



BCA
SPECIALIZATION

BSc(IT)
SPECIALIZATION



FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY



**Exclusive
IT Programmes
for Science
and General Stream**



**PIONEER IN
COMPUTER
SCIENCE
EDUCATION**

ABOUT GLS UNIVERSITY

GLS University is committed to fostering an innovative and ideal learning environment, building on the proud legacy of its founding institution, **Gujarat Law Society (GLS)**. Established in 1927, GLS is one of the oldest and largest educational organizations in Gujarat, envisioned by eminent leaders such as **Sardar Vallabhbhai Patel**, **Shri Ganesh Mavlankar**—the first Speaker of India—and **Shri I. M. Nanavati**.

Founded in **April 2015 under the Gujarat Private University Act 2009**, GLS University has rapidly grown into a mammoth institution, enrolling over 15,000+ students across 9 departments and offering **25+ programmes** in diverse fields, including **Business Management, Commerce, Law, Computer Applications, Engineering, Design, Performing Arts & Liberal Studies**.



Accreditation & Recognition

GLS University has been awarded the prestigious NAAC A+ grade with a CGPA of 3.44 (1st), making it the only private university in Gujarat to achieve the highest points. This distinction reflects the university's comprehensive growth in industry-focused curricula, innovative teaching methods, impactful research, infrastructure development, e-governance, and its commitment to promoting social values.



Campus & Facilities

Located in the heart of Ahmedabad, GLS University offers a safe, welcoming, and student-centric environment. The lush green campus is equipped with modern classrooms, computer labs, a wellstocked library, indoor and outdoor sports facilities, a gymnasium, seminar halls, an auditorium, and a cafeteria—providing a holistic space for both academic and recreational growth.



Academic Excellence & Industry Integration

GLS University blends flexibility, hands-on learning, and interdisciplinary approaches to empower students to explore their passions and pursue dream careers. Strong industry partnerships, apprenticeship programmes, and corporate collaborations ensure experiential learning and career readiness. Value Added Courses further enrich the academic journey by equipping students with skills in digital literacy, entrepreneurship, communication, analytics, and leadership.



Faculty & Research

Our faculty members are distinguished experts dedicated to impactful research that contributes positively to society and the environment. The university emphasizes social consciousness, intellectual challenges, and cultural diversity, shaping graduates into responsible global citizens.



Vision & Alignment with NEP 2020

GLS University is recognized as an educational hub that blends liberal thinking with rigorous learning, fully aligned with the National Education Policy (NEP) 2020. With flexible entry-exit options, dual degree programmes, and multidisciplinary pathways, GLS University ensures students are prepared for the evolving global landscape.

FROM PRESIDENT'S DESK



GLS University is a place where excellence thrives, and innovation flourishes. Established in 1927 by the Gujarat Law Society, our institution carries forward a proud legacy of knowledge, creativity, and leadership. Today, with the prestigious A+ NAAC grade and global recognition, GLS University stands as a beacon for students who aspire to lead with integrity, wisdom, and courage.

As we approach 2026, Gujarat Law Society will enter its 100th year of its distinguished journey. This centenary is a proud testament to our legacy of knowledge and leadership, and GLS University stands ready to carry this vision into the next century—advancing research, strengthening global collaborations, and nurturing ethical leaders for generations to come.

We are committed to delivering education at par with the finest institutions worldwide. Our programs emphasize strong foundational knowledge, rigorous pedagogy, and academic research, while our innovative curriculum integrates real-world challenges. With distinguished faculty, global collaborations, and strong industry partnerships, we prepare students to become ethical leaders who think critically, communicate effectively, and serve society with conviction.

In a city where East meets West, GLS University embodies the blending of diverse cultures and intellectual traditions. Diversity, intercultural learning, and innovation are at the heart of our mission, supported by an extensive international network of academic collaborations and a curriculum designed in partnership with leading institutions worldwide. This global perspective ensures our graduates are equipped to excel in both national and international arenas.

Our vision for the next decade is to create a holistic environment that encompasses state-of-the-art infrastructure, a conducive atmosphere for learning and development, a strong research orientation, enhanced innovation capabilities, and global outreach. By nurturing intelligence, emotional resilience, analytical ability, and creativity, we ensure the holistic growth of our students and prepare them to meet the demands of a diverse and complex world.

GLS University remains steadfast in its commitment to excellence, innovation, and ethical leadership. Empowering minds and inspiring futures, we continue to stand as a trailblazer in higher education— where tradition meets progress, and where students are transformed into leaders dedicated to serving the greater good.

Sudhir Nanavati
President

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 promotes the overall growth of students by equipping them with knowledge of the latest technological advancements and keeping them updated on current industry trends. 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 learnings. The focus of the institute is to motivate students acquiring domain expertise and life skills to sustain life outside the periphery of the classroom



