



Visvesvaraya Technological University, Belagavi
Centre for Online Education, Mysuru (VTU-COE)
Interactive Live Lecture Schedule for BCA

Programme Name : BCA in Data Analytics / BCA in Data Science

Date	Time	Course Name & Course Code	Module	Topics to be covered	Name of the Course Expert
24-11-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-1	MATRICES Definition, Types of Matrices, Addition, Subtraction, Scalar Multiplication and Multiplication of Matrices, Adjoint, Inverse, Eigen values and Eigen Vectors of a Matrix	Dr. Roopa K M Professor, Dept. of Mathematics, BIT Bangaluru
25-11-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-1	Introduction to computers: Characteristics of computers, Classification of Digital Computer Systems: Microcomputers, Minicomputers, Mainframes, Supercomputers	Dr.Kumar P K Assistant Professor, Dept. Of CSE, VTU CPGS Mysuru
26-11-2023	6:00 - 7:00 pm	Programming in C OBCA103	Module-1	Problem Solving techniques: Introduction, Problem solving procedure, Algorithm: Steps involved in algorithm development, Algorithms for simple problems: To find largest of three numbers, factorial of number , check for prime number ,check for palindrome	Prof. Saraswati R Bhusanur Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
26-11-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-1	Introduction: Definition, Computer system components, User view, system view and system goals , Batch Systems	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
27-11-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-1	Caley-Hamilton Theorem (Statement only) Rank of a matrix, Row reduced echelon form and normal form Solution of homogeneous and non homogeneous system of linear equations.	Dr. Roopa K M Professor, Dept. of Mathematics, BIT Bangaluru
28-11-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-1	Anatomy of Computer: Introduction, Functions & Components of a Computer, Central Processing Unit, Microprocessor, Storage units	Dr.Kumar P K Assistant Professor, Dept. Of CSE, VTU CPGS Mysuru
29-11-2023	7:00 - 8:00 pm	Programming in C OBCA103	Module-1	Count no.of odd , even and zeros in list of integers. Flowcharts: Definition, advantages, Symbols used in flow charts.Flowcharts for simpleproblems mentioned in algorithms. Psuedocode.	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
30-11-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-1	Multi programmed Systems, Time-Sharing Systems, Real-Time Systems, System Components, Operating system services, System calls and system programs.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
04-12-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-2	SETS: Sets, Subsets, Types of Sets, Operation on Sets	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
05-12-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-1	Input and output Devices. How CPU and memory works. Program execution with illustrative examples. Introduction to microcontrollers.	Dr. Sivaprakash C, Associate Profesor & Head, Dept. Of CSE, SSEC, Bengaluru
06-12-2023	7:00 - 8:00 pm	Programming in C OBCA103	Module-1	Introduction to C: Overview of C Program, Importance of C Program, Basic structure of a C-program, Execution of C Program. Constants, Variables & Data types: Character set, C token, Keywords & identifiers, Constants, Variables, datat ypes, Declaration of variables, assigning values to variables, defining symbolic constants.	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi

07-12-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-1	Process: Process Concept, process state diagram process Control block , Process Scheduling- Scheduling queues, scheduler, Cooperating process, Interprocess Communication, Threads- meaning , user threads , Kernel Threads, Multithreading Models, Threading Issues.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
11-12-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-2	Cartesian product , Cardinality of sets and applications.	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
12-12-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-2	Operating System Fundamentals: Operating Systems: Introduction, Functions of an operating System, Classification of Operating Systems	Dr. Sivaprakash C, Associate Profesor & Head, Dept. Of CSE, SSEC, Bengaluru
13-12-2023	7:00 - 8:00 pm	Programming in C OBCA103	Module-2	Operators and Expression: Arithmetic, Relational, logical, assignment, increment & decrement, conditional, bit wise & special operators	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
14-12-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-2	CPU Scheduling Basic concepts, Preemptive and Non-preemptive Scheduling	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
18-12-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-3	ALGEBRAIC STRUCTURES: Binary operations, groups, semi-groups, subgroups, normal subgroups	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
19-12-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-2	System programs, Application programs, Utilities, The Unix Operating System, Basic Unix commands.	Dr. Sivaprakash C, Associate Profesor & Head, Dept. Of CSE, SSEC, Bengaluru
20-12-2023	7:00 - 8:00 pm	Programming in C OBCA103	Module-2	evaluation of expressions, Precedence of arithmetic operators, type conversions in expressions, operator precedence & Associativity, built in mathematical functions.	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
21-12-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-2	Scheduling Criteria, Scheduling algorithms FCFS, Shortest job first Priority scheduling, Round Robin Scheduling.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
26-12-2023	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-3	isomorphism and homomorphism. RINGS: Integral domains and fields.	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
27-12-2023	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-3	Database applications, Database users, Introduction to SQL, Data types, Classification of SQL-DDL with constraints, DML, DCL	Dr. Sivaprakash C, Associate Profesor & Head, Dept. Of CSE, SSEC, Bengaluru
28-12-2023	7:00 - 8:00 pm	Programming in C OBCA103	Module-3	Managing Input and Output operations: Reading & writing a character, formatted input and output. Decision Making and Branching: Decision making with if statement, simple if statement	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
29-12-2023	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-3	Process Synchronization The Critical section problem, Solution Approach critical section problem, Bakery Algorithm, Semaphores Meaning	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
02.01.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-4	DIFFERENTIAL CALCULUS: Limits, Continuity, Successive differentiation, n^{th} derivative of standard functions	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru

