CAUSSANEL COLLEGE OF ARTS AND SCIENCE

(Affiliated to Alagappa University, Karaikudi)

Accredited with 'A' Grade by NAAC

Recognized by UGC under 2(f) & 12(B)

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Type of Graduation	Under Graduation
Programme Name	**B.Sc Information Technology**
Regulation (CBCS)	2017

Outcome of the Programme

1. Apply knowledge of computing requirements for technology solutions in business applications.
    - Apply knowledge of applications development.
    - Develop scripts for information technology applications.

- Develop computer code for business applications.
- Create, install, and configure virtual machines.

2. Analyze a problem and identify and define the computing requirements for the appropriate solutions.
    - Plan, install, manage, and troubleshoot a computer network.
    - Apply telecommunications principles to design and configure a network.
    - Plan and implement security technology.
3. Design and use spreadsheets and database applications for business processes and tracking.
    - Use spreadsheets for business applications and project tracking.
    - Design a relational database using Microsoft Access.
    - Construct a conceptual database model and write queries for relational databases.
4. Develop an understanding of professional, ethical, legal, security, and social issues and responsibilities. Explain ethical and legal issues impacting information technology.
5. Develop the ability to function effectively on teams to accomplish a common goal.
    - Examine the project life cycle, project teams, estimating project times, developing plans, identifying risks, and outsourcing.
    - Apply project management techniques to IT projects.
6. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
    - Develop information technology solutions by evaluating user requirements in the systems development environment.
    - Develop an information technology solution to a real-world problem including design, implementation, and evaluation of the computer-based system.

7. Develop an ability to communicate effectively with a range of audiences. Develop written and oral presentations of information technology solutions appropriate for a wide range of audiences.

Specific Outcome of the Programme

The department is running one programme i.e., B.Sc. (IT) course. This course focuses on preparing student for roles pertaining to computer applications and IT industry. This course develops programming skills, networking skills, programming languages and modern techniques of IT.

Undergraduate level programme in the area of Information Technology gives a number of opportunities to individuals to go ahead and shine in their lives. On completion of UG courses students can serve in the following ways: Serve as the Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.

Serve as the IT or Computer Engineers and System engineer with enhanced knowledge of computers and its building blocks. Work as the Hardware Designer/Engineer with the knowledge of Networking Concepts.

Serve as the System Administrators and Data Administrators with thorough knowledge of DBMS. Serve as the Web Designers with latest web development technologies. Finally, program specific outcome better understands by following that-

• Under Graduates will have skills and knowledge to excel in their professional career in IT applications and related disciplines

• Under Graduates will contribute and communicate effectively within the team to grow into leaders

• Under Graduates will practice lifelong learning for continuing professional development into leaders

• Under Graduates will have the capability to continue their formal education and successfully complete an advanced degree • Under Graduates will contribute to the growth of the nation and society by applying acquired knowledge in technical, computing and managerial skills.

Semester	Subject Code	Subject Title	Outcome	Specific Outcome
I	7BIT1C1	Principles of Information Technology	Analyze a complex computing problem and to apply principles of computing and other	• Design ,implement and evaluate a computing requirements in the

			relevant disciplines to identify solutions.	context of the program's
I	7BSOA1	Fundamental of Computer	Expertise windows operating system and Office tools	• Understand basic terms and definitions of Computer • Learn data processing methods and representation of data Learn Office tools to make daily
I	7BIT1P1	Office Automation Lab	0ffice tools course would enable the students in crafting professional word documents, excel spread sheets, power point presentations using the Microsoft suite of office tools. To familiarize the students in preparation of documents and presentations with office automation tools.	· to perform documentation • · to perform accounting operations · to perform presentation skills
II	7BIT2C1	Programming in C and Data Structures	Acquire the basic knowledge of C Programming language and	• To impart the basic concepts of data structures and

			develop simple application in C using basic constructs.	algorithms 2 To understand concepts about searching and sorting techniques 3 To Understand basic concepts about stacks, queues, lists, trees and graphs 4 To understanding about writing algorithms and step by step approach in solving problems with the help of fundamental data structures
II	7BSOA2	Desktop publishing	Design Advertisements, Books, Business cards and other graphical oriented works using Corel Draw and Photoshop	• Understand the basic features and operations of Corel Draw and Photoshop Learn advanced tools in Corel Draw and Photoshop
II	7BIT2P1		lab course is to enable students to acquire Problem Solving skill using	• Acquire programming skills by executing programs using arrays

			computers and facilitate them to learn basic principles of programming so as to write programs using C	and string • Design and develop programs in c using functions and pointers. • Implement the structure concepts in C Programs
III	7BIT3C1	Java Programming	to train the students in core java and make them to develop programs to the industry standard.	• Understand constructor, method overloading, static function concepts and develop programs. • Demonstrate the uses of inheritance, abstract class and interface • Acquire knowledge to create package, identify and fix errors in the code and achieve faster • execution of code by multithreaded programming.

