

Faculty of
Computer Applications
& Information Technology

**BACHELOR OF COMPUTER APPLICATIONS (BCA)**SIX SEMESTERS DEGREE COURSE





GLS University is a statutory state private university established by the act of Gujarat State Assembly. GLS University is set up with the vision to benchmark global standards of education and create path breaking programmes in the area of strategic importance not only to the country but also across the world.

The university has initiated various innovative programmes in diverse areas of Management, Information Technology, Design, Communications, Social Sciences, Commerce etc. It already offers programmes like MCA, MBA, MSc (IT), iMSc (IT), BCA, BBA, iMBA, BCom, MCom, B. Design, M. Design, PGDCA and PhD. With a view to providing an impetus to research, the University intends to have research focus in its under graduate and post graduate programmes.

GLS University, with its rich legacy of Gujarat Law Society that has been in the field of education for over a period of nine decades is now poised to become Gujarat's first globally relevant university, delivering quality education at affordable costs.

# FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY - FCAIT

The institute offers comprehensive Undergraduate Computer Science program which integrates the best in academic and technological realms. The institute aims to inculcate in the students a culture characterized by integrity, mutual respect, enthusiasm and hard work. The environment enables students to co-operate and compete to acquire an in-depth knowledge of computers and thus, carve a niche in the IT industry. The institute also lays strong emphasis on social values, so that students emerge as successful and ethical professionals as well as responsible human beings. The institute adorns a hi-tech environment that constantly exposes the learners to the latest technology. The spectrum of interactions and activities like Seminars, Workshops, Guest Lectures, Alumni Meet, Sports Meet, Educational Tours, Extension Activities, Cultural Activities etc. are regular features aiming at bringing an overall development of the students.

# PIONEER IN COMPUTER SCIENCE EDUCATION



## **BCA PROGRAMME**

With the rapid growth of IT industry worldwide, the demand of computer professionals is briskly increasing. This increasing growth has created a lot of opportunities for the computer graduates. The computerization of processes in various work areas have yielded requirement of IT manpower as core human resource. FCAIT - Bachelor of Computer Applications (BCA) Programme is a three year (six semesters) Under Graduate Programme based on Choice Based Credit System (CBCS). The syllabus of the programme comprises of latest and exciting subjects like Embedded Systems, Digital Marketing, Cloud Computing, Mobile Application Development in IOS and Android, Website Frameworks (Ruby on Rails, Joomla, Drupal), PHP, Programming languages (Python, C++, JAVA), Networking, Data structure, Green Computing etc. The BCA Programme is structured to balance theory and practical elements by combining classroom delivery and discussions, practical problem solving, group presentations, experiments with new concepts and internal as well as external software development projects

## **FUTURE PROSPECTS**

Computer technology is a rapidly growing field with numerous opportunities. Since BCA is not only about computers but also about technology, there are very bright prospects in this field. Candidates completing BCA can find opportunities in private as well as government sectors. After the successful completion of BCA, the students will be able to select from diverse options and opportunities to shape their careers in multi-faceted roles like business analyst, data analyst, software programmer, network and/or system administrator, database administrator, web designer, web/multimedia programmer, trainer, computer scientist, information officer, information systems manager and others.

BEYOND ACADEMICS LEARNING @ BCA COURSE STRUCTURE BCA PROGRAMME



## **OUR USP**

Educational and Operational credibility of over 20 years

Best-in-the-League Faculty members

Unique pedagogical approaches through ICT tools and techniques

State-of-the-art Infrastructural resources

Excellent Placement support and guidance

Emphasis on proactive learning

Hands-on practical sessions

Extensive collection of books, e -resources/ journals, periodicals and e-learning materials

## **ALUMNI SPEAKS**

GLS inspired me to achieve a level higher than I thought. I have discovered a passion for learning & exploring, for asking questions that weren't even on my radar three years ago. College prepared me for a career as well as life outside of my career. College has given me a chance to sharpen my skills in my field of choice.

- Jaimin Gajjar(CEO, JOE Solutions)

My experience at GLSICA 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. The faculty has always been supportive and inspiring guides, and also challenging taskmasters.