Transforming Learners into Digital Leaders

DISTINGUISHING FEATURES



**99 years
of Rich
Legacy**



**25+ years
of Academic
Excellence**



**Industry
Aligned
Curriculum**



**State-of-the-Art
Computer
Labs**



**Exclusive
International
Collaborations**



**Modern and
Well-Equipped
Infrastructure**



**Cutting Edge
ICT Enabled
Learning**



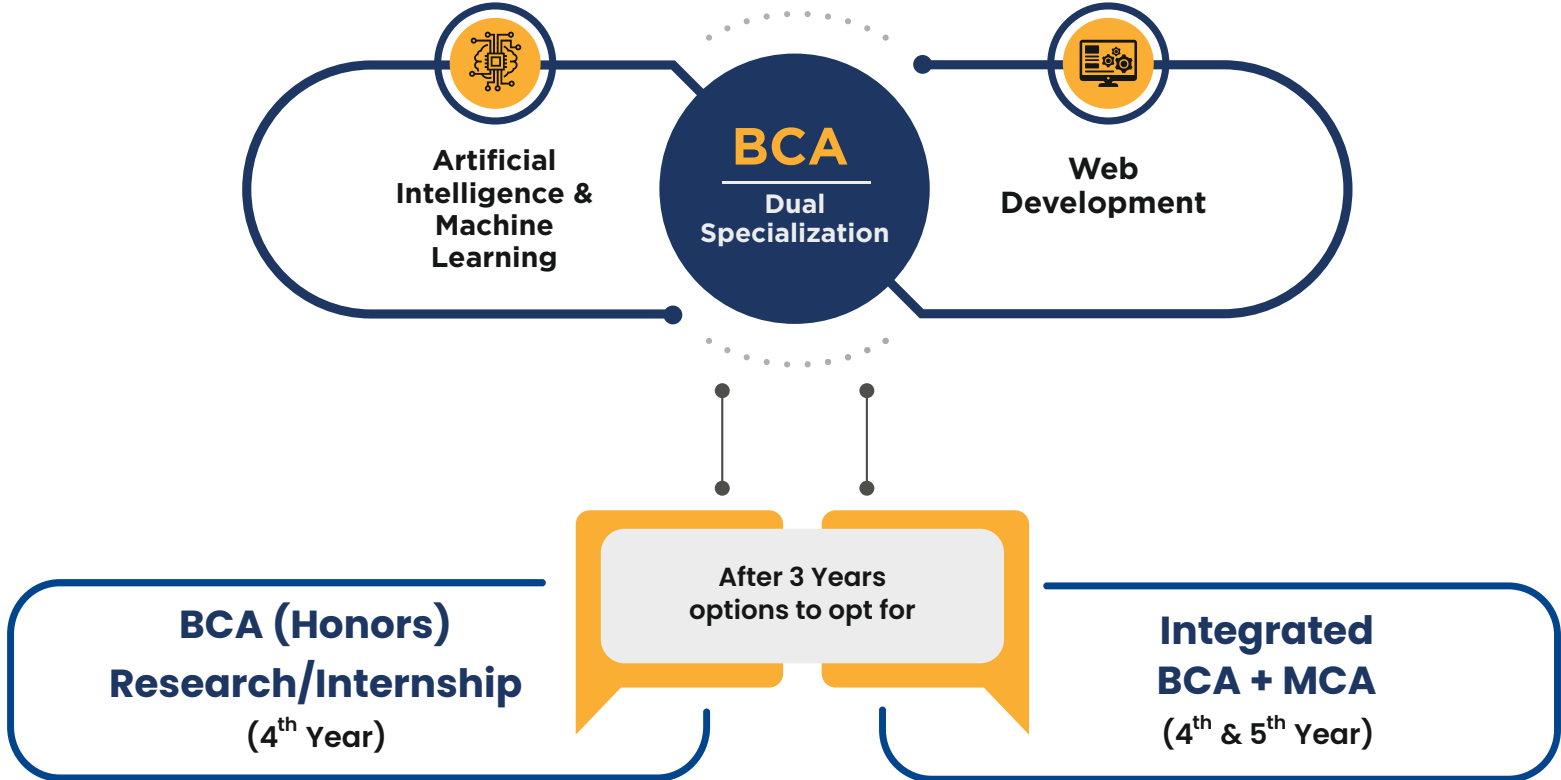
**Highly
Experienced
Faculty**



