

**K.L.E. Society's
Raja Lakhamagouda Science Institute (Autonomous), Belagavi
(PO's/PSO's/CO's)**

Program: BCA (UG02C01)

Programme Outcome

P01: The program prepares the young professional for a range of computer applications, computer organization, techniques of Computer Networking, Software Engineering, Web development, Database management and Advance Java.

P02: An ability to design a computing system to meet desired needs within realistic constraints such as safety, security and applicability in multidisciplinary teams with positive attitude.

P03: In order to enhance programming skills of the young IT professionals, the program has introduced the concept of project development in each language/technology learnt during semester.

Programme Specific Outcomes

Pso1: focuses on preparing student for roles pertaining to computer applications and IT industry

Pso2: start from the basics and in every semester learns each and everything about computers.

Pso3: develop programming skills, networking skills, learn applications, packages, programming languages and modern techniques of IT

Pso4: Information about various computer applications and latest development in IT and communication system is also provided

Pso5: Gives overview of the topics in IT like networking, computer graphics, web development, trouble shooting, and hardware and software skills.

Course Outcomes

Semester I

Course Type	Course Code	Course Title	Course Outcome
AECC	21CA101	English	CO1: Able to understand and construct grammatically correct sentences and paragraph CO2: Able to correctly frame the sentences into paragraphs CO3: Learn to write effective formal letters
AECC	21CA102	Kannada	CO1: To impart and motivate them to learn the State Language with ease and confidence enabling for better communication skills CO2: To orient and enhance the knowledge of the language basics and grammar the bridge course sessions are conducted by the language department. CO3: To develop and sharpen interpersonal and communication skills
AECC	21CA103	Functional Kannada	CO1: To impart Kannada Learning CO2: Kannada in day-to-day life
DSC	21CA104	Data Structures using C	CO1: Learn the basic definitions, primitive and non-primitive data structures and dynamic memory allocation CO2: Able to perform basic file operations and learn random access functions of file system CO3: Learn to prepare programs on Recursion, searching and sorting techniques CO4: Learn basic definitions and programs on Stack and Queues
DSC	21CA105	Web Technology	CO1: Learn the basic definitions and elements of Web and Internet along with HTML basic structure and tags CO2: Be able to learn event handling methods and get introduced with cascading style sheets CO3: Be able to learn scripting language JavaScript and its looping constructs CO4: Learn to implement arrays and event handling functions in DOM and get to know about validation in forms
DSC	21CA106	Mathematics	CO1: Be able to learn Divisibility and its algorithm and LCM, Decimal fractions.

			CO2: Be able to solve problems on Numbers, Age and Average CO3: Be able to learn Ratio proportional, Chain rule CO4: Be able to learn Percentage, Profit n loss
DSC	21CA112	Data Structure using C Lab	CO1: Able to work on programs based on basic arithmetic functions, student result and employee salary CO2: Learn to work on programs based on number series and pattern display CO3: Learn to work on programs based on Arrays and Searching techniques CO4: Learn to work on programs based on Sorting and converting of expressions from infix to postfix CO5: Learn to work on programs based on queues and linked list
DSC	21CA113	Web Technology Lab	CO1: Be able to work on basic tags of HTML and CSS properties CO2: Learn to work on programs based on JavaScript programs CO3: Learn to work on programs based on XML CO4: Learn to work on programs based on event handling using HTML tags CO5: Learn to work on programs based on Arrays and dynamic pages using HTML and JavaScript
SEC	21CA110	Physical Education – Yoga	CO1: Students will be able to understand the basic principles and practices of Physical Education, Sports and Yoga CO2: Students will be able to instruct the Physical Activities, Sports and Yoga practices for healthy living CO3: To develop professionalism among students to conduct, organize & officiate Physical Education, Sports and Yoga events at schools and community level
SEC	21CA111	Health and Wellness	CO1: Students will be able to understand the basic principles and practices of Physical Education, Sports and Yoga CO2: Students will be able to instruct the Physical Activities, Sports and Yoga practices for healthy living CO3: To develop professionalism among students to conduct, organize & officiate Physical Education, Sports and Yoga events at schools and community level

