

## **Bachelor of Computer Application (BCA)**

**Course Overview Institution: St. Anne's First Grade College for Women**

**Program Duration: 3 Years (6 Semesters)**

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### **Semester 5:**

#### **Web Programming:**

This course introduces the fundamentals of developing websites and web applications. Students will learn front-end technologies such as HTML, CSS, and JavaScript, as well as basic server-side scripting, databases, and web frameworks. The course emphasizes building responsive and interactive web pages.

#### **Quantitative Techniques:**

This course covers mathematical and statistical tools used in decision-making and data analysis. Topics include linear programming, probability, statistical inference, regression analysis, and optimization methods. Students will apply these techniques to solve real-world business and computational problems.

#### **Artificial Intelligence (AI):**

This course introduces the principles and techniques of artificial intelligence. Students will explore topics such as intelligent agents, search algorithms, knowledge representation, machine learning, natural language processing, and AI applications in real-world systems.

#### **Data Mining:**

This course focuses on extracting meaningful patterns and insights from large datasets. Students will learn data preprocessing, classification, clustering, association rule mining, and evaluation techniques. The course emphasizes both the theoretical foundations and practical applications of data mining tools.

**Cyber Crimes:**

This course examines cyber crimes and their impact on individuals, organizations, and society. Topics include types of cyber threats, hacking techniques, digital forensics, cyber laws, and ethical issues. Students will explore methods of prevention, investigation, and prosecution of cybercrimes.