Bachelor of Computer Applications (BCA)

Year: 2018-2019

Semester: I

Program Outcomes: At the end of the course the student should be able to:

(a) Analyze problems and design effective and efficient software solutions.

(b) Develop software under latest Application Development Environments.

(c) Learn new technologies with ease and be productive at all times.

(d) Read, write, and contribute to technical literature.

(e) Work in teams.

(f) Be a good citizen in all respects

Course wise outcomes:

Course Code	Name of the course	Course outcomes
101	Fundamentals of Information Technology	1. Understand basic concepts and terminology of information technology. 2. Have a basic understanding of personal computers and their operations. 3. Be able to identify issues related to information security.
101	Algorithm and program Design	1.learn good principles of algorithm design; 2.learn how to analyze algorithms and estimate their worst-case and average-case behaviour (in easy cases); 3. become familiar with fundamental data structures and with the manner in which these data structures can best be implemented; become accustomed to the description of algorithms in both functional and procedural styles;
103	C Programming – I	1.To solve a given problem using programming/algorithm Understand and use C libraries, 2.Trace the given C program manually 3.Effectively use of Arrays and functions 4.Write C program for simple applications of real life using structures and Unions
104	Business organization system	1. Students shall know about business and structure 2. Students shall know about various forms of business 3. Students will have sound knowledge about overall business environment
105	Business Mathematics	The students will be able to solve small business problems by using the concepts of Business Mathematics
106	Lab on MS-Office Suite	1.Demonstrate an advanced knowledge of the Word Processing package, MS Office and a knowledge of how to design & create effective and structured documents like

		technical reports, letters, brochures, etc., 2. Demonstrate the skills in the appropriate use of various features of the spread sheet package MS Excel and also to create useful spreadsheet applications like tabulated statements, balance sheets, statistical charts, business statements, etc. 3.Demonstrate the skills in making an effective presentation with audio and video effects using the MS Excel package 4.Draw graphical pictures, flow charts, block diagrams etc., using the drawing tools available in MS Word or MS Power Point and incorporate them into documents and presentations
107	Lab on C Programming – I	1. Implement a real world problem using basic constructs of C language. 2. Develop an application using Decision making and looping 3. Make use of proper operators to solve problem. 4. Make use of Arrays and pointers efficiently and handling strings. 5. Comprehend the dynamic memory allocation and pointers in C. 6. Able to define new data types using enum, structures and typedef
108	General course-I: Career & Life Skills	Students will be able to understand self potential and ways to enhance capabilities

Name of the program: Bachelor of Computer Applications (BCA)

Year: 2018-2019

Semester: II

Program outcomes: At the end of the course the student should be able to:

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Course wise outcomes:

Course Code	Name of the course	Course outcomes
201	Computer Organization and Architecture	1. Simple machine architecture and the reduced instruction set computers. 2. Memory control, direct memory access, interrupts, and memory organization 3.Basic data flow through the CPU (interfacing, bus control logic, and internal communications). 4. Number systems, instruction sets, addressing modes, and data/instruction formats.
202	DBMS I	1. Understand the concepts of database and techniques for its management. 2. Different Data Models at Conceptual and Logical level. 3. Differentiate between the role of DBA and Data Architect 4. Understanding Data Security standards and Methods
203	C Programming - II	1. Have thorough knowledge about data structures 2. Ability to design& develop program using linear data structures& non linear data structures for solving problems 3. Ability to choose appropriate data structures for problem solving 4. Ability to use combination of these data structures for problem solving
204	Financial Accounting	1. The knowledge of accounting and its principles at basic level. Practical's in Tally and Excel for Financial Accounting assignments
205	Principles of Management	1. To understand the functions and processes of business management.
206	Lab on C Programming - II	1. Define basic data structures such as Date, Currency and Rational; and using it. 2. Defining and using and updating Liner data structures : arrays and Linked List 3. Should define data types such as stack, queue and List 4. Able to read and write data into files.

