

CURRICULUM AND ITS RELEVANCE TO LOCAL / NATIONAL / REGIONAL / GLOBAL NEEDS

DEPARTMENT NAME – SCHOOL OF IT

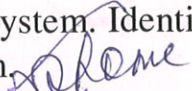
Sr. No.	Course Code	Course Name	Relevance (Local / National / Global)	Description(Importance for Student)
1	BCA-101	Communicative English	Global	Equip them with basic knowledge to pursue careers in publishing, cinema, theatre, journalism, education and advertising and also provide the students with an ability to build and enrich their communication skills.
2	BCA-102	Basic Mathematics	Global	Be able to compute limits of sequences involving elementary functions. Classify partial differential equations and transform into canonical form. Solve linear partial differential equations of both first and second order and apply partial derivative equation techniques to predict the behavior of certain phenomena.
3	BCA-103	Information Technology & Application	Global	Design and develop software solutions for contemporary business environments by employing appropriate problem solving strategies. Comprehend and resolve common desktop and network issue. Analyze common business functions and identify, design, and develop appropriate information technology solutions (in web, desktop, network, and/or database applications.
4	BCA-104	Programming in C	Global	Illustrate the flowchart and designing an algorithm for a given problem to develop c programs using operators. Develop conditional and iterative statements to write c programs. Exercise user defined functions to solve real time problems. C programs that use pointers to access arrays, strings and functions. To inculcate logical thinking amongst the young minds.



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5	BCA-105	Principle of Programming	Global	Automate the performance of a task. To analyze impacts of computing on individuals, organizations, and society. Learns the basic computer language To inculcate logical thinking amongst the young minds.
6	BCA-201	Data Structure using C	Global	Apply and implement learned algorithm design techniques and data structures to solve problems. Understand the various searching and sorting techniques.
7	BCA-202	Computer Organization	Global	Understand the working mechanism and design guidelines of different combinational, sequential circuits and their role in the digital system design. Became able to know various types of components- ADC and DAC, memory elements and the timing circuits to generate different waveforms, and also the different logic families involved in the digital system.
8	BCA-203	Operating System	Global	Understand the basics of operating systems like kernel, shell, types and views of Operating systems. Describe the various CPU scheduling algorithms and remove deadlocks. To use the computer system resources in an efficient way. Explain various memory management techniques and concept of thrashing
9	BCA-204	Introduction to Statistics	Global	Concepts of statistical population and sample, variables and attributes. Tabular and graphical representation of data based on variables. Conditions for the consistency' and criteria for the independence of data based on attributes
10	BCA-205	System Analysis & Design	Global	Conducts research on existing systems. Develop plans for the new system. Explore the technical risks involved in the system's and technical possibilities. Scheduling with using GANTT and PERT techniques. Evaluates the economic self-sufficiency whether to install the system. Identifies problems in the system.




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11	BCA-301	Software Engineering	Global	Students can conduct effective and efficient inspections. Students can explain and apply graph coverage criteria for structural coverage. Students can explain and apply data flow coverage and logic coverage. Students can explain and apply input space partitioning. Students can explain and apply mutation testing
12	BCA-302	Object Oriented Programming with C++	Global	To understand a software development problem and express it precisely. To identify the objects of a system and to establish their relationships. To implement a module structure this executes efficiently. Able to generate a design which can be converted into applications with languages
13	BCA-303	Database Management	Global	Able to model an application's data requirements using conceptual modeling tools like ER diagrams and design database schemas based on the conceptual model so as to successfully design a complete application.
14	BCA-304	Computer Networking	Global	Describe communication models TCP/IP, ISO-OSI model, network topologies along with communicating devices and connecting media. Apply knowledge of error detection, correction and learn concepts of flow control along with error control. Classify various IP addressing techniques, subnetting along with network routing protocols and algorithms. Understand various transport layer protocols and their design considerations along with congestion control to maintain Quality of Service.
15	BCA-305	Principle of Management	Global	Emanate Leadership, Creativity, Attitude, Skills, Passions and Learning from its every corner to cast its rays towards empowering business excellence in the Industry and academia. Understand the application of theoretical studies into the real time application
16	BCA-401	Java Programming	Global	Understand & analyze the Java features and Program Structure. Apply the concepts of encapsulation in classes and objects. Classify and implement the types of Inheritance & Packages with exception handling.

17	BCA-402	Discrete Mathematics	Global	Understand mathematical reasoning in order to read, comprehend and construct mathematical arguments .Count or enumerate objects and solve counting problems and analyze algorithms. Solve problems in almost every conceivable discipline using graph models .Solve the linear system of equations and Apply the principles of correlation and regression in practical problems.
18	BCA-403	Environmental Science	Global	Acquire values and attitudes towards understanding complex environmental-economic social challenges, and participating actively in solving current environmental problems and preventing the future ones. Adopt sustainability as a practice in life, society and industry.
19	BCA-404	Artificial Intelligence	Global	Relate the basic concepts and technologies used in the field of management information systems. Compare the processes of developing and implementing information systems. Outline the role of the ethical, social, and security issues of information systems. Translate the role of information systems in organizations, the strategic management processes, with the implications for the management
20	BCA-405	Internet & Web Design	Global	Understand basics of web technologies. Create interactive web applications using latest web technologies. Publish and maintain interactive web applications.
21	BCA-501	Windows Programming Using VB.Net	Global	Design, formulate, and construct applications with VB.NET. Integrate variables and constants into calculations applying VB.NET. Determine logical alternatives with VB.NET decision structures. Implement lists and loops with VB.NET controls and iteration. Separate operations into appropriate VB.NET procedures and functions. Assemble multiple forms, modules, and menus into working VB.NET solutions
22	BCA-502	Organizational Behaviour	Global	The students will be able to justify how organizational change and conflict affect working relationships within organizations

				and demonstrate how to apply relevant theories to solve problems of change and conflict within organizations.
23	BCA-503	Python Programming	Global	Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python .Express different Decision Making statements and Functions .Interpret Object oriented programming in Python. Understand and summarize different File handling operations
24	BCA-504	E-Commerce	Global	Have the knowledge of the different types of management information systems. Understand the processes of developing and implementing information systems. Be aware of the ethical, social, and security issues of information systems.
25	BCA-505	Business English	Global	Educate students in both the artistry and utility of the English language through the study of literature and other contemporary forms of culture. Provide students with the critical faculties necessary in an academic environment, on the job, and in an increasingly complex, interdependent world.
26	BCA-601(A)	Advanced Web Technology	Global	Understand basics of web technologies. Create interactive web applications using latest web technologies. Publish and maintain interactive web applications. Use XML standards and tools towards smart web applications.
27	BCA-601(B)	Data Mining & Data Warehouse	Global	Learn fetch the data easily from large value of data. Understand the tools and technique of data mining. Able to apply data mining techniques in various application and its case studies. Know the architecture of data ware house and its application
28	BCA-602	Software Project Management	Global	Students can compute test coverage and yield, according to a variety of criteria. Students can use statistical techniques to evaluate the defect density and the likelihood of fault
29	BCA-603	Project & Viva	Global	The Student should submit spiral bound copy of the project report. This should give a clear picture of the project. Objective should be clearly specified.



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