
- Augmented Reality/ Virtual Reality
- Technical & Professional Communication

VALUE ADDED COURSES

- IT in Healthcare
- Digital Marketing
- Introduction to IKS
- Gujarat: Culture & Tradition
- Gandhian Thoughts
- Lessons from Indian Leaders
- Environmental Studies
- History of Computing
- Indian Constitution
- Green Computing
- Principles of Management
- E – Governance & E – Commerce
- Startup & Entrepreneurship Development
- Financial Education & Investment Awareness

INTERNSHIPS & PLACEMENTS

The Placement Cell organizes, supports and supervises campus recruitments and selection process for students. Students are trained in essential placement related skills throughout the year such as resume building, interview preparation and group discussion. The cell provides the students with mentorship for career support and 100% assistance in acquiring internships and placements.
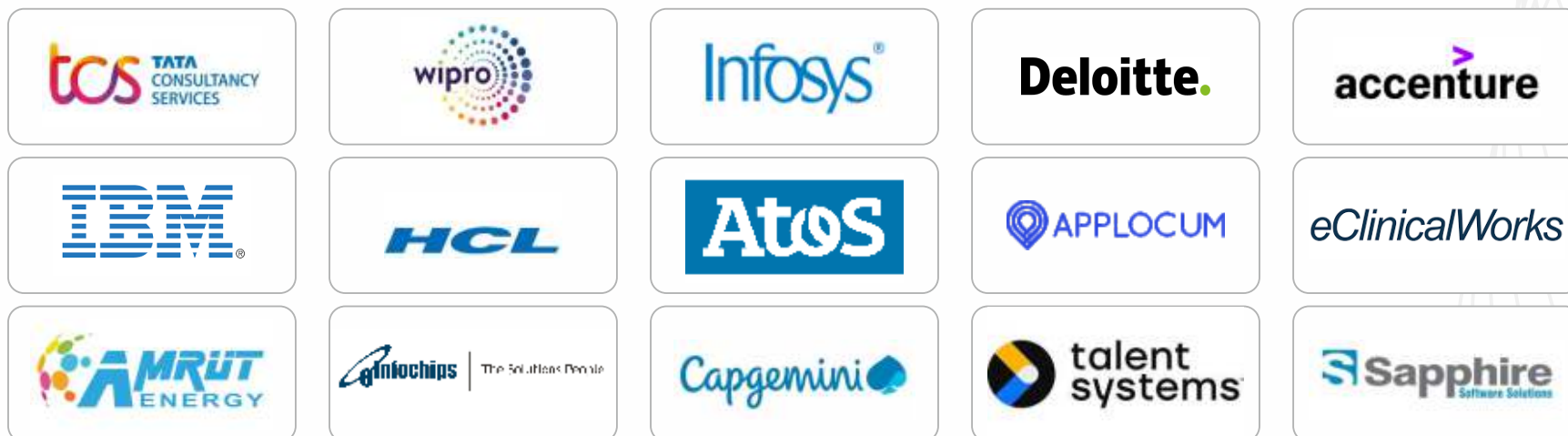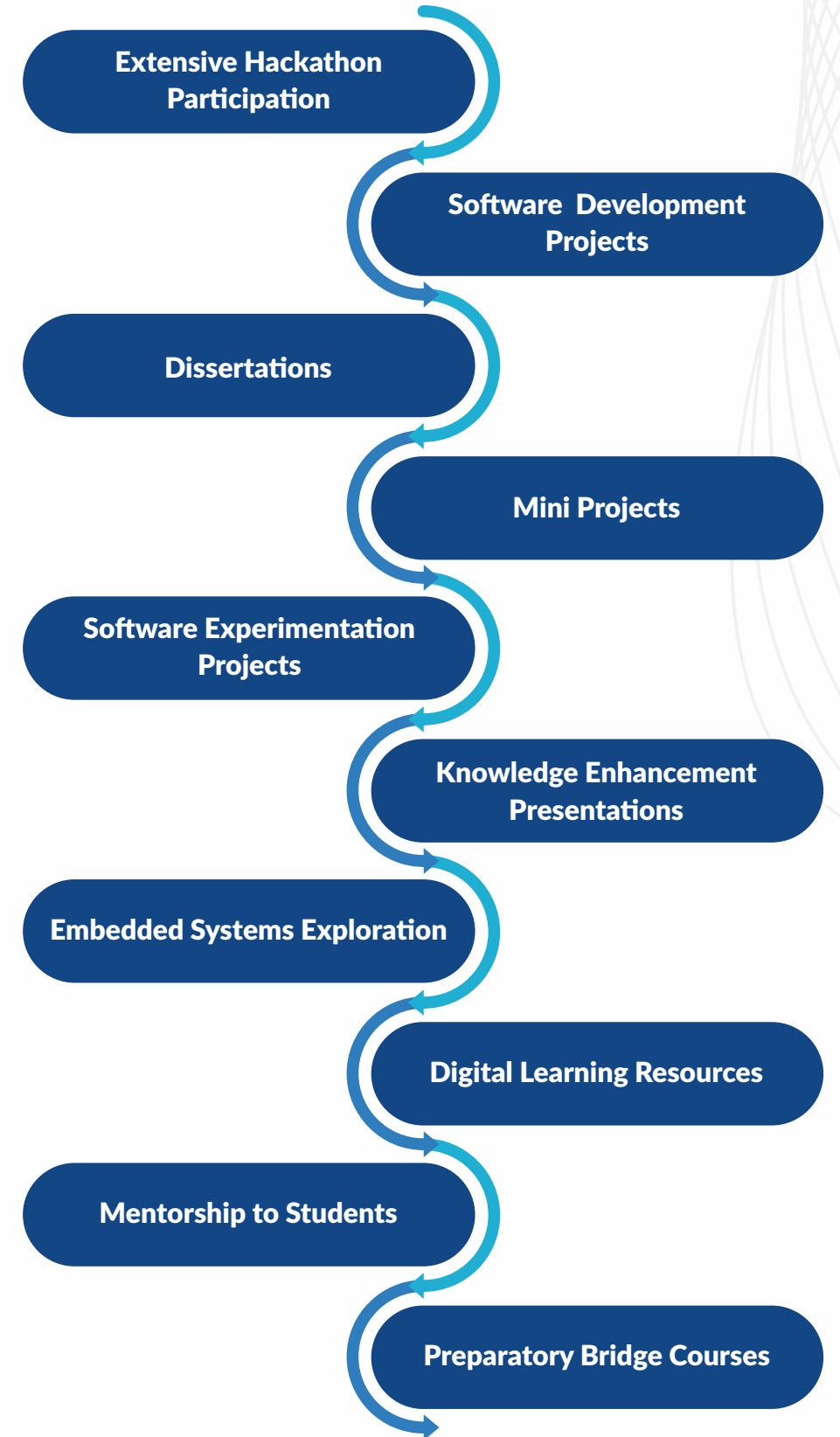
RED HAT ACADEMY