		5. Able to define hierarchical data types; manipulate and use it. 6. Able to understand searching and sorting mechanism and use various algorithms on it
207	Environmental Studies	1. Understand the importance of Environment in the life of living things.
208	General Course II : Smart Cities	1. Students will get an understanding of road map for Planning Smart Cities and benchmarking their performance for Indian context

Name of the program: Bachelor of Computer Applications (BCA)

Year: 2018-2019

Semester: III

Program outcomes: At the end of the course the student should be able to:

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Course wise outcomes:

Course Code	Name of the course	Course outcomes
301	Operating Systems	1 Explain the concepts of process, address space and file 2 Compare and contrast various CPU scheduling algorithms 3 Understand functioning and working of Windows as well as Unix Operating System
302	Software Engineering	**1** Understand life cycle models**,** Requirement elicitation techniques, understand the concept of Analysis and Design of software. **2** Develop SRS as per any of the existing standards. 3 Implement software engineering concepts in software development to develop quality software.
303	DBMS II	1 Creating tables, and queries using SQL 2 Applying SQL Operators and SQL Functions in the created tables in SQL; 3 Writing and solving complex queries based on joins, sub queries 4 Writing PL/SQL blocks, objects
304	Statistics	1 Tabulate the raw data by using frequency distribution and represent the data graphically. 2 Analyse the data by using measures of central tendancy and dispersion 3 Estimate the value of dependent variable 4 Generate the relationship between two variables in the form of degree or equation
305	Multimedia Technology	1 To understand about various interactive

		multimedia devices, the basic concept about images and image formats. 2 To understand different software tools used in multimedia
306	Lab on Oracle and Multimedia	1 Creating tables, and queries using SQL 2 Applying SQL Operators and SQL Functions in the created tables in SQL; 3 Writing and solving complex queries based on joins, sub queries 4 Writing PL/SQL blocks, objects 5 Creating multimedia file 6 Understanding the use of multimedia in web sites
307	Lab on Linux Operating System	1 The course is to provide the knowledge of the Linux Operating System. This course intends to teach various features that will help the students to use and learn the working of Ubuntu /Red Hat operating system
308	**General Course III :** Community Work III / Start up management / Agro Tourism	1. Students will be able to know the community needs and understand their role towards community development 2. Students will be able to understand the role of start ups and case studies of well known start ups in India. **3.** Students will be able to obtain and diversify knowledge from tourism, rural tourism and their specific form agri-tourism.

Name of the program: Bachelor of Computer Applications (BCA)

Year: 2018-2019

Semester: IV

Program outcomes: At the end of the course the student should be able to:

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Course wise outcomes:

Course Code	Name of the course	Course outcomes
401	Computer Networks	1 Students will acquire a good knowledge of the computer network, its architecture and operation. 2 Student will be able to pursue his study in advanced networking courses (This knowledge will help them to create base for the Network Electives to be studied in the next semesters). 3 Students will be able to follow trends of computer networks. So, students will get exposer to advanced network technologies like MANET, WSN, and 4G.
402	Software Testing	1Understand basic concepts and terminology of information technology. 2 Have a basic understanding of personal computers and their operations. 3 Be able to identify issues related to information security.
403	Java Programming	1 Design interfaces, abstract and concrete classes 2 Use concurrent programming, java Collections and utility classes 3 Able to achieve object persistence using object serialization. 4 Design applications using event driven programming. 5 Get the main features of Java Programming for Business Applications
404	Operations Research	1 Students will be able to describe characteristics and scope of OR. 2 Students will be able to define and formulate mathematical problems.

		3 Students will be able to select optimal problems solving techniques for a given problem using LP. 4 Students will be able to formulate and solve transportation, travelling sales problems. 5 Students will be able to demonstrate and solve simple models of Game theory. 6 Students will be able to solve different problems related to Network
405	Entrepreneurship Development	1 Evolution, definition, characteristics, function and types of entrepreneurs. 2 Role of Entrepreneurship in Economic Development. 3 Business Opportunity Identification 4 Importance of Business plan 5 Support Agencies 6 Concept of Intellectual property rights
406	Lab on Java	1 Provide foundation for programming and Enable the students to analyze and efficiently solve the problems using Java Programming
407	Minor Project - I	
408	**General Course IV:** Community work IV / Basics of Taxation / Meditation & Yoga	1. Students will be able to know the community needs and understand their role to contribute meaningfully towards community development. 3 Students will be able to have a basic knowledge about direct tax system in India 4 Students will be able to have a basic knowledge about indirect tax system in India. 5 Students will be upgraded and upskilled with the latest amendments in taxation policy of India. 6. Students will be able to understand the advantages of Yoga and practice basic yog kriyas

