



ST. WILFRED'S P.G. COLLEGE

(Affiliated to the University of Rajasthan)

COURSE OUTCOMES

B.CA. Ist(Computer Fundamentals and Office Management Tools)

BCA-101

CO1	Familiar with parts of computer
CO2	Understand the input and output devices.
CO3	Basic ideas of storage devices, computer Networks and Operating System
CO4	To learn about basics of applications system software
CO5	To learn about hardware components

B.CA. Ist(COMPUTER ARCHITECTURE)

BCA-102

CO1	Understand the fundamentals of different instruction set architectures and their relationship to the CPU design.
CO2	Understand the principles and the implementation of computer arithmetic.
CO3	Learn about Primary and Secondary storage System.
CO4	Understand the architecture and functionality of central processing unit
CO5	Exemplify in a better way the I/O and memory organization

B.CA. Ist(Operating Systems)

BCA-103

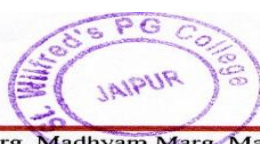
CO1	Implement various algorithms required for management, scheduling, allocation and communication used in Operating System.
CO2	Learn different types of operating systems along with concept of file systems and CPU scheduling algorithms used in operating system.
CO3	Provide students knowledge of memory management and deadlock handling algorithms.
CO4	Learn the general architecture of computers
CO5	become familiar (if not already) with the C language, cc compiler, and Make files


B.CA. Ist(Principles of Programming Language through C)

BCA-104

CO1	Design, develop and test programs written in 'C'
CO2	Analyze a given problem and develop an algorithm to solve the problem
CO3	Improve upon a solution to a problem
CO4	Develop conditional and iterative statements to write C programs
CO5	Exercise files concept to show input and output of files in C


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B.CA. Ist(Web Application Development)

BCA-105

CO1	To develop Webpages, Static Websites, Dynamic Websites.
CO2	To use ASP as Server Side Scripting Language.
CO3	To use PHP as Server Side Scripting Language.
CO4	To use JSP, JavaScript.
CO5	Use the JavaScript to develop the dynamic web pages

B.CA. Ist(MATHEMATICS)

BCA-106

CO1	Reason mathematically about basic discrete structures such as numbers, sets, used in computer science.
CO2	Familiar with Determinant and Matrices.
CO3	Formulate Limit, Continuity and Differentiability.
CO4	Demonstrate a working knowledge Definite and Indefinite Integrals.
CO5	Understand the basic principles of sets and operations in sets.

B.CA. Ist(Office Management Tools Lab)

BCA-107

CO1	Understand basic computer hardware architecture & be able to design fundamental logic circuits.
CO2	Convert between different number systems and describe some different codes.
CO3	Understand the functions of basic digital combinatorial circuits and sequential circuits.
CO4	Understand the fundamental hardware components that make up a computer's hardware and the role of each of these components
CO5	Understand the fundamental concept of system technology analysis and design

B.CA. Ist(C Programming Lab)

BCA-108

CO1	Learn how to build by the algorithms for problems.
CO2	Learn how to create pictorial representations of the program.
CO3	Learn how to apply logic for problems.
CO4	Learn about Loops, Conditional statements, Array, Pointers, File Handling, Structure, Unions etc
CO5	Learn about variables, constants, data types ,scope of variables, flow charts

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B.CA. Ist(Web Application Development Lab)

BCA-109

CO1	Understand the basic working of Internet and its main services.
CO2	Create web pages using HTML.
CO3	Acquire knowledge about Cyber Crime and the facilities for secure communication.
CO4	Understand, analyze and create web pages using HTML, DHTML and Cascading Styles Sheets
CO5	Understand web pages using XML ,website development and protocols.

B.CA. Ist(Communication and Soft Skills Lab)

BCA-110

CO21	Develop the student's ability to use English language accurately and effectively by enhancing their communication skills
CO2	Mastering the art of a professional business presentation
CO3	Distinguish different communication process and its practical application
CO4	More effective written communication
CO5	Understand the skills of reading,writing,listening and speaking.

