

# Curriculum

## Faculty of Computer Applications & Information Technology

Integrated MSc (IT) - 5 Year Integrated Programme  
BSc (IT) – MSc (IT) Programme

### — Distinguishing Features —



### — Achievements —

- Most preferred institute for admissions in IT Courses
- Providing Comprehensive Grounding in the foundation of Computer Science and Information Technology over 2 Decades
- Strong foundation of industry-academia interaction and relationship
- Faculties with rich academic and research experience
- More than 100 Research Papers have been published by faculties.
- In-house magazine to encourage literary and contemporary contributions from students
- Students have achieved success in various state & national level technical, cultural, and sports events held at renowned institutes
- Students participated in Smart Gujarat Hackathon - Grand Finale Of 2020 on the theme of IoT Based Notice Board
- A team of students participated in Technovation Hackathon & Innovation Budge organized with the theme of Platform To Communication For People To Split Ride
- Our students participated, presented and secured rank for their innovative project on Missile Radar System in IGNITE 22 organized by CMPICA.
- Students participated in an external event "Konflues21" organized by IBS, Mumbai. Students won 1st prize in Treasure Hunt, BGMI, Photography Events

## — LEARNING BEYOND SYLLABUS —

### Industrial Projects

The institute encourages the students to take up live industrial projects or research areas as part of the subject "Mini Project / Dissertation" in the third year. The students are encouraged to undertake innovative and challenging topics to understand the practical aspects of project development. Few project titles are:

CodeNFT

Stock Price  
Prediction using  
Machine Learning

Sign Language  
Glove using  
Arduino

Air Monitoring  
Using IoT

Cybercrime during  
Covid19 and Major  
Impact

Artificial  
Intelligence And  
Robotics System

Waste Food  
Solution-Handouts

### Hardware Exploration

The institute encourages students to explore a single board computer Raspberry Pi, microcontrollers such as Arduino, photon particles, and other incipient technologies such as AI, Machine Learning, Python, and others. Round the year, students experiment and showcase their projects by presenting real-life live models:



Smart Shoes



Fall Detection &  
Alert System



Smart Water Bottle



Anti-Theft and  
Safety Monitoring  
Device



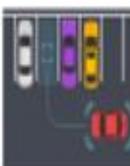
TEXT Reader  
For Blind



Social Distancing  
Device



School Security  
System



Automatic Car  
Parking System



Radar System

### Software Experimentation Projects

The institute motivates students to experiment with Open Source software. Students install, learn and implement the practical applications of software and that helps to enhance their problem solving and logical skills. They also get the opportunity to explore and understand a large spectrum of programming languages and software. Few project areas are:



Programming Languages



Designing & Animation



Database



Communication



Framework



Network Storage



Machine Learning



Digital Circuits

### Knowledge Enhancement Presentations

To prepare students to learn beyond the curriculum and to enhance their inquisitiveness, research aptitude, communication skills, and presentation skills they have a component called Knowledge Enhancement Presentations where they design, develop and present the topics on various emerging technologies in the field of computer science. A few topics for experimentation and exploration include:

Design Thinking in Information Technology
Industry Predictive Analytics in Ecommerce Business
Smart Quill Digital
AI in Automotive Industry
Aircraft GPS Tracking
Smart Eye Technology
Reality of Wireless Technologies
Digital Jewellery
Apache Druid
Cloud Data Center

### Workshop & Seminars

To provide students a window to the latest and emerging trends in technology, the institute invites experts from the IT and education fields for conducting workshops and seminars related to upcoming technologies and current IT trends. This year due to the pandemic the institute arranged various online webinars and workshops on the following themes:



Besides, technological exposure, the institute provides the students a platform on various dimensions of holistic development through various seminars and workshops as:

#### Linguistic Development Events

- Soft Skills Development
- Communication Skills Development
- Vocabulary Development
- Personality Development

#### Empowering Women

- Self Defense Techniques
- Hallaboi – Women Safety Measures

#### Social Development Events

- Developing Emotional Quotient
- Seven Factors Of Total Fitness
- Paint Your Life
- Pranayama and Self-Healing techniques
- Fitness Workshop on Zumba and Bokwa
- Yoga Workshop
- Healthy Food Habits