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Year: 2018-2019

Semester: V

Program outcomes: At the end of the course the student should be able to:

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Course wise outcomes:

Course Code	Name of the course	Course outcomes
501	Introduction to the Internet Technologies	1 Describe and use client-side technologies of the World Wide Web: HTML5, CSS3, Javascript. 2 To implement different constructs and programming techniques provided by Java Script.
502	Object Oriented Analysis and Design	1 Advantages of using OOP platforms for development. 2 Process carried out while designing Object Oriented Systems.
503	C# Programming	1 This COURSE focuses on building applications with a graphical user interface (GUI) for the Microsoft Windows operating system although GUI interfaces on other operating systems, and on the Web Topics include: event-driven programming, Win32 API, dialog boxes and standard GUI controls, dynamic link libraries, .NET Framework. The C# programming languages will be used to build applications.
504	Graph Theory	1 Use graphs as models in a variety of areas. 2 Formulate several real world problems in mathematical terms
505	Elective I	
506	Lab on Internet Technology and C# Programming	**1** Describe and use client-side technologies of the World Wide Web: HTML5, CSS3, Javascript.

		2 To implement different constructs and programming techniques provided by Java Script. **3** This COURSE focuses on building applications with a graphical user interface (GUI) for the Microsoft Windows operating system although GUI interfaces on other operating systems, and on the Web Topics include: event-driven programming, Win32 API, dialog boxes and standard GUI controls, dynamic link libraries, .NET Framework. The C# programming languages will be used to build applications
507	Minor Project II	
508	**General Course V:** Social Media Management / Road Safety and Management / Event Management	1 Students will learn by doing assignments focusing on social media, post writing and publishing, management and measurement tools, a social media audit, editorial calendar and crises management. 2 Students will master the skills necessary to become successful social media managers. 3 The students are oriented to event management in order to strengthen their skills of planning, organizing and other such management functional skills.

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Year: 2018-2019

Semester: VI

Program outcomes: At the end of the course the student should be able to:

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Course wise outcomes:

Course Code	Name of the course	Course outcomes
601	Data warehousing and Data Mining	1 Process raw data to make it suitable for various data mining algorithms. 3 Discover and measure interesting patterns from different kinds of databases. 4 Apply the techniques of clustering, classification, association finding, feature selection and visualization to real world data.
602	Web Programming	1 Design web pages 2 Knowledge about different types of web sites 3 Navigation amongst web pages 4 Knowledge about presenting information on web interfaces
603	Software project Management	1 Understand and practice the process of project management and its application in delivering successful IT projects; 2 Evaluate a project to develop the scope of work, provide accurate cost estimates and to plan the various activities; 3 Identify the resources required for a project and to produce a work plan and resource schedule.
604	Business Analytics	1 Identify and prioritize information & data modelling. 2 Identify and prioritize threats to information assets.

		3 Define an Geographical information system. 4 Understand various types of Analytics and its significance. 5 Understand text & web mining 6 Applications of business analytics
605	Elective II	
606	Lab on Web programming	
607	Major Project	
608	**General Course VI:** Business Ethics / Basics of Hospitality Management / Aptitude	1 This course exposes the student to the issues of values and ethics in management so that decision making and decision execution are undertaken in a human manner, as this will add to the flexibility and dynamism of the corporate culture. 2 The course will take the student from managerial ethics to organizational ethics and business sustainability. 3 The objective of this paper is to increase the capabilities of the student required by the industry. As per the need of the industry, the students will be trained in the latest Mathematical, Statistical,Logical, Vebal Ability, Current Trends in IT etc by the industry experts