



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Computer Architecture & Organization

Faculty : Ms. Ratnaprabha W. Jasutkar

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Basic Structure of Computers	18/08/2017	BCSL202	D
1	2	Functional units	18/08/2017	BCSL202	D
1	3	Basic operational concepts	21/08/2017	BCSL202	D
1	4	Bus structures Addressing modes	22/08/2017	BCSL202	D
1	5	parameter passing	24/08/2017	BCSL202	D
1	6	Instruction formats	25/08/2017	BCSL202	D
1	7	expanding opcodes method	25/08/2017	BCSL202	D
2	8	Basic Processing Unit	28/08/2017	BCSL202	D
2	9	Bus architecture	29/08/2017	BCSL202	D
2	10	Execution of a Complete Instruction	31/08/2017	BCSL202	D
2	11	sequencing of control signals	04/09/2017	BCSL202	D
2	12	Hardwired control	05/09/2017	BCSL202	D
2	13	Microprogrammed Control	07/09/2017	BCSL202	D
2	14	microinstruction format	08/09/2017	BCSL202	D
2	15	Bit slice concept	08/09/2017	BCSL202	D
3	16	Arithmetic Unit	11/09/2017	BCSL202	D
3	17	Number representations and their operations	12/09/2017	BCSL202	D
3	18	Design of Fast Adders	14/09/2017	BCSL202	D
3	19	Signed multiplication	15/09/2017	BCSL202	D
3	20	Booth's Algorithm	15/09/2017	BCSL202	D
3	21	bit-pair recoding	18/09/2017	BCSL202	D
3	22	Integer Division	19/09/2017	BCSL202	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Computer Architecture & Organization

Faculty : Ms. Ratnaprabha W. Jasutkar

Unit	Topic Code	Topic Covered	Date	Course	Section
3	23	Floating point numbers and operations	22/09/2017	BCSL202	D
3	24	guard bits and rounding	22/09/2017	BCSL202	D
4	25	The Memory System	25/09/2017	BCSL202	D
4	26	Various technologies used in memory design	26/09/2017	BCSL202	D
4	27	higher order memory design	28/09/2017	BCSL202	D
4	28	Multimodal memories and interleaving	29/09/2017	BCSL202	D
4	29	Associative Memory	29/09/2017	BCSL202	D
4	30	Cache memory	02/10/2017	BCSL202	D
4	31	Virtual Memory	03/10/2017	BCSL202	D
5	32	Input /Output Organization	05/10/2017	BCSL202	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Dighdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Data Structure Using C

Faculty : Shruti Giridhar Mule

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to data structure	18/08/2017	BCSL201	D
1	1	Introduction to Arrays, Linear arrays, Arrays as ADT, Representation of linear in memory	18/08/2017	BCSL201	D
1	2	Inserting & deleting, Traversing Linear Arrays, Sorting: Bubble sort,	18/08/2017	BCSL201	D
1	3	Searching: Linear search, Binary search	21/08/2017	BCSL201	D
1	4	Multidimensional arrays, Representation of Polynomials using Arrays,	21/08/2017	BCSL201	D
1	5	Record & Pointers, Pointer arrays, Dynamic memory management, Records, Record structures,	22/08/2017	BCSL201	D
1	6	Representation of records in memory, Parallel Arrays, Matrices, Sparse Matrices.	23/08/2017	BCSL201	D
6	7	Programs on Array, Sorting & searching, Introduction to Sorting, Insertion Sort, Selection Sort	28/08/2017	BCSL201	D
6	8	Merging, Merge-Sort, Shell Sort, Radix Sort, Sorting Techniques Comparison	28/08/2017	BCSL201	D
6	9	Searching and Data Modification, Hashing, Programs on Sorting & searching	30/08/2017	BCSL201	D
6	10	Introduction to linked list, Representation of linked Lists in Memory (Video Lecture),	01/09/2017	BCSL201	D
6	11	Program on Linked list, Insertion in to a linked list, Deletion from a linked list.	01/09/2017	BCSL201	D
6	12	Traversing a Linked list, Searching a linked list, Memory allocation, Garbage collection.	04/09/2017	BCSL201	D
6	13	Types of Linked list & their Use, Insertion and Deletion from a Circularly linked list.	04/09/2017	BCSL201	D
6	14	Two way lists or Doubly Linked List., Doubly Linked List Programs	05/09/2017	BCSL201	D
2	15	Exercise on Linked list , Introduction to Stacks, Array representation of stacks.	06/09/2017	BCSL201	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road,Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise TeachingPlan for Session : Winter 2017