03.01.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-3	Database applications, Database users, Introduction to SQL, Data types, Classification of SQL-DDL with constraints, DML, DCL	Dr. Sivaprakash C, Associate Professor & Head, Dept. Of CSE, SSEC, Bengaluru
04.01.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-3	the if else statement, nesting of if ... else statements, the else if ladder, the switch statement, the ?: operator, the goto statement. Decision making and looping: The while statement, the do statement, for statement, exit, break, jumps in loops.	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
05.01.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-3	Types of Semaphores, Synchronization problems- Bounded Buffer Problem, Readers-Writers problem and Dining Philosophers problem.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
08.01.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-4	Leibnitz theorem for finding n^{th} derivative of product of two functions. Taylor's series and Maclaurin's series.	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
09.01.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-4	Computer Networks: Data transmission media, Network types and Topologies, Network devices, Network architecture, Application layer protocols, obtains essential system network information using system tools	Dr. Sivaprakash C, Associate Professor & Head, Dept. Of CSE, SSEC, Bengaluru
10.01.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-3	Arrays: Declaration, initialization & access of one dimensional & two dimensional arrays. Programs using one and two dimensional arrays- sorting and searching arrays. Handling of Strings:	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
11.01.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-3	Deadlocks Deadlock Characterization, Methods for Handling Deadlocks, Deadlock Prevention, Deadlock Avoidance, Deadlock Detection, Recovery from Deadlock.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
15.01.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-4	Partial differentiation: Partial derivatives	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru
16.01.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-4	network interfaces and their addresses, active processes using network communication.	Prof Guruprasad Y K, Associate Professor Dept. Of ISE, Sri Venkateshwara College of Engineering, Bengaluru
17.01.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-4	Declaring & initializing string variables, reading strings from terminal, writing strings to screen, Arithmetic operations on characters, String Handling functions, table of strings.	Prof. Saraswati R Bhusanur, Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
18.01.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-4	Memory Management Introduction, Logical versus physical address space, Dynamic Loading, Dynamic Linking, Swapping	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
22.01.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-4	Homogeneous function, Euler's theorem, maxima and minima for function of two variables.	Dr. Roopa K M, Professor, Dept. of Mathematics, BIT Bangaluru

23.01.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-5	Basic network debugging: using trace route to discover route to a remote computer, ping to check network connectivity.	Prof Guruprasad Y K , Associate Professor Dept. Of ISE, Sri Venkateshwara College of Engineering, Bengaluru
24.01.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-4	User defined functions: Need for user defined functions, Declaring, defining and calling C functions return values & their types, Categories of functions: With/without arguments, with/without return values. Nesting of functions	Prof. Saraswati R Bhusanur , Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
25.01.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-4	Contiguous Allocation, Partitioned Memory Allocation, Paging, Segmentation, Segmentation with Paging.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
29.01.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-5	ORDINARY DIFFERENTIAL EQUATIONS (ODE'S) OF FIRST ORDER WITH FIRST DEGREE Variable separable, Homogenous	Dr. Roopa K M , Professor, Dept. of Mathematics, BIT Bangalore
30.01.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-5	Internet & Web Basics: Introduction, Features of Internet, Internet application, Services of Internet, Logical and physical addresses	Prof Guruprasad Y K, Associate Professor Dept. Of ISE, Sri Venkateshwara college of engineering, Bengaluru-562157
31.01.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-5	Recursion: Definition, example programs. Storage classes: The scope, visibility & lifetime of variables. Structures and union: Structure definition, giving values to members, structure initialization, comparison of structure variables, arrays of structures, arrays within structures, Structure and functions	Prof. Saraswati R Bhusanur , Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
01.02.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-5	File System File concepts, File Attributes, File Operations, File Types, File Structure, Access Methods	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera
05.02.2024	7:00 - 8:00 pm	Foundation of Mathematics -I OBCA101	Module-5	Reducible to homogenous, Linear, Reducible to linear and Exact ODE'S. Application: Orthogonal Trajectories.	Dr. Roopa K M , Professor, Dept. of Mathematics, BIT Bangalore
06.02.2024	7:00 - 8:00 pm	Fundamentals of Computers OBCA102	Module-5	Internet Service Providers, Domain Name System. Web Basics: Introduction to web, webpages and websites, web browsers, http/https, URL.	Prof Guruprasad Y K , Associate Professor Dept. Of ISE, Sri Venkateshwara College of Engineering, Bengaluru
07.02.2024	7:00 - 8:00 pm	Programming in C OBCA103	Module-5	Recursion: Definition, example programs. Storage classes: The scope, visibility & lifetime of variables. Structures and union: Structure definition, giving values to members, structure initialization, comparison of structure variables, arrays of structures, arrays within structures, Structure and functions	Prof. Saraswati R Bhusanur , Assistant Professor, Dept. Of CSE, VTU CPGS, Belagavi
08.02.2024	7:00 - 8:00 pm	Introduction to Operating system OBCA104	Module-5	Directory Structure, File-System Structure, Allocation Methods- Contiguous Allocation, Linked Allocation and Indexed Allocation, Free-Space Management.	Prof. Latharani T R Assistant Professor, Dept. Of CSE, Jain IT, Davanagera