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B.CA. IInd(OOps through C++)

BCA-201

CO1	Understand fundamental constructs of OOP.
CO2	Get the knowledge of UML with skills to draw UML diagrams.
CO3	Get the knowledge of different forms of OO Implementation.
CO4	Apply object oriented programming concepts in problem solving through C++
CO5	Gain the basic knowledge on Object Oriented concepts.

B.CA. IInd(DATABASE MANAGEMENT SYSTEM)

BCA-202

CO1	Master the basic concepts and understand the applications of database systems.
CO2	Construct an Entity-Relationship (E-R) model from specifications and to transform to relational model.
CO3	Construct unary/binary/set/aggregate queries in relational algebra.
CO4	Understand and apply database normalization principles.
CO5	Construct SQL queries to perform CRUD operations on database. (Create, Retrieve, Update, Delete)

B.CA. IInd(SOFTWARE ENGINEERING)

BCA-203

CO1	Understand the steps in Software Development.
CO2	Select and implement different software development process models.
CO3	Extract and analyze software requirements specifications for different projects.
CO4	Develop some basic level of software architecture/design.
CO5	Define the basic concepts and importance of Software project management concepts like cost estimation, scheduling and reviewing the progress.

B.CA. IInd(DATASTRUCTURES &ALGORITHM)

BCA-204

CO1	Design and analyze the time and space efficiency of the data structure
CO2	Design an algorithm by selecting appropriate design strategies.
CO3	Identify the appropriate data structure for given problem
CO4	Have practical knowledge on the application of data structures
CO5	Apply graph and tree traverse technique to various applications.

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B.CA. IInd(CLOUD COMPUTING)

BCA-205

CO1	Understand the basic about cloud computing
CO2	Learn about cloud computing architecture and types
CO3	Learn about cloud application platforms
CO4	Analyze Data Base design methodology.
CO5	Acquire knowledge in fundamentals of Data Base management system.

B.CA. IInd(OOP LABS)

BCA-207

CO1	Programs using Control Structures
CO2	Programs using Functions
CO3	Programs using Arrays
CO4	Programs using Inline Functions
CO5	Programs using Classes

B.CA. IInd(OOP LABS)

BCA-207

CO1	Understand about SQL Fundamentals. Understand about Unary & Binary table operations
CO2	Understand about Handle with different Data Base languages
CO3	Understand about table View, Log & Triggers.
CO4	Understand different database packages (Oracle/ mysql/ DB2/ etc) Commit & Rollback.
CO5	Understand about handling online Transactions. Handle database connectivity with front-end Learn about Queries Using DDL- DML commands , Nested queries using SQL, Built-in functions of SQL

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B.CA. IIIrd(JAVA PROGRAMMING)

BCA-301

CO1	Understand the principles and practice of object oriented analysis and design in the construction of robust, maintainable programs which satisfy their requirements;
CO2	Understand the concept of package, interface, multithreading and File handling in java.
CO3	Demonstrate the principles of object oriented programming;
CO4	Implement, compile, test and run Java programs comprising more than one class, to address a particular software problem. Demonstrate simple data structures like arrays in a Java program.
CO5	Make use of members of classes found in the Java API (such as the Math class)

B.CA. IIIrd(PYTHON PROGRAMMING)

BCA-302

CO1	Interpret the fundamental Python syntax and semantics and be fluent in the use of Python control flow statements.
CO2	Understand and Express proficiency in the handling of strings and functions.
CO3	Understand and Determine the methods to create and manipulate Python programs by utilizing the data structures like lists, dictionaries, tuples and sets.
CO4	Identify the commonly used operations involving file systems and regular expressions.
CO5	Articulate the Object-Oriented Programming concepts such as encapsulation, inheritance and polymorphism as used in Python

B.CA. IIIrd(DATA COMMUNICATION AND COMPUTER NETWORK)

BCA-303

CO1	Student will be able to understand network communication using the layered concept, Open System Interconnect (OSI) and the Internet Model.
CO2	Student will be able to understand various types of transmission media, network devices; and parameters of evaluation of performance for each media and device.
CO3	Student will be able to understand the concept of flow control, error control and LAN protocols; to explain the design of, and algorithms used in, the physical, data link layers.
CO4	Student will understand the working principles of LAN and the concepts behind physical and logical addressing, subnetting and supernetting.
CO5	Student shall understand the functions performed by a Network Management System and to analyze connection establishment and congestion control with respect to TCP Protocol.

