

# JAGORA UNIVERSITY -GLOBAL EDUCATION INITIATIVE PROGRAMME INTERNATIONAL D'EXCELLENCE

# BACHELOR OF COMPUTER APPLICATIONS (BCA)

# **PROGRAM OVERVIEW**



The Bachelor of Computer Applications (BCA) is a three-year Undergraduate program that imparts extensive knowledge in Computer Fundamentals, Programming Languages, Database Systems, Information Security, web development, and so on to the students with a fundamental and advanced understanding of Information Technology and Computer Applications.

# WHY SHOULD ONE STUDY THE BACHELOR OF COMPUTER APPLICATIONS (BCA) PROGRAM WITH JAGORA-UIECC?

There is a high demand for this program because BCA can be pursued with significant flexibility, convenience, and accessibility and with fewer entrance requirements.

Throughout the course of the study, the students will realise multiple community projects that will help develop their employability skills such as:

- Problem-Solving and Decision-making Skills
- Task-Related Skills
- Personal Values
- Relations with Other People
- Communication Skills
- Maturity
- Health and Safety Habits
- Commitment to Job

#### **ELIGIBILITY CRITERIA:**

Candidate must have completed high school diploma (Baccalaureate or GCA)

#### **KEY HIGHLIGHTS:**

- Dual Degree
- Live classes during Weekends
- Repeated Access to the Course Material
- UGC Approved in India
- Flexibility of Learning

## **PROGRAM DURATION:**

The Jagora-KLU-UIECC Bachelor of Computer Applications (BCA) program is a 6-semester, 3-year undergraduate program.

#### **PROGRAM BENEFITS:**

- Multi-Faceted Career: A BCA course provides a variety of professional options that enable degree holders to work in various fields or businesses and can take up several jobs, engage in freelancing or consultancy work, or pursue other interests with excellent career advancement chances.
- Lucrative Career Prospects: Jobs for BCA graduates are many, and they offer stability and financial security and not only offer stability and financial security but also the freedom to choose a path that aligns with one's values, interests, and talents for long-term career success.
- Value in IT Industry: A BCA degree holder commands value in the IT industry, and hence there is a plethora of opportunities open for them at all times.
- Skill Based Course: Since this training is entirely skill-based, the greater your skills, the better your opportunities and earnings will be.
- Hands-on Experience: Instead of simply studying or observing, students who enroll in this course have actual, hands-on experience, which helps them better understand the industry and advance in their careers.

#### **CAREER OPTIONS:**

- Technical Analyst: Researching securities or assessing investments based on historical market prices and technical indications, which are crucial in the financial market, is the major responsibility of a technical analyst.
- Software Developer: The job of a software developer is to design, test, and maintain various software applications that address problems in the real world.
- Web Developer: The primary responsibility of a web developer is to design and layout websites with an eye on the needs of the customer and the end user.
- Blockchain Developer: A blockchain developer creates and improves the blockchain protocol while testing various software and hardware.
- System Analyst: System analysts are essential to the successful operation of an organization's information systems and are a significant factor in achieving corporate success.

# **COURSE CURRICULUM**

## **SEMESTER WISE COURSES**

## SEMESTER I

- Integrated Professional English
- Mathematics for Computer Science
- Problem Solving through Programming
- Computer Organization & Architecture
- Ecology & Environment
- Essentials of Information Technology
- SEMESTER II
- English Proficiency
- Operating System
- Data Structures
- Object Oriented Programming through Java
- Mobile Application Development
- Web and Social Media Technologies

# SEMESTER III

- Software Engineering
- Database Management Systems
- Computer Networks
- Web Development using Python
- Design Thinking & Innovation
- Internship-1
- Professional Elective 1
- Open Elective 1

# **COURSE CURRICULUM**

## **SEMESTER WISE COURSES**

## **SEMESTER IV**

- Essential Skills for Employability(HSS3)
- Universal Human Values & Professional Ethics(HSS4)
- Java Full Stack Development
- Object Oriented Analysis & Design
- Professional Elective 2
- Open Elective 2
- Term Paper

# SEMESTER V

- Foreign Language
- Corporate Readiness Skills
- Internship-2
- Professional Elective 3
- Open Elective 3

# SEMESTER VI

- Major Project
- Professional Elective 4
- Professional Elective 5
- MOOCS Certification 1
- MOOCS Certification 2

# **COURSE CURRICULUM**

## **SEMESTER WISE COURSES**

## **Cloud Technology & Information Security**

- Cloud Architecture
- Cloud Information Security
- Ethical Hacking
- Cloud Web Services
- Design and Development of Cloud Application

# <u>Data Science (DS)</u>

- Data Warehousing & Mining
- Probability and Statistics
- Big Data Analytics
- Data Visualization
- Machine Learning