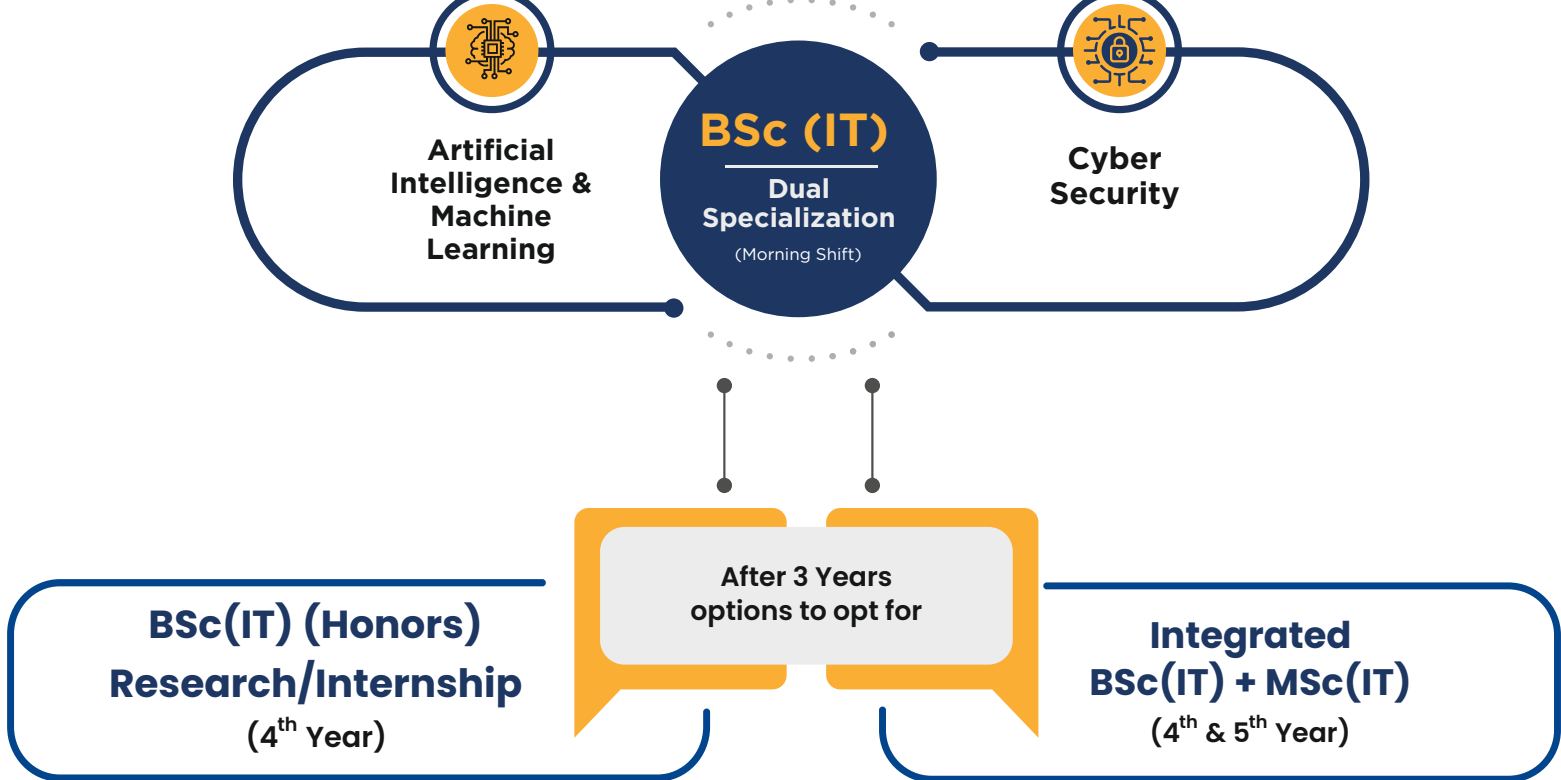
**Extensive
Library
Resources**



PROGRAMMES



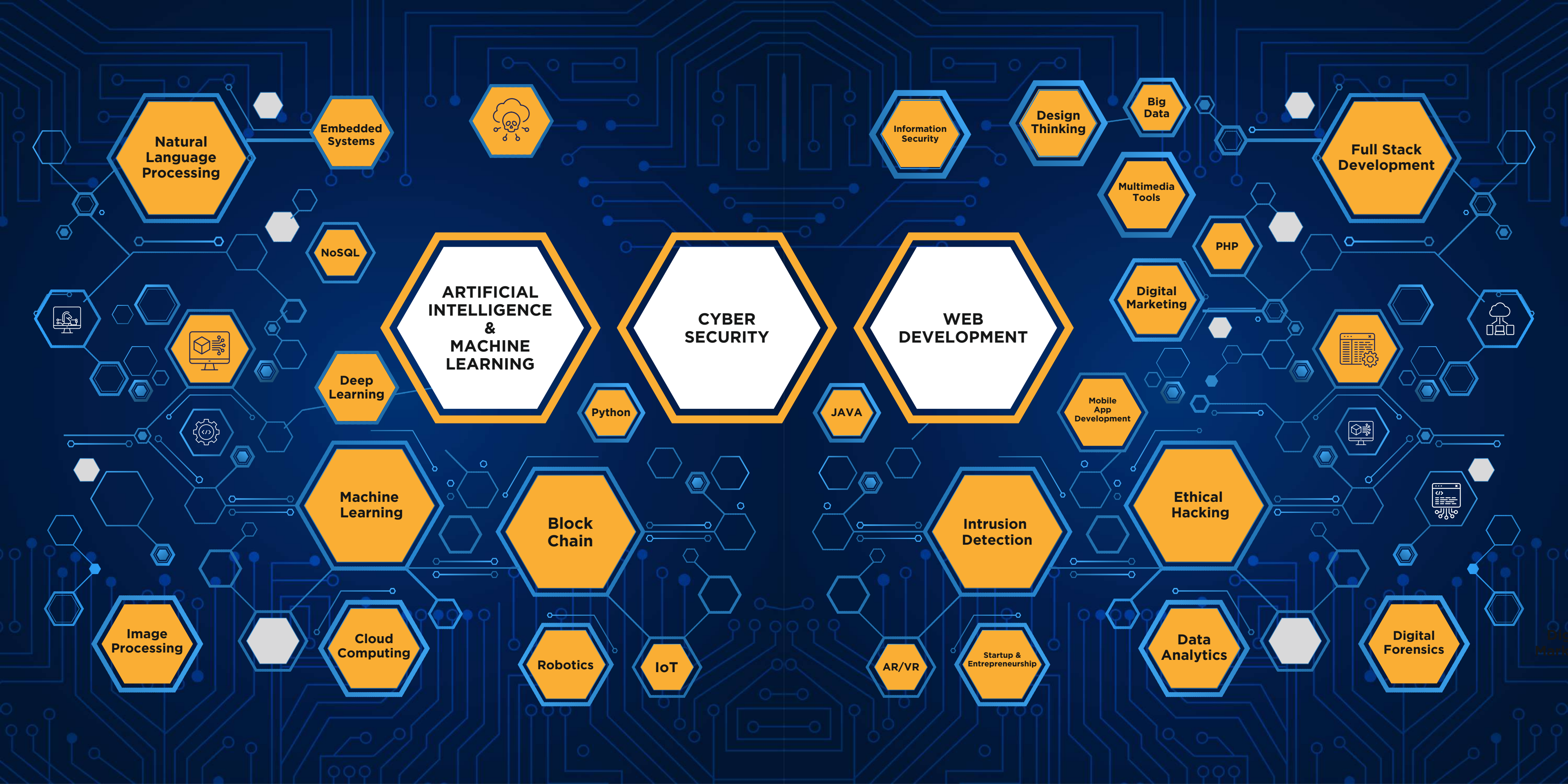
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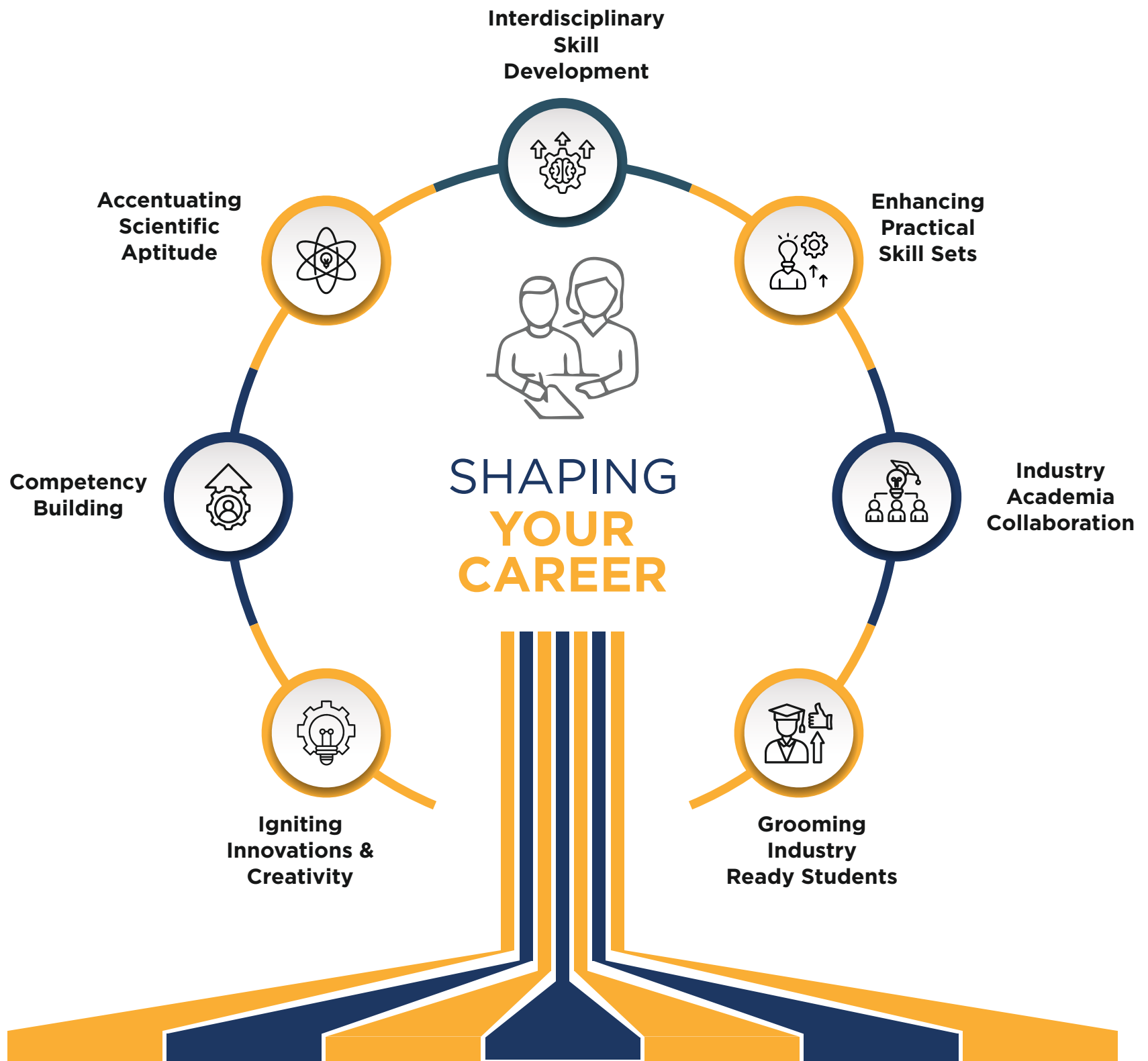