SEC	21CA109	Hardware and Networking	CO1: Get to learn about course and computer CO2: Learn about Personal Computer and about its device functionalities CO3: Learn safe lab procedures and tool use CO4: Learn about assembling of Computers CO5: Learn about preventative maintenance and use Operating System
-----	---------	-------------------------	---

Semester II

Course Type	Course Code	Course Title	Course Outcome
AECC	21EN201	English II	CO1: Recognize the errors of usage and correct them CO2: Be able to differentiate between active and passive voice and change from one to another CO3: Be able to understand structure and sounds of words CO4: Understand and appreciate English spoken by people from different regions and be able to speak & present confidently in various situations
AECC	21KA201	Kannada II	CO1: To impart and motivate them to learn the State Language with ease and confidence enabling for better communication skills CO2: To orient and enhance the knowledge of the language basics and grammar the bridge course sessions are conducted by the language department CO3: To develop and sharpen interpersonal and communication skills
AECC	21KA211	Functional Kannada II	CO1: Kannada usage in communication CO2: Kannada writing skills
DSC	21CA204	DBMS	CO1: Learn definition of database, architecture characteristics advantages & disadvantages and applications of database CO2: Learn Data modelling using the Entity–Relationship (ER) model and Relational Data Model and Relational Algebra CO3: Understand the use of data types and details of SQL CO4: Understand Functional dependencies and Normalization for Relational Databases and Transaction Processing Concepts

OEC	21CA205	DIGITAL ELECTRONICS	CO1: Learn about various number systems available, as well as their representation and conversion in standard ASCII code CO2: Learn about laws and theorems as well as logical gates and different maps used by Boolean expressions
AECC	21CA207	Environmental Studies	CO1: Environmental consciousness and its protection CO2: Environmental laws and acts
OEC	21CA206	Statistical Methods FOR Data Analysis	CO1: Be able to understand how data is organized, categorized by applying various techniques available CO2: Get familiar with the classification as well as density of data and frequency distribution CO3: Learn to represent data diagrammatically and well as in graphical forms CO4: Learn the various measures of central values
DSC	21CA208	JAVA PROGRAMMING	CO1: Understand basic definition and concepts of Java also basic programming constructs CO2: Know about OOPS concepts, Arrays & its types and learn how to declaration, access arrays CO3: Be able to understand Interfaces, Packages and Managing Exceptions CO4: Understand Multithreading concept in Java and collections
DSC	21CA209	OPERATING SYSTEM	CO1: Understand Operating System definition, types of operating system, tasks of operating system and also Process Management concepts. CO2: Know about Process synchronization and deadlocks CO3: Be able to understand Operating System's Memory management and Virtual machine CO4: Understand File Management System, Secondary storage structure, Disk Management & Structure, Disk Scheduling Methods
DSC	21CA210	JAVA PROGRAMMING LAB	CO1: Will get hands on experience of different types of data types and creating objects and class, CO2: Know how to do type casting, switch statement, types of constructors and constructor overloading, CO3: Will get hands on experience of method overriding, Inheritance concept,

			<p>abstract class and method</p> <p>CO4: Know how to use user defined packages, know how to handle exceptions in java</p> <p>CO5: Understand the concept of multithreading, thread synchronization, Array List and also Linked List interface</p>
DSC	21CA211	DBMS LAB	<p>CO1: Will get hands on experience of table creation, specifying constraints</p> <p>CO2: Will know how create view in the database.</p> <p>CO3: Will get hands on experience on using different types of SQL commands.</p> <p>CO4: Will know how to delete records from the database table and more complex queries.</p> <p>CO5: Will understand how to retrieve records from the database and how to join database tables.</p>
VBC	21PE201	PHYSICAL EDUCATION AND YOGA	<p>CO1: Students will be able to understand the basic principles and practices of Physical Education, Sports and Yoga.</p> <p>CO2: Students will be able to instruct the Physical Activities, Sports and Yoga practices for healthy living.</p> <p>CO3: To develop professionalism among students to conduct, organize & officiate Physical Education, Sports and Yoga events at schools and community level.</p>

