

# **BACHELOR OF COMPUTER APPLICATIONS** **(BCA)**

# **BCA**

## **Bachelor of Computer Application**



# **INTRODUCTION TO BCA**

- A 3-YEAR UNDERGRADUATE PROGRAM FOCUSED ON THE WORLD OF SOFTWARE AND APPLICATIONS.
- INTRODUCTION TO PROGRAMMING LANGUAGES.
- IT PROVIDES A BALANCED MIX OF THEORY AND PRACTICAL SKILLS, PREPARING STUDENTS FOR BOTH JOBS AND HIGHER STUDIES.
- THE COURSE IS SUITABLE FOR STUDENTS WHO WANT TO ENTER THE IT FIELD WITHOUT PURSUING ENGINEERING (B.TECH).
- THE BCA COURSE CAN TRANSFORM YOU FROM A TECH USER INTO A TECH CREATOR.



# **ABOUT BCA COURSE**



THE BACHELOR OF COMPUTER APPLICATIONS (BCA) IS A 3-YEAR UNDERGRADUATE DEGREE PROGRAM IN COMPUTER SCIENCE AND INFORMATION TECHNOLOGY. IT WAS INTRODUCED IN INDIA DURING THE 1990S TO MEET THE GROWING DEMAND FOR IT PROFESSIONALS, WITH THE UNIVERSITY OF PUNE BEING ONE OF THE FIRST TO LAUNCH IT IN 1999. THE COURSE FOCUSES ON PROGRAMMING, SOFTWARE DEVELOPMENT, DATABASES, AND NETWORKING, PROVIDING STUDENTS WITH BOTH THEORETICAL KNOWLEDGE AND PRACTICAL SKILLS. BCA PREPARES GRADUATES FOR CAREERS IN THE IT INDUSTRY AS WELL AS HIGHER STUDIES LIKE MCA, MBA, OR M.SC. IN COMPUTER SCIENCE.

# **WHAT WILL YOU LEARN**



PROGRAMMING LANGUAGES: C, C++, JAVA, PYTHON, .NET



WEB TECHNOLOGIES: HTML, CSS, JAVASCRIPT, PHP



MATHEMATICS: DISCRETE MATH, STATISTICS



DATA STRUCTURES & ALGORITHMS: THE LOGIC AND BRAIN BEHIND EFFICIENT CODE. THEMATICS: DISCRETE MATH, STATISTICS



# **SKILLS YOU GAIN**



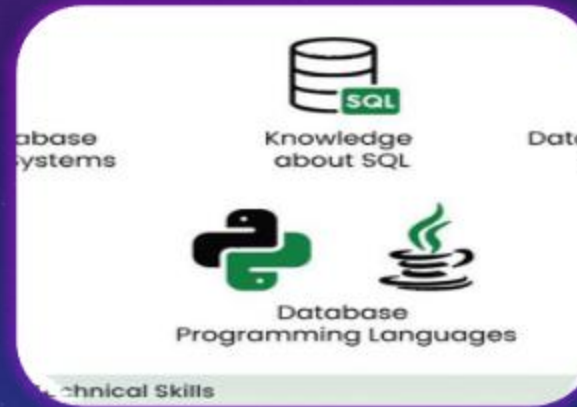
## **PROGRAMMING & DEVELOPMENT SKILLS**

(C, C++, Java, Python, Object-Oriented Programming (OOPs))



## **WEB DEVELOPMENT SKILLS**

(HTML, CSS, JavaScript, PHP)



## **DATABASE & DATA SKILLS**

(SQL, MySQL, Oracle)



## **COMPUTER & NETWORKING SKILLS**

(Operating Systems, Computer Networks, Cloud Computing, Cybersecurity)

# **PROGRAMMING LANGUAGES**



C



C++



JAVA



PYTHON



.NET



C#



PHP



HTML



SQL



# **WHY CHOOSE BCA?**



PROVIDES STRONG FOUNDATION IN COMPUTER SCIENCE WITHOUT HEAVY ENGINEERING FOCUS

SHORTER DURATION (3 YEARS) COMPARED TO B.TECH (4 YEARS)

AFFORDABLE COMPARED TO B.TECH BUT STILL OFFERS STRONG CAREER OPTIONS

HIGH DEMAND IN IT SECTOR WITH GROWING CAREER OPPORTUNITIES

OPTION TO SPECIALIZE IN FIELDS LIKE DATA SCIENCE, CYBERSECURITY, CLOUD,  
OR AI THROUGH CERTIFICATIONS



# **CAREER OPPORTUNITIES**

SOFTWARE DEVELOPER / PROGRAMMER

WEB & MOBILE APP DEVELOPER

DATA ANALYST / DATABASE ADMINISTRATOR

CYBER SECURITY SPECIALIST

IT SUPPORT / SYSTEM ADMINISTRATOR

# **EXPANDING YOUR OPPORTUNITIES WITH EXTRA SKILLS**

## **ARTIFICIAL INTELLIGENCE (AI)**

- Automates tasks & improves efficiency
- Huge demand in IT, healthcare, finance, .



## **MACHINE LEARNING (ML)**

- Helps in data analysis & decision-making
- Opens careers in Data Science & Analytics





## CLOUD COMPUTING

- Enables working with scalable IT infrastructure
- In demand by companies like AWS, Microsoft, Google

## CYBERSECURITY

- Protects systems from cyber threats
- Growing need in banking, government, and IT firms



# **WHAT AFTER BCA?**



- MCA (MASTER OF COMPUTER APPLICATIONS)



- MBA IN IT / BUSINESS ANALYTICS



- M.SC. (COMPUTER SCIENCE, DATA SCIENCE, AI, CYBERSECURITY)



- CERTIFICATIONS (CLOUD, AWS, MICROSOFT, GOOGLE, ETC.)





# **QUESTIONS & ANSWERS**

**Q1. What is the duration of the BCA course?**

**Q2. When was the BCA program first introduced in India?**

**Q3. Which university was the first to implement BCA And which year?**

**Q4. What are the core subjects taught in BCA?**

**Q5. What are the career opportunities after BCA?**

**Q6. What higher studies can be pursued after BCA?**



**THANK YOU**

**MIR MUSTAFA ALI RAZVI**