Carving Personalized Academic Journey



Curating Customized Academic Pathways



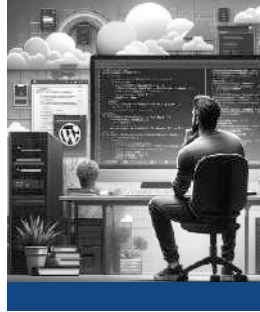


Beyond Degrees – Building Skills for Life and Work

FUTURE OPPORTUNITIES



**Robotics
Technologist**



**Full Stack
Developer**



**AI & ML
Expert**



**Network
Architect**



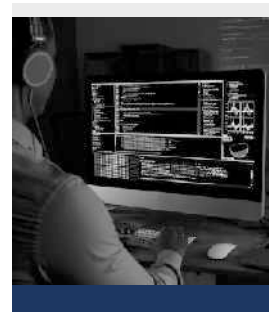
**Data
Scientist**



**Network Security
Analyst**



**Data
Analyst**



**Web
Designer**



**Information
Systems Manager**



**Business
Intelligence
Developer**



**Information
Technologist**

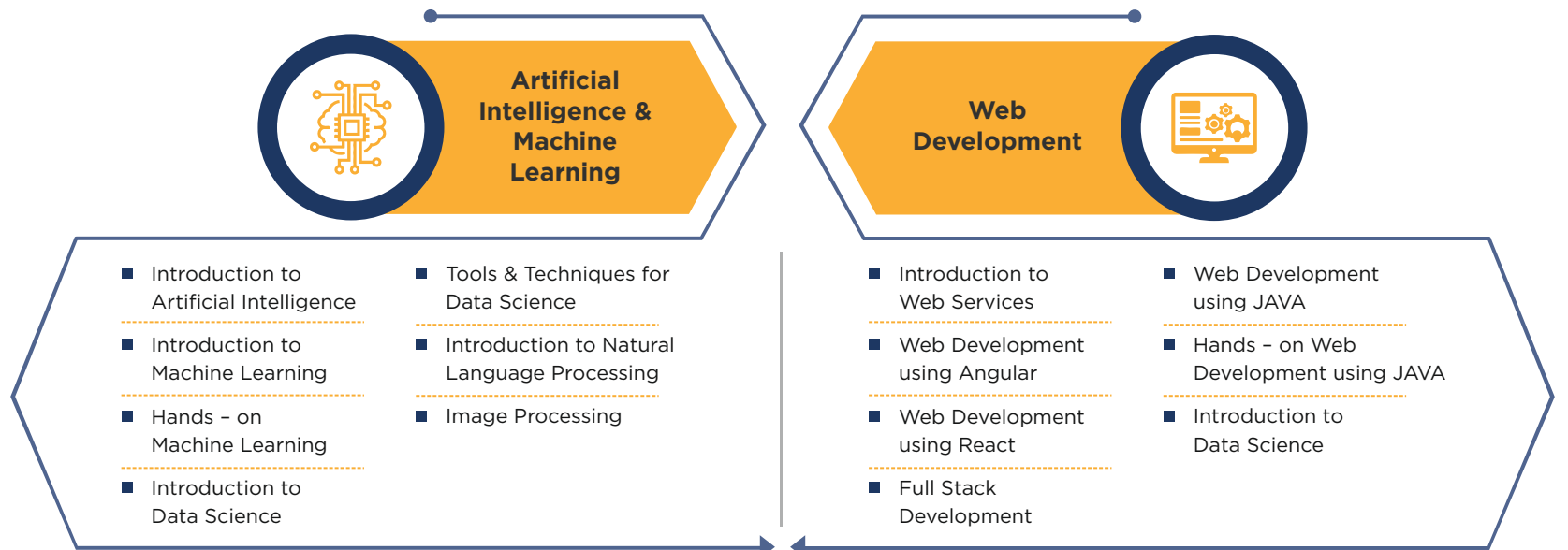
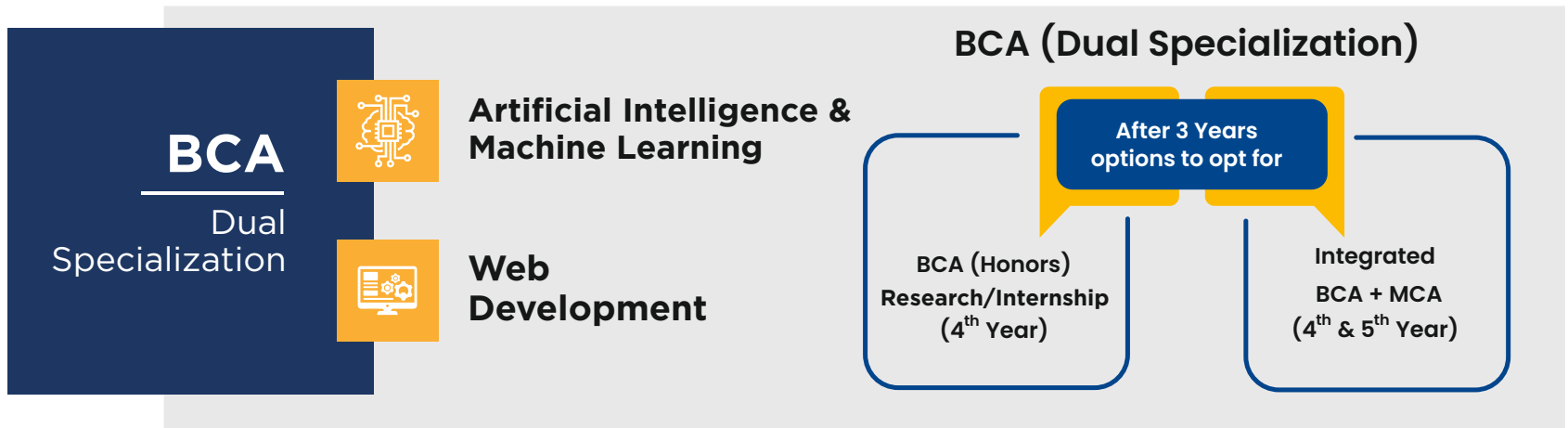


**Database
Administrator**

Careers powered by Technologies

BACHELOR OF COMPUTER APPLICATIONS

The Bachelor of Computer Applications (BCA) programme with 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 IT industry. The syllabi is updated as per NEP 2020 to make student-centric education viable to all.



Strong Foundations for the Digital Future

SEMESTER - 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

SEMESTER - 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

SEMESTER - 3

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

SEMESTER - 4

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

SEMESTER - 5

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

SEMESTER - 6

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

SEMESTER - 7

- Data Warehousing & Data Mining
- Cyber Security
- Software Project Management & Software Testing
- Web Development using Python
OR
- Artificial Intelligence & Machine Learning
- Full Stack Development
OR
- Data Analytics & Visualisation
- On Job Training / Research Project

SEMESTER - 8

- Block Chain Technology
- Design & Analysis of Algorithm
- Design Patterns
- Advanced Web Programming with PHP Frame Work
OR
- Advanced Machine Learning & NLP
- MOOC
- On Job Training / Research Project