Semester III

Course Type	Course Code	Course Title	Course Outcome
AECC	21CA301	Additional English	<p>CO1: Be able to work on their speech and learn to overcome stage fear in public speaking and get their self-confidence developed.</p> <p>CO2: Learn the process of documentations for seminars, workshops and Industrial Tours.</p> <p>CO3: Be able to learn writing letters for Job application as well as improve their resume writing skills.</p>
AECC	21CA302	Kannada	<p>CO1: To impart and motivate them to learn the State Language with ease and</p>

			<p>confidence enabling for better communication skills</p> <p>CO2: To orient and enhance the knowledge of the language basics and grammar the bridge course sessions are conducted by the language department.</p> <p>CO3: To develop and sharpen interpersonal and communication skills.</p>
AEEC	21CA303	Hindi	<p>CO1: Understanding the origin of Hindi language and its literature.</p> <p>CO2: Identifying the dialects of Hindi language family.</p> <p>CO3: Analysing the development of Khariboli Hindi.</p> <p>CO4: Understanding the concept of history of literature.</p> <p>CO5: Understanding the basis of the classification of Hindi literature.</p>
SEC	21CA304	Constitution of India	<p>CO1. Understand and explain the significance of Indian Constitution</p> <p>CO2. Exercise one's fundamental rights in proper sense</p> <p>CO3. Analyse the Indian political system in detail</p> <p>CO4. Understand Electoral Process, Emergency provisions and Amendment</p>
DSC	21CA305	Python Programming	<p>CO1: Knowing about basic Python.</p> <p>CO2: Understanding Python function (Lamda)</p> <p>CO3: Understanding Python Exception Handling.</p> <p>CO4: Learning SQL and PYTHON Connectivity.</p>
DSC	21CA306	Advanced JAVA	<p>CO1: Knowing about Swings, Containers.</p> <p>CO2: Understanding Database connectivity JDBC.</p> <p>CO3: Understanding JSP, Java Servlets.</p> <p>CO4: Learning Networking Basics.</p> <p>CO5: Understanding Enterprise Java Beans.</p>
DSC	21CA307	DAA	<p>CO1: Learn analyses performance of algorithms and describe the analysis algorithm, efficiency using different notations.</p> <p>CO2: Learn various problems using divide conquer techniques different types of sorting and searching techniques and algorithms.</p> <p>CO3: Be able to solve problems using algorithm such as dynamic programming.</p> <p>CO4: Be able to solve problems using algorithm & design methods such as backtracking and branch.</p>

Semester IV

Course Type	Course Code	Course Title	Course Outcome
AECC	21CA401	Additional English	CO1: Be able to work on their speech and learn to overcome stage fear in public speaking and get their self-confidence developed CO2: Learn the process of documentations for seminars, workshops CO3: Be able to learn writing letters & CV for Job profile
AECC	21CA402	Kannada	CO1: To impart and motivate them to learn the State Language with ease and confidence enabling for better communication skills CO2: To orient and enhance the knowledge of the language basics and grammar the bridge course sessions are conducted by the language department. CO3: To develop and sharpen interpersonal and communication skills
AECC	21CA403	Hindi	CO1: Understanding the origin of Hindi language and its literature CO2: Identifying the dialects of Hindi language family CO3: Analysing the development of Khariboli Hindi CO4: Understanding the concept of history of literature CO5: Understanding the basis of the classification of Hindi literature
DSC	21CA404	Android Programming	CO1: Learn the android architecture and android installation CO2: Learn Android application life cycle, activities, event handlers and widgets CO3: Be able build User Interfaces using UI design and layouts CO4: To learn intents and Broadcast Receivers, working with SQLite Databases
DSC	21CA405	Data Science	CO1: Understanding Basic concepts of Data Science CO2: Understanding Statistical Analysis CO3: How to present analysis using Visualization and matplotlib CO4: Learning Numpy Library, Understanding data manipulation with Pandas
DSC	21CA406	Computer Networks	CO1: Understand network structure, network architecture, Topologies, OSI CO2: Learn Data Link Layer design issues, Error detection and correction CO3: Understand Medium Access Control, multiple access protocols CO4: The network Layer Transport Layer and Application Layer