



**Jog Educational Trust's**

## **P. Jog College of Science and Commerce**

*(Affiliated to Savitribai Phule Pune University)*

**Course Structure**

### **Bachelor of Business Administration – Computer Application**

The Bachelor of Business Administration – Computer Application (BBA-CA) program at P. Jog College of Science & Commerce offers a dynamic and career-focused study that integrates core business management principles with advanced computer application skills. Designed to meet the growing demands of the IT-enabled business environment, the program combines managerial knowledge with technical expertise in programming, software development, database management, and system analysis.

Supported by the college's strong academic legacy, the department emphasizes a balanced approach of theoretical concepts and practical implementation through hands-on lab sessions, project-based learning, case studies, and industry-relevant assignments. Students gain exposure to modern computing tools, emerging technologies, and real-world business applications.

With access to updated computer laboratories, experienced faculty mentorship, and a supportive academic ecosystem, the program builds a strong foundation in business strategy, digital systems, and technology-driven decision-making. It prepares students for diverse career opportunities in software development, IT management, business analytics, system administration, and entrepreneurship in the digital domain.

Duration: 3 years

Medium of Instruction: English

Course Eligibility: 10+2+CET or its equivalent from a recognized institution

Examination Pattern: Semester Pattern

### Semester I

| Sr. No. | Verticals                      | Subject Name   | Subject Code | Total Credits |
|---------|--------------------------------|--|--------------|---------------|
| 1       | MJ                             | Problem solving using C  |              | 2             |
| 2       | MJ                             | Data Base Management System  |              | 2             |
| 3       | Major Mandatory<br>(Practical) | Computer Laboratory based on C Programming<br>and Data Base Management System (DBMS) |              | 2             |
| 4       | OE 1                           | Business Mathematics   |              | 2             |
| 5       | OE 2                           | Business Statistics  |              | 2             |
| 6       | VSC                            | Office Automation tools  |              | 2             |
| 7       | SCE                            | Programming Principles and algorithm   |              | 2             |
| 8       | AEV                            | Business Communication Skills-I  |              | 2             |
| 9       | VEC                            | Environmental Awareness  |              | 2             |
| 10      | IKS                            | Generic IKS  |              | 2             |
| 12      | DD                             | Physical Education – I   |              | 2             |
|         |                                |  | Total        | 22            |

### Semester II

| Sr. No. | Verticals | Subject Name  | Subject Code | Total Credits |
|---------|-----------|---|--------------|---------------|
| 1       | MJ        | Advance C Programming                               |              | 2             |
| 2       | MJ        | Relational Database Management System<br>(RDBMS)    |              | 2             |
| 3       | MJ        | Computer Laboratory based on Advance C and<br>RDBMS |              | 2             |

|    |       |  |              |    |
|----|-------|--|--------------|----|
| 4  | Minor | Principle and Practices of Management      |              | 2  |
| 5  | OE    | Introduction to Data Science               |              | 2  |
| 6  | OE    | Tally Prime                                |              | 2  |
| 7  | VSC   | Web Technology                             |              | 2  |
| 8  | SCE   | E-Commerce                                 |              | 2  |
| 9  | AEC   | Business Communication Skills-II           |              | 2  |
| 10 | VEC   | Democracy Awareness & Gender Sensitization |              | 2  |
| 11 | CC    | Democracy Awareness & Gender Sensitization |              | 2  |
|    |       |  | <b>Total</b> | 22 |

### Semester III

| Sr. No. | Verticals | Subject Name   | Subject Code | Total Credits |
|---------|-----------|--|--------------|---------------|
| 1       | MJ        | Data Structure   |              | 4             |
| 2       | MJ        | PHP  |              | 4             |
| 3       | Minor     | Computer Laboratory based on DS, PHP                   |              | 4             |
| 4       | OE        | To be selected from the basket of the other faculty    |              | 2             |
| 5       | VSC       | Web development tools                                  |              | 2             |
| 6       | AEC       | Modern Indian Languages 1                              |              | 2             |
| 7       | Project   | Project based on Web Applications                      |              | 2             |
| 8       | CC        | NSS/NCC/Yoga Education/Health and Wellness/Fine Arts-I |              | 2             |
|         |           |  | <b>Total</b> | 22            |

### Semester IV

| Sr. No. | Verticals | Subject Name  | Subject Code | Total Credits |
|---------|-----------|---|--------------|---------------|
| 1       | MJ        | Object Oriented Programming using C++                   |              | 4             |
| 2       | MJ        | Advance PHP   |              | 4             |
| 3       | Minor     | Computer Laboratory based on CPP, Adv PHP               |              | 4             |
| 4       | OE        | Digital Marketing                                       |              | 2             |
| 5       | SEC       | Computer Network  |              | 2             |
| 6       | AEC       | Modern Indian Languages 2                               |              | 2             |
| 7       | Project   | Project based on Digital Marketing                      |              | 2             |
| 8       | CC        | NSS/NCC/Yoga Education/Health and Wellness/Fine Arts-II |              | 2             |
|         |           |   | <b>Total</b> | 22            |

### **Course Objectives (Program Objectives)**

The **Bachelor of Business Administration – Computer Application (BBA-CA)** program aims to:

- 1. Provide a strong foundation in business management principles and computer application concepts**, including programming, databases, networking, and software development.
- 2. Develop technical skills in programming languages, web development, data management, and emerging technologies** to solve real-world business problems effectively.
- 3. Build competence in designing, developing, and implementing computer-based solutions** for organizational needs and decision-making processes.
- 4. Enhance analytical thinking, logical reasoning, and problem-solving abilities** through practical projects, case studies, and hands-on training.
- 5. Promote professional ethics, teamwork, communication skills, and entrepreneurial mindset** required for careers in IT, business analytics, and technology-driven industries.

## Course Outcomes (Program Outcomes)

Upon completing the program, students will be able to:

1. **Demonstrate a clear understanding of business management concepts and core computer application principles**, including programming, database management, networking, and software development.
2. **Design, develop, and implement computer-based solutions** such as applications, websites, and database systems to address business and organizational requirements.
3. **Apply programming languages, web technologies, and data management tools** in practical situations to solve real-world business problems.
4. **Analyze system requirements and evaluate technological solutions** to improve operational efficiency, decision-making, and digital transformation in organizations.
5. **Perform IT and business application-related tasks suitable for entry-level roles** such as software developer, web developer, system analyst, data analyst, and pursue higher studies like MCA, MBA (IT), M.Com (Computer Applications), or professional certifications in emerging technologies.

## Possible Career Opportunities

1. **Roles in IT and software development sectors** such as Junior Software Developer, Web Developer, Application Developer, and Programming Executive.
2. **Opportunities in database and system management** including Database Administrator (Junior Level), System Support Executive, and Network Administrator.
3. **Positions in business and data analysis domains** such as Data Analyst (Entry Level), Business Analyst, and MIS Executive.
4. **Roles related to digital marketing and e-commerce management** including Digital Marketing Executive, SEO Analyst, and E-commerce Coordinator.
5. **Opportunities in IT support and technical services** such as Technical Support Executive, IT Helpdesk Officer, and System Maintenance Assistant in corporate and service organizations.
6. **Pathways to higher education and professional courses** such as MCA, MBA (IT/Systems), M.Com (Computer Applications), MSc (Computer Science), and certifications in areas like Data Science, Cyber Security, Cloud Computing, Artificial Intelligence, and Software Testing.

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