SEMESTER - 9

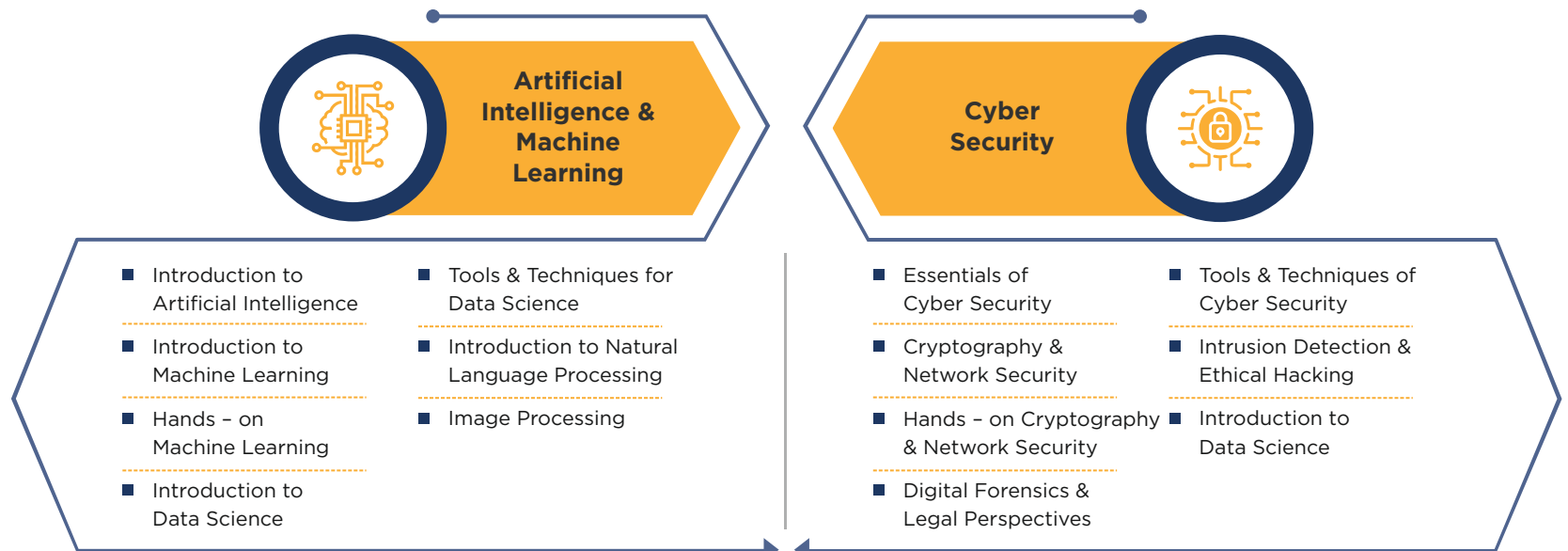
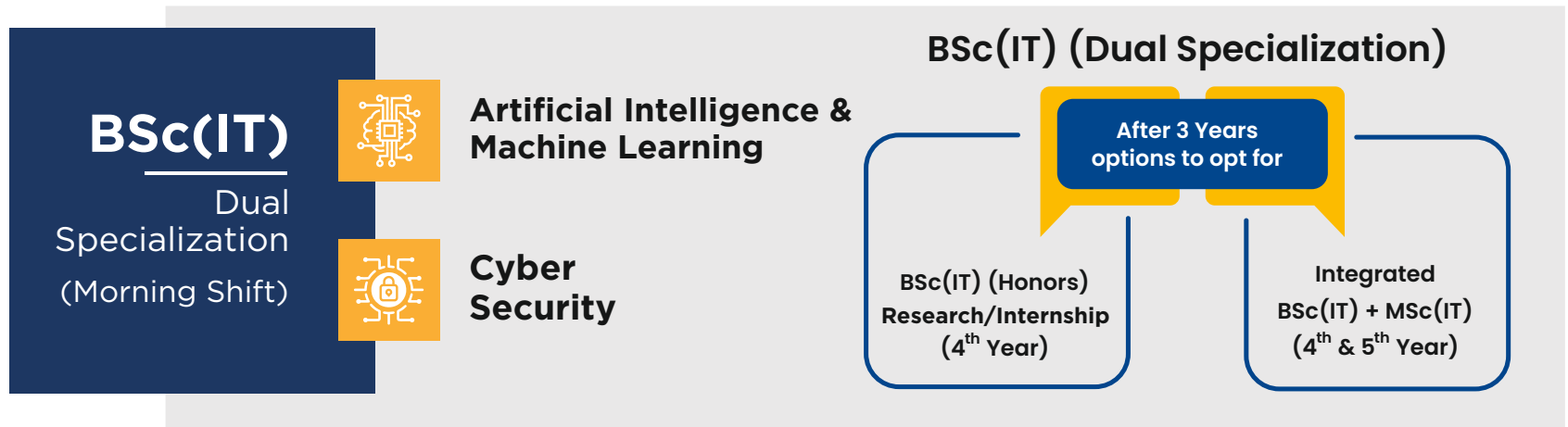
- Track 1: IoT
- Track 2: Cyber Security
- Track 3: Data Analytics

SEMESTER - 10

- Industry Internship

BACHELOR OF SCIENCE (IT)

The Bachelor of Science in Information Technology (BSc.(IT)) programme with 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 the most updated course content.



SEMESTER - 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

SEMESTER - 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

SEMESTER - 3

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

SEMESTER - 4

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

SEMESTER - 5

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

SEMESTER - 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

SEMESTER - 7

- Data Warehousing & Data Mining
- Full Stack Development
- Software Project Management
- Cyber Security
- OR
- Artificial Intelligence & Machine Learning
- Cryptography & Network Security
- OR
- Data Analytics & Visualisation
- On Job Training / Research Project

SEMESTER - 8

- Block Chain Technology
- Design & Analysis of Algorithm
- Design Patterns
- Intrusion Detection & Ethical Hacking
- OR
- Advanced Machine Learning & NLP
- MOOC
- On Job Training / Research Project