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B.CA. IIIrd(ARTIFICIAL INTELLIGENCE)

BCA-304

CO1	Understand the informed and uninformed problem types and apply search strategies to solve them.
CO2	Apply difficult real life problems in a state space representation so as to solve them using AI techniques like searching and game playing
CO3	Design and evaluate intelligent expert models for perception and prediction from intelligent environment.
CO4	Formulate valid solutions for problems involving uncertain inputs or outcomes by using decision making techniques.
CO5	Demonstrate and enrich knowledge to select and apply AI tools to synthesize information and develop models within constraints of application area

B.CA. IIIrd(DIGITAL MARKETING)

BCA-305

CO1	Analyse the confluence of marketing, operations, and human resources in real-time delivery.
CO2	Demonstrate cognitive knowledge of the skills required in conducting online research and research on online markets, as well as in identifying, assessing and selecting digital market opportunities.
CO3	Explain emerging trends in digital marketing and critically assess the use of digital marketing tools by applying relevant marketing theories and frameworks.
CO4	Investigate and evaluate issues in adapting to globalised markets that are constantly changing and increasingly networked.
CO5	Interpret the traditional marketing mix within the context of a changing and extended range of digital strategies and tactics.

B.CA. IIIrd(JAVA LAB)

BCA-307

CO1	Able to write programs for solving real world problems using java collection frame work
CO2	Able to write programs using abstract classes.
CO3	Able to write multithreaded programs.
CO4	Able to write GUI programs using swing controls in Java.
CO5	Able to write programs using Inheritance classes

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B.CA. IIIrd(PYTHON LAB)

BCA-308

CO1	Setup python to develop simple applications.
CO2	Make use of the python programming language to construct basic programs.
CO3	Know how to use collections such as list, tuple, range, dictionary and sets.
CO4	Make use of functions, classes and objects from those classes.
CO5	Understand the concepts of inheritance and polymorphism for code reusability and extensibility

B.CA. IIIrd(DIGITAL MARKETING LAB)

BCA-309

CO1	Analyse the confluence of marketing, operations, and human resources in real-time delivery.
CO2	Demonstrate cognitive knowledge of the skills required in conducting online research and research on online markets, as well as in identifying, assessing and selecting digital market opportunities.
CO3	Explain emerging trends in digital marketing and critically assess the use of digital marketing tools by applying relevant marketing theories and frameworks.
CO4	Investigate and evaluate issues in adapting to globalised markets that are constantly changing and increasingly networked.
CO5	Interpret the traditional marketing mix within the context of a changing and extended range of digital strategies and tactics.

B.CA. IIIrd(PROJECT)

BCA-310

CO1	Demonstrate a sound technical knowledge of their selected project topic.
CO2	Undertake problem identification, formulation and solution.
CO3	Design engineering solutions to complex problems utilising a systems approach.
CO4	Conduct an engineering project.
CO5	Communicate with engineers and the community at large in written and oral forms.

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B.CA. IIIrd(Data Warehousing and Data Mining)

BCA-C01

CO1	Understand the functionality of the various data mining and data warehousing component.
CO2	Appreciate the strengths and limitations of various data mining and data warehousing models.
CO3	Explain the analyzing techniques of various data.
CO4	Describe different methodologies used in data mining and data ware housing.
CO5	Compare different approaches of data ware housing and data mining with various technologies.

B.CA. IIIrd(Network Security & Cryptography)

BCA-C02

CO1	Analyze and design classical encryption techniques and block ciphers.
CO2	Understand and analyze data encryption standard.
CO3	Understand and analyze public-key cryptography, RSA and other public-key cryptosystems
CO4	such as Diffie-Hellman Key Exchange, ElGamal Cryptosystem, etc
CO5	Understand key management and distribution schemes and design User Authentication

B.CA. IIIrd(Machine Learning)

BCA-C03

CO1	Understand the mathematical and statistical perspectives of machine learning algorithms through python programming.
CO2	Design and evaluate the unsupervised models through python in built functions.
CO3	Evaluate the machine learning models pre-processed through various feature engineering algorithms by python programming.
CO4	Design and apply various reinforcement algorithms to solve real time complex problems.
CO5	Design and develop the code for recommender system using Natural Language processing

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