GLS University is excited to present an extraordinary partnership with Red Hat Academy. Red Hat Academy partners with academic institutions around the world to provide the next generation of IT talent with free access to a range of Red Hat's training courses and certification exams. By joining GLSU, you gain access to plethora of cost-effective courses.

Red Hat Academy certification offerings

01	Core system administration

- **Red Hat System Administration I (Rh124)**
- **Red Hat System Administration II (Rh134)**
- **Red Hat System Administration III: Data Center Services for Red Hat Enterprise Linux 7 (Rh254)**
- **Red Hat Enterprise Linux Automation with Ansible® (Rh294)**

02	Application development

- **Red Hat Application Development I: Programming in JavaTM EE (Ad183)**
- **Python Programming with Red Hat (Ad141)**

03	Cloud computing

- **Red Hat OpenStack Administration I: Core Operations for Domain Operators (Cl110)**
- **Red Hat OpenShift I: Containers & Kubernetes (Do180)**
- **Introduction to OpenShift Applicationas (Do101)**
- **Red Hat EnRed Hat OpenShift Development I: Introduction to Containers with Podman (Do188) terprise Linux Automation with Ansible® (Rh294)**

TOWARDS ACADEMIC EXCELLENCE

Extensive Hackathon Participation

Software Development Projects

Dissertations

Mini Projects

Software Experimentation Projects

Knowledge Enhancement Presentations

Embedded Systems Exploration

Digital Learning Resources

Mentorship to Students

Preparatory Bridge Courses

DISCOVER, DEVELOP, 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. Our students represented the institute in various events like the e-Yantra Hackathon organized by IIT Bombay, KAVACH-2023 Cybersecurity Hackathon, SSIP Hackathon and many more.

200+
PARTICIPANTS

60+
TEAMS AND MENTORS

20+
HACKATHON EVENTS

11+
WINNER TEAMS

SMART SOLUTIONS FOR A BETTER TOMMORROW

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 Smart Gloves Gesture Vocalizer, Smart Glass for the Blind, Digital Menu Ordering Model, Smart Traffic Controller, Smart Pet Feeder, Bipad Robot, Magic Mirror, ChessMate, Dam Overflow Monitoring System, Indoor Navigation System, Smart Trolley, and many more.

SCHOOL OF INTERNATIONAL STUDIES - GLOBAL PROGRAMMES

The Global Programme is a program designed to help students prepare for undergraduate or graduate studies at universities in the worldwide. The program is offered by several Foreign Universities and colleges and aim to provide students with the necessary skills and knowledge to succeed in their academic studies.

Upon successful completion of the Global Programme, students are typically guaranteed admission to the foreign university's undergraduate or graduate programs, provided they meet the academic and language requirements. This can be a great option for students who may not meet the university's admission requirements on their own, but who are otherwise qualified and motivated to succeed in their academic studies.

The Global Program can get the student a world recognised bachelor's degree.

Partnering more than 50 Foreign Institutions

GLS University's Immersion Programmes can provide students an exposure to foreign education in very short span.