SEMESTER - 9

- Track 1 : IoT
- Track 2: Web Development
- Track 3: Data Analytics

SEMESTER - 10

- Industry Internship

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

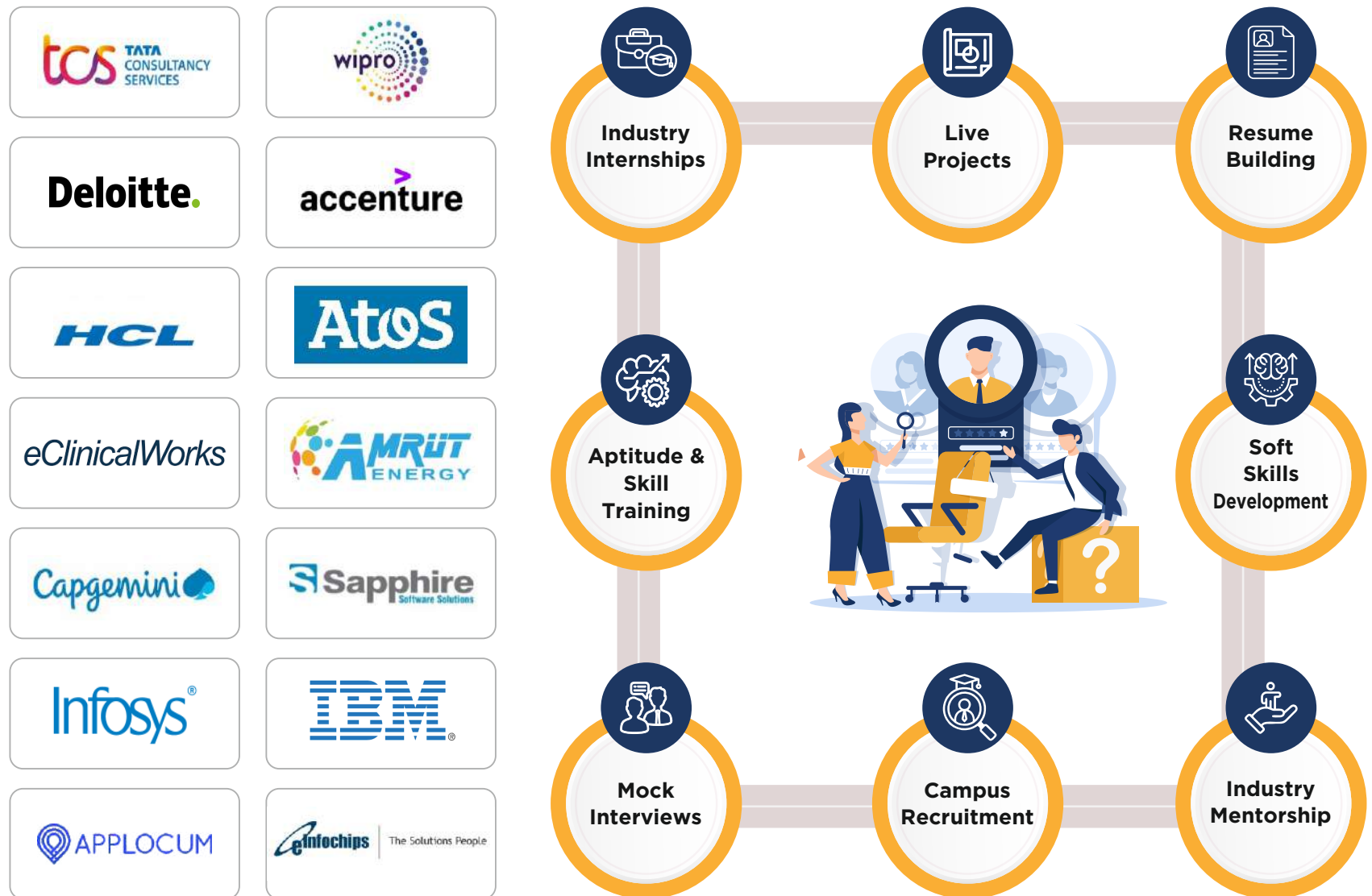
- IT in Healthcare
- Digital Marketing
- Introduction to IKS
- Gujarat: Culture & Tradition
- Gandhian Thoughts
- Lessons from Indian Leaders
- Environmental Studies
- History of Computing
- Indian Constitution
- Green Computing
- Principles of Management
- E - Governance & E - Commerce
- Startup & Entrepreneurship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



VALUE ADDED COURSES

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.



Turning Potential into Professional Success

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

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 Java™ EE (Ad183)
- » Python Programming with Red Hat (Ad141)

03 Cloud computing

- » Red Hat OpenStack Administration I: Core Operations for Domain Operators (CI110)
- » Red Hat OpenShift I: Containers & Kubernetes (Do180)
- » Introduction to OpenShift Applications (Do101)
- » Red Hat Enterprise Linux OpenShift Development I: Introduction to Containers with Podman (Do188) Enterprise Linux Automation with Ansible® (Rh294)

TOWARDS ACADEMIC EXCELLENCE



**Capstone
Projects**



**Student-Mentor
Programmes**



**Knowledge
Enhancement
Projects**



**Innovation
Through
Hackathons**



**IoT
Projects**



**Digital
Learning
Resources**



**Bridge
Courses**



**Software
Experimentation
Projects**



**Project Based
Learning**



**System
Development
Projects**



CO-CURRICULAR ACTIVITIES



INDUSTRIAL VISITS & EDUCATIONAL TOURS



Exploring Technology Beyond Textbooks

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 Smart India Hackathon, eYantra Hackathon organized by IIT Bombay, KAVACH Cybersecurity Hackathon, SSIP Hackathon and many more.

FCAIT students secured the First Runner-Up position at Intellify Hackathon 3.0, winning a cash prize of Rs. 50,000. Their project, SympAI, is an innovative AI-powered healthcare assistant that transforms patient interactions into predictive analytics, marking a significant step toward the future of intelligent healthcare solutions. Additionally, FCAIT students achieved 1st Rank at HackNuthon 5.0, further highlighting the institute’s strong culture of innovation, problem-solving, and technical excellence.