				• Understand applets and database connectivity to develop window based application
III	7BIT4P1		to train the student to develop problem solving abilities and facilitate them to build the necessary skill set and analytical abilities for developing java based software for real life problems	• Develop simple java programs to demonstrate OOPs concepts. • Construct programs using constructor, method overloading and static function. • Examine reusability through inheritance, abstract class and interface concept in real time • Application development • Develop packages and understand how to fix errors using exception handling

III	7BCCA3	Principles of management	management is most successful if planning is performed in a collaborative manner with an end result in mind. ... Outcome management focuses on **and tracks a client's progress over time and looks at the effectiveness of service**	• they are integral to planning, organizing, leading, and controlling a modern organization. From effective team building to conflict resolution, you'll study human behavior so you can motivate your employees to perform at their best.
IV	7BIT4C1	OpenSource Software	Ability to install and run open-source operating systems. Ability to gather information about Free and Open Source Software projects from software releases and from sites on the internet. interact with Free and Open Source Software development projects.	• Ability to build and modify one or more Free and Open Source Software packages. • Ability to use a version control system and to interface with version control systems used by development communities. Ability to contribute software to and

IV	7BIT4P1	Open source Lab	the module students have acquired basics and advanced knowledge in working with Open Source projects and contributing to them. The students have understood how to start their own Open Source projects and select a proper License. Furthermore, the students have understood which tools like static analysis, continuous integration and linter they could use to validate their contribution before creating an actual pull request	used for Open Source Software Development and Training purposes. All the labs are equipped with interconnected 10Gbps SFP+ port single mode fiber optics and has all PCs have at-least i7 processor, 8 GB RAM, 100Mbps NKN Link etc.
IV	7BBCA4	Service Marketing	Service marketing: **building trust, empowering service delivery personnel, establishing uniform processes**, and promoting customer	• Lower Costs. Self-service marketing can help an enterprise to control costs in two main areas. ...

			satisfaction.	• Increased Productivity. ... • Increased Brand Equity. ... • Improved Analytics. ... • Increased Sales. ... • Improved Time to Market.
V	7BIT5C1	Database Management System	to understand the basic Database concepts and RDBMS concepts using Oracle SQL and PL/SQL. It helps the students to acquire sound knowledge in Oracle.	• on database, relational database, data Models and ER model. • ii. Understand the normalization and denormalization concepts to organize the data. • iii. Familiarize structure query language, SQL queries, sub-queries, operators and views.

				• iv. Discuss PL/SQL concepts, handle loops, control statements andcursors. • v. Analyze the uses of sub programming, exception handling and triggers to builtprograms
V	7BIT5C2	Visual Programming	Solving the real world problems and developing it as a real-time application Create user friendly fast and secure application connected with Databases	• Understanding the .Net framework and CLR environment • Remembering Expressions, Datatypes, Decision making and Branching • Learning windows common controls, additional controls, windows menus, inbuilt functions and dialog boxes Demonstrating database in .Net environment with

				ADO.NET
V	7BIT5P1	.NET PROGRAMMING	to provide in depth knowledge about .NET frame work, VB.Net, ASP.NET and ADO.NET. It also equips the students to develop window applications and dynamic web application	• To understand the dot net framework and its features • Explore the features of IDE and build window based applications using forms, controls, • events, procedures and functions • Understand exception handling, delegates and inheritance concept and write programs on • Console application. • Create database connectivity programs usingADO.NET. Gain knowledge on ASP.NET and design simple, dynamic webpages
V	7BITE1B	Computer	Create attractive User	• Demonstrate the line

		Graphics	interfaces for the developed applications Design good and fast multimedia applications which are need of the hour	drawing algorithms, circle drawing and Ellipse drawing too • Learn 2D & 3D Transformations, Viewing and Clipping • Able to design the interactive user interfaces by analysing the IO devices
V	7BITE2A	Computer Networks	to understand various issues in establishing networks and the importance of various architectures and protocols in computer networks	• the types of networks and topologies and uses of networks • Describe the functions of each layer in OSI and TCP/IP model. • Summarize the analog and digital data communication • Illustrate the functions of data link layer and explain the hardware components

				• v. Elucidate the functions of Network layer and routing algorithms and discuss cryptography and • network security.
VI	7BIT6C1	Software Engineering	to train the students to understand the basic software engineering concepts and make them to analyze, estimate & design new software with quality standards	• on planning the software development process. • Process SRS and perform requirement engineering of software development. • Develop strategies to initiate, plan, execute, monitor and control the software design. • Create test plans to verify and validate a system.
VI	7BIT6C2	Operating System and System Software	to understand the basic operating system concepts. It highlights the goals and services of the OS and	• the fundamental concepts of operating system. Understand the process

			covers scheduling, memory management, paging and segmentation. It facilitates the students to write simple shell script programs in Unix	management • components of Operating System. • Analyse CPU scheduling, synchronization concepts and discuss the methods to manage / avoid • deadlocks. • iv. Compare different types of memory management techniques that are used in Operating Systems. • v. Recognize the uses of paging, segmentation and file system mechanisms
VI	7BIT6C3	Principles of Multimedia	study of the multimedia systems and the technologies that support the components of multimedia. Hands on	• Recall Distributed Multimedia Systems and the components of Multimedia.

			training will be given on multimedia applications with the help of Sound Forge, Movie Maker and macro media FlashMX. Advanced concepts of action script in flash will be implemented	• ii. Summarize the need and requirements of Continuous Multimedia Systems. • iii. Develop Audio and Video applications using Authoring Tools. iv. Create interactive media applications using basic animation techniques in Flash. v. Build interactive Forms using Action Script and the Objects in Flash.
VI	7BITE3B	E-Commerce	to e-Commerce, highlighting the features and benefits. Business models of e-Commerce will be subsequently explained. Relevance of e-Commerce with regard to marketing strategies will be covered.	• Acquire the basic knowledge about e-commerce, benefits and challenges. • Gain the applications of e-commerce in business • Analyze the weaknesses and

				advantages of internet advertising • Understand the numerous payment systems and issues init.