Nirzari Parikh (Technical Data Analyst, Accrease Aps, Denmark)

BCA Course runs on Choice Based Credit System (CBCS). It 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 the light of liberalization and globalization in higher education. The subjects are categorized as:

Core Courses (CCs)

Core Elective Courses (CECs)

Elective Courses (ECs)

Foundation Courses (FCs)

## **SEMESTER 1**

#### **Core Courses**

- Computer Fundamentals & Information Technology
- Logic Development & Programming
- Introduction to HTML5
- Basics of Mathematics
- Practical on LDP
- Practical on HTML5
- OSOS & Publishing Tools

#### **Foundation Course**

Communication Skills

#### **Elective Course (Any One)**

- Learning from World Leaders
- Culture & Civilization
- Health Education
- Gandhian Movement

## **SEMESTER 2**

#### **Core Courses**

- •Introduction to Object Oriented Programming
- Dynamic HTML
- Database Management System-I
- Computer Organization & Advanced Microprocessors
- Practical on IOOP
- Practical on DHTML
- Multimedia Tools

#### **Foundation Course (Any One)**

- Fundamentals of Accounting
- Professional Communication in English
- Discrete Mathematics

#### **Elective Course**

• Environmental Studies

## **SEMESTER 3**

#### **Core Courses**

- Advanced Object Oriented Programming
- Data Structures
- Database Management System-II
- Fundamentals of Operating System
- Practical on AOOP
- Practical on DS
- Practical on DBMS-II

#### **Foundation Course (Any One)**

- Statistics for Data Analysis
- Introduction to Angular JS

#### **Elective Course (Any One)**

- Principles of Management
- Soft Skills Development
- Introduction to Indian Constitution
- Green Computing

# COURSE STRUCTURE



## **SEMESTER 4**

#### **Core Courses**

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

#### **Foundation Course (Any One)**

- E-Governance
- Introduction to Embedded Systems

#### **Elective Course (Any One)**

- Digital Marketing
- History of Gujarat & its Culture
- Disaster Management
- Design Thinking
- Stories from English Literature

## **SEMESTER 5**

#### **Core Courses**

- Website Development Using PHP & MySQL
- Advanced Java
- Practical on PHP
- Practical on Advanced Java
- Software Development Project I

#### **Foundation Course (Any One)**

- E-Commerce
- Operation Research
- Introduction to Web Services

#### **Core Elective Course (Any One)**

- Software Project Management
- Introduction to Cloud Computing

- Introduction to Python
- Information Security
- Practical on Python
- Software Development Project II

#### **Core Course (Any One)**

- Mobile Application Development Using Android
- Mobile Application Development Using IOS

#### **Foundation Course (Any One)**

- Enterprise Resource Planning
- Management Information System
- Emerging Technologies

#### **Core Elective Course (Any One)**

- Website Frameworks I (JOOMLA)
- Website Frameworks II (RUBY on Rails)
- Introduction to Drupal

## **LEARNING BEYOND SYLLABUS**

Hackathon: 2 teams of BCA bagged first prize in Gujarat government initiative "Smart Gujarat for New India - Hackathon 2018" competition. The event involved 16 Departments that addressed 206 problem statements given by Government of Gujarat to be solved by 1,100 teams comprising more than 8,000 students from 202 colleges affiliated to 35 universities under the guidance of 500 unique faculty mentors making it the highest in such open innovation experiment.



Team Attendance Spy won 1st prize in Education Department & 3rd Position in amongst 1100 teams across 16 Departments.



Team DigiMed won 1st prize in Heatlh & Family Welfare Department

### PLACEMENT OPPORTUNITIES





Deloitte. Infos



accenture





**Excellent Teaching Support** 



**Learning Facilitated** By Technological Teaching



**Exploring Ideas** 





**International Immersion Program** 

## **LEARNING @ BCA**



## **ELIGIBILITY CRITERIA FOR ADMISSION**

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
- Accountancy Computer

- Physics
- Accounting and Book Keeping
- Business Mathematics
- 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%

# BEYOND















## **ACADEMICS**

















## FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY - BCA Programme

(Formerly Known as GLS Institute of Computer Applications - NAAC Accredited)

Gujarat Law Society Campus, Ellisbridge, Ahmedabad – 380006

Contact No.: 079-26447638

Email: glsbca@glsuniversity.ac.in, info@glsica.org Visit us at: www.glsufcait.org, www.glsuniversity.ac.in