Student can become an Internationally Accepted Employee.

Lucrative Scholarship Opportunities

Students can save huge amounton their first year's studies and the living cost of foreign land as it takes place in India.

Hand-on preparation of English Proficiency and Paperwork for immigration

UTS College — UNIVERSITY OF TECHNOLOGY SYDNEY

LBu LEEDS BECKETT UNIVERSITY

Year	Awarded Degree	Place to Study
1st	Bachelor in Business/ International Business or Bachelor in IT/ Computer Science from UTS College, Sydney LBU, UK GLS University	GLS University, Ahmedabad, India
2nd & 3rd		UTS, Sydney, Australia or LBU, UK or GLS University, India

INTERNATIONAL COLLABORATIONS

UTS College — UNIVERSITY OF TECHNOLOGY SYDNEY

HARVARD BUSINESS SCHOOL

ISDC — International Skill Development Corporation

LBu LEEDS BECKETT UNIVERSITY

CBU

Seneca POLYTECHNIC

CIMA

ACCA

Curtin University

SYNERGY UNIVERSITY

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

CITY UNIVERSITY

LUISS BUSINESS SCHOOL

school of continuing studies YORK U

citiCOLLEGE

CMA

NJCU NEW JERSEY CITY UNIVERSITY

IOA Institute of Analytics — The Global Body for Analytics

ALUMNI SPEAKS

GLS is a brand which defines the students, ready to conquer the world. At GLS, I thrived for three transformative years. The supportive faculty not only aided academic success but also nurtured personal growth. Thanks to GLS, I secured a position with an MNC through campus placements. Forever grateful for the experience and memories, GLS will always hold a special place in my heart. Thank you, GLS, for everything.

Bhavesh Shete
Sr Software Support Engineer,
At Exubix Infotech

As a proud GLS alumni, my journey from student to corporate professional was transformative. GLS provided a strong academic foundation and instilled values like integrity and teamwork. The vibrant community nurtured personal growth and lifelong friendships. Armed with these skills and values, I navigate the corporate world with determination, embracing innovation and collaboration. Grateful for the lessons learned, GLS continues to shape my career journey. Forever thankful.

Sanjana
Software Engineer, Momentum Ventures

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

GLS University laid a solid foundation for my career in technology. Professors were passionate and knowledgeable, using engaging teaching methods. Field tours and volunteering opportunities provided practical experience, enhancing our understanding of computer applications in real-world settings. Overall, my time at GLS was enriching and invaluable.

Shraddha Jadawala
Data & IT Specialist, Q & C Services Inc

In 2014, I began my journey at GLS Institutes of Computer Application, facing initial programming challenges. Yet, GLS's unwavering support propelled me forward, culminating in a top 50 position. Their commitment to student development and innovation fostered my success in the IT industry. Joining SPEC-INDIA post-MCA, I've thrived, supported by GLS's alumni network. I'm grateful for role of GLS in shaping my career and fostering excellence.

Akash Thakkar
Associate Team Lead, SPEC-INDIA

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 extracurricular 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, Google

ACCOMMODATION AND EXTENDED FACILITY

At The Hive Hostels, in partnership with GLS University, we take immense pride in offering students an unparalleled standard of accommodation and extended facilities. Our collaborative effort aims to provide students with a holistic living experience that not only meets but exceeds their expectations.

Nestled at the intersection of comfort and convenience, The Hive Hostels is more than just a place to stay – it's a thriving community where students can thrive academically and socially. Our partnership with GLS University underscores our shared commitment to fostering an environment where students feel supported and inspired

From meticulously prepared meals to attentive housekeeping services, every aspect of our accommodations is designed to enhance the student living experience. With spacious rooms, modern amenities, and a range of services tailored to meet the diverse needs of our residents, The Hive Hostels is where students can truly feel at home while pursuing their academic aspirations.

- Four Freshly Cooked Meals
- Professional Housekeeping
- College Pickup and Drop
- Community Events
- Bicycle on Demand
- 24*7 Tea Coffee Machine
- Spacious Rooms
- Laundry Service
- CCTV Surveillance
- WiFi
- Dedicated support Staff
- Doctor on call

Contact us today to learn more about our accommodation options and how we can enhance the student living experience at GLS University.

Contact us :
1800-572-0709 (Toll free)
9414830190 / 9662401424 / 9998365202

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

CAMPUS RESOURCES

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 the Commerce or Science stream, during the current year with the following subjects:

  1) English

  2) Any one of the following:

  ▪ Mathematics ▪ Physics ▪ Statistics ▪ Business Mathematics ▪ Elements of Accountancy ▪ Elements of Book Keeping ▪ Computers

- The applicant must have obtained the following minimum 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%

- First Attempt Certificate is mandatory.

Faculty of Computer Applications & Information Technology

📍 GLS University Campus, Ellisbridge, Ahmedabad – 380006.

📞 9904086377, 8866106226

🌐 www.glsuniversity.ac.in | www.glsufcait.org

✉ admissions@glsica.org

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