634 +
Participants

137 +
Participating
Teams

38 +
Hackathon
Events

13 +
Winner
Teams



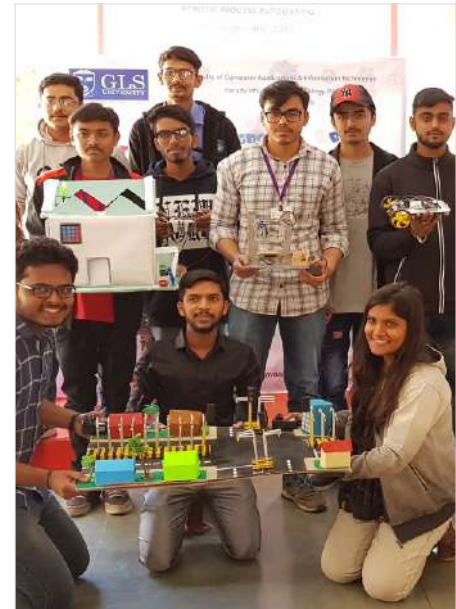
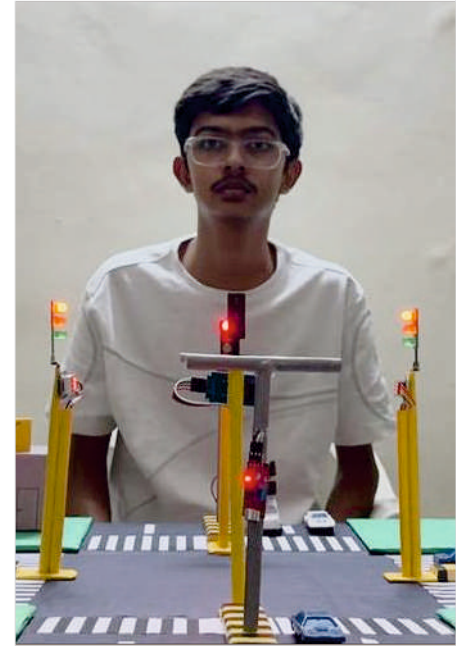
Hack the Future

SMART SOLUTIONS FOR A BETTER TOMORROW

The institute encourages students to explore emerging technologies and provides a robust platform to develop engineering and industry-relevant skills. Students actively experiment with and develop a wide range of IoT-based projects using single-board computers such as Raspberry Pi and microcontrollers including Arduino, Particle Photon, and NodeMCU.

These projects are implemented through functional live models such as Smart Gloves, Smart Curtain Automation System, Home Energy Monitoring System, Smart Dustbin for Waste Segregation, Smart NFC-Based Attendance System, Rubik's Cube Solver, Automatic Water Shed System, Smart To-Do List with Gesture and Mobile Control, Medical Vending Machine, Music Synthesizer using Motion Control, Light-Based Morse Signaling System, and many more.

Through these hands-on initiatives, students gain practical exposure to real-world problem-solving, innovation, and interdisciplinary engineering applications.



ALUMNI SPEAKS



My experience at GLS has been truly memorable. The institute provided me with exposure beyond the curriculum, fostering a well-rounded learning experience. Along with academics, we were encouraged to participate in various extracurricular activities, which contributed to our overall growth. The faculty went above and beyond to help students understand complex concepts and address any doubts or concerns, making the learning journey even more enriching.

Kinjal Akhani
**Cloud Engineer,
Google**



Looking back, my time at GLS University was a transformative journey that laid a strong foundation for my career in AI. The well-structured curriculum provided me with the technical expertise and industry insights needed to excel in this fast-evolving field. The unwavering support of the faculty made complex subjects exciting and approachable, while the university's emphasis on industry alignment and open-source contributions gave me a competitive edge.

Akshat Surolia
**Senior AI & Ops Engineer,
Wysa**



Studying at GLS was an incredible experience. The faculty members were highly interactive and always supportive, emphasizing practical knowledge that proved invaluable in my professional journey. I can confidently say that the institution goes beyond quality education—it also encourages extracurricular activities that contribute to holistic growth. The knowledge and skills I gained here have played a crucial role in shaping my career.

Saloni Shah
**Website Developer,
Tata Consultancy Service (TCS)**



My years at GLS formed the foundation of my journey in Computer Science. The professors consistently encouraged us to think beyond textbooks and the syllabus — to code, experiment, and explore multiple approaches to problem-solving. We were motivated to build real, practical projects instead of merely "coding algorithms." Because of this hands-on learning environment, during my post-graduation and even in my first job, I was among the few who had already written a significant amount of code and gained strong practical experience.

Bhoomit Vasani
**Sr. Software Engineer at
Amazon (USA)**



GLS has been an unforgettable journey where I've forged lifelong friendships that still keep me connected. I've personally gained a lot from the faculty who guided me to build a solid career—today I work with Fortune 500 companies and one of India's first AI unicorns. GLS didn't just teach me academics; it was flexible enough to let me play football and chase my personal goals, shaping both my professional and personal growth.

Darshan Jain
**Senior Data & AI Engineer
Fractal AI**



My experience at GLS University was extremely wonderful. Practical examples and cases, which were discussed in the class are helping me a lot in the industry currently. The commitment to student development and innovation have fostered my development and success. The strong alumni network has enabled me to thrive in my career and gain professional excellence.

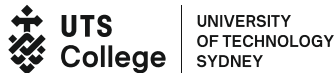
Akash Thakkar
**Associate Team Lead,
SPEC-INDIA**

FACULTY OF INTERNATIONAL AND LIBERAL 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.



Global Bachelors Programme

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

Global B.Design (Hons.) in Collaboration with SAE, Australia

The Bachelor of Design (B. Des. Hons.) at GLS University, Ahmedabad is a globally benchmarked four-year undergraduate programme, run exclusively by GLS University with academic content and certification support from SAE Institute, Australia – a world leader in creative media education.

INTERNATIONAL COLLABORATIONS



EXCLUSIVE ACCOMMODATION ARRANGEMENTS FOR GLS UNIVERSITY

Elevate your student living experience with affordable luxury only at The Hive Hostels/ Cirkle Hostel
At 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



Spacious Cupboard



High-Speed Wi-Fi



Coffee Machine



Pick-up & Drop Service



Laundry Service



Delicious Meals and
Whatnot!



A Place where you Inspire and Be Inspired The 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.

The Hive Hostel: Calling - 1800-572-0709, WhatsApp : 8200511606
Cirkle Hostel: +91- 97245 49049, +91-99983 65202

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

CAMPUS RESOURCES



Technology - Enabled Learning Spaces

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 General 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.



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



FACULTY OF COMPUTER APPLICATIONS & INFORMATION TECHNOLOGY [FCAIT]



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Glsu Fcait



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GLSU FCAIT

