CANARA COLLEGE

Managed by Canara High School Association, Mangaluru
Re-accredited by NAAC with 3.21 CGPA at 'A' Grade (Cycle IV - 2022)
Recognized under Section 2(f) and 12(B) of U.G.C. Act, 1956 & Affiliated to Mangalore University
Mahatma Gandhi Road, Kodialbail, Mangaluru – 575 003, D. K. District, Karnataka, India

BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)

(Basic / Honors Degree)

PEOs, POs, PSOs & GAs

OUTCOME BASED EDUCATION

In accordance with
National Education Policy (NEP) 2020 Scheme
(Effective from 2021-22 Batch onwards)

BACHELOR OF COMPUTER APPLICATIONS (B.C.A.) PROGRAMME
(Basic / Honors Degree)

Programme Educational Objectives (PEOs) :

The three / four years B.C.A. (Basic / Honors) Degree programme intends to attain the following Programme Educational Objectives :

PEO 1	Provide a foundation of computing principles and business practices for effectively using / managing information systems and enterprise software.
PEO 2	Analyze the requirements for system development and exposes students to business software and information systems.
PEO 3	Provides options to specialize in legacy application software, system software or mobile applications.
PEO 4	Produce outstanding IT professionals who can apply the theoretical knowledge into practice in the real world and develop standalone live projects themselves.
PEO 5	Provide opportunity for the study of modern methods of information processing and its applications.
PEO 6	Develop the programming techniques and the problem-solving skills through programming.
PEO 7	Prepare the graduates who wish to go on to further studies in computer science and related field.
PEO 8	Acquaint to work effectively with a range of current, standard, Office Productivity software applications.

Programme Outcomes (POs) :

Students of B.C.A. (Basics) Degree Programme at the time of graduation will be able to attain the following attributes :

PO 1	**Discipline Knowledge :** Acquiring knowledge on basics of Computer Science and ability to apply to design principles in the development of solutions for problems of varying complexity.
PO 2	**Problem Solving :** Improved reasoning with strong mathematical ability to Identify, formulate and analyze problems related to computer science and exhibiting a sound knowledge on data structures and algorithms.
PO 3	**Design and Development of Solutions :** Ability to design and development of algorithmic solutions to real world problems and acquiring a minimum knowledge on statistics and optimization problems. Establishing excellent skills in applying various design strategies for solving complex problems.
PO 4	**Programming a Computer :** Exhibiting strong skills required to program a computer for various issues and problems of day-to-day applications with thorough knowledge on programming languages of various levels.
PO 5	**Application Systems Knowledge :** Possessing a sound knowledge on computer application software and ability to design and develop app for applicative problems.

PO 6	**Modern Tool Usage :** Identify, select and use a modern scientific and IT tool or technique for modeling, prediction, data analysis and solving problems in the area of Computer Science and making them mobile based application software.
PO 7	**Communication :** Must have a reasonably good communication knowledge both in oral and writing.
PO 8	**Project Management :** Practicing of existing projects and becoming independent to launch own project by identifying a gap in solutions.
PO 9	**Ethics on Profession, Environment and Society :** Exhibiting professional ethics to maintain the integrality in a working environment and also have concern on societal impacts due to computer-based solutions for problems.
PO 10	**Lifelong Learning :** Should become an independent learner. So, learn to learn ability.
PO 11	**Motivation to take up Higher Studies :** Inspiration to continue educations towards advanced studies on Computer Science.

Additional Programme Outcomes (Honors Degree) :

Students of B.C.A. (Honors) Degree Programme at the time of graduation will be able to attain the following additional attributes besides the afore-mentioned attributes :

PO 1	Apply standard Software Engineering practices and strategies in real -time software project development.
PO 2	Design and develop computer programs / computer-based systems in the areas related to AI, algorithms, networking, web design, cloud computing, IoT and data analytics.
PO 3	Acquaint with the contemporary trends in industrial / research settings and thereby innovate novel solutions to existing problems.
PO 4	Apply the knowledge and understanding noted above to the analysis of a given information handling problem.
PO 5	Work independently on a substantial software project and as an effective team member.

Graduate Attributes (GAs) :

GA 1	Academic Excellence
GA 2	Professional Efficiency
GA 3	Technical Proficiency
GA 3	Effective Communication Skills
GA 4	Leadership and Team work
GA 5	Life-Long Learning
GA 6	Creativity and Innovation
GA 7	Social Engagement