Course : Data Structure Using C

Faculty : Shruti Giridhar Mule

Unit	Topic Code	Topic Covered	Date	Course	Section
2	16	Linked representation of stacks. Stacks as ADT.C41	08/09/2017	BCSL201	D
2	17	Arithmetic expression. Polish Notation. (Video Lecture)	08/09/2017	BCSL201	D
2	18	Applications of Stacks. Recursion., Towers of Hanoi, Implementation of recursive procedures by stacks.	11/09/2017	BCSL201	D
2	19	Linked Representation of Queues, Queues as ADT., Circular of Queues, Deques, Priority Queues, Applications of Queues	11/09/2017	BCSL201	D
3	20	Programs on Prefix, Postfix and Infix, Introduction to Non Linear Data Structure, Header Nodes; Binary tree ,Binary Search Trees	12/09/2017	BCSL201	D
3	21	Implementation of Tree using Array & Linked List, Introduction to Binary Trees. Representing Binary Tree in Memory	13/09/2017	BCSL201	D
3	22	Searching and Inserting in Binary Search Trees, Deleting in a Binary Search Tree, Threads ,Threaded Binary Trees	15/09/2017	BCSL201	D
4	23	Traversing Binary Trees, Traversal Algorithms Using Stacks	15/09/2017	BCSL201	D
4	24	B-tree & B++ Tree, AVL Tree (Insertion & Deletion Algorithm)(Video Lecture)	18/09/2017	BCSL201	D
4	25	Balanced Binary Trees, AVL Search Trees, Insertion in an AVL Search Tree ,Deletion in an AVL Search Tree	18/09/2017	BCSL201	D
4	26	Programs on Binary Search Tree, Programs on Traversal of tree	19/09/2017	BCSL201	D
5	27	Introduction to graphs , Graph Theory,	20/09/2017	BCSL201	D
5	28	Terminology , Sequential Representation of Graphs,	22/09/2017	BCSL201	D
5	29	Adjacency Matrix; Path Matrix, Linked Representation of a Graph,	22/09/2017	BCSL201	D
5	30	Programs on Prefix, Postfix and Infix, Introduction to Non Linear Data Structure, Header Nodes; Binary tree ,Binary Search Trees	25/09/2017	BCSL201	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Data Structure Using C

Faculty : Shruti Giridhar Mule

Unit	Topic Code	Topic Covered	Date	Course	Section
5	31	Operations on Graphs. Traversing a Graph,	25/09/2017	BCSL201	D
5	32	Warshall's Algorithm; Shortest Paths., Prims & Kruskals Algorithm, Programs on Shortest Path	26/09/2017	BCSL201	D
5	33	Topological Sorting,	27/09/2017	BCSL201	D
5	34	Spanning Trees,	29/09/2017	BCSL201	D
5	35	Programs on BFS and DFS	29/09/2017	BCSL201	D
0	36	Revision	03/10/2017	BCSL201	D
0	37	Revision	04/10/2017	BCSL201	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Introduction to Internet Programming

Faculty : SIDDHANT K. JAISWAL

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Html- Forms	14/06/2017	BITL201	A
1	2	List on notepad	15/06/2017	BITL201	A
1	3	Tables, Frames creation	19/06/2017	BITL201	A
1	4	Cascading Styles-Web Page Design	21/06/2017	BITL201	A
1	5	Cascading Styles-Web Page Design	22/06/2017	BITL201	A
1	45	Basics of Styling	26/06/2017	BITL201	A
1	6	Structure Web Page Design	28/06/2017	BITL201	A
1	7	Structure Web Page Design	03/07/2017	BITL201	A
1	8	Content Using Block And Inline Tags	05/07/2017	BITL201	A
1	9	Content Using Block And Inline	07/07/2017	BITL201	A
1	10	Default CSS Styles and implementation	10/07/2017	BITL201	A
1	11	Hyperlinks And Images creation in forms	12/07/2017	BITL201	A
2	13	Designing Template in Wordpress	19/07/2017	BITL201	A
2	12	Forms input	21/07/2017	BITL201	A
2	15	Connecting components	24/07/2017	BITL201	A
2	16	Hosting on Wordpress	26/07/2017	BITL201	A
2	14	Wordpress	28/07/2017	BITL201	A
3	18	Writing Javascript Into Html	31/07/2017	BITL201	A
3	19	Programming Techniques for Javascript	02/08/2017	BITL201	A
3	17	Javascript programming	04/08/2017	BITL201	A
3	21	Operation And Expression In Javascript	09/08/2017	BITL201	A
3	20	Programming Constructs	11/08/2017	BITL201	A



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Introduction to Internet Programming

Faculty : SIDDHANT K. JAISWAL

Unit	Topic Code	Topic Covered	Date	Course	Section
3	23	Programming Constructs	14/08/2017	BITL201	A
4	24	Dynamic Html – Introduction and basic implementation	16/08/2017	BITL201	A
1	22	html- Forms	19/08/2017	BITL201	A
4	25	Cascading Style Sheets with Class	21/08/2017	BITL201	A
4	26	Cascading Style Sheets with Class	23/08/2017	BITL201	A
4	27	External Style Sheet implementation	24/08/2017	BITL201	A
1	46	List on notepad	24/08/2017	BITL201	A
1	47	tables, Frames creation	26/08/2017	BITL201	A
4	28	Connecting with database	28/08/2017	BITL201	A
4	29	Working With Jsss And Layers	30/08/2017	BITL201	A
4	30	Working With Jsss And Layers	31/08/2017	BITL201	A
1	48	Cascading Styles-Web Page Design	31/08/2017	BITL201	A
1	49	Structure Web Page Design	31/08/2017	BITL201	A
1	50	content Using Block And Inline Tags	02/09/2017	BITL201	A
5	31	Introduction to Python	04/09/2017	BITL201	A
5	32	Basics of Python programming	06/09/2017	BITL201	A
5	33	Python program implementation	07/09/2017	BITL201	A
2	51	Designing Template in Wordpress	09/09/2017	BITL201	A
5	34	Web programming using Python	11/09/2017	BITL201	A
5	35	Web programming using Python	13/09/2017	BITL201	A
5	36	External Style Sheet	14/09/2017	BITL201	A
2	52	Forms input	14/09/2017	BITL201	A



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Introduction to Internet Programming

Faculty : SIDDHANT K. JAISWAL

Unit	Topic Code	Topic Covered	Date	Course	Section
2	53	Connecting components	16/09/2017	BITL201	A
5	37	Hosting website	18/09/2017	BITL201	A
5	38	Hosting website	20/09/2017	BITL201	A
6	39	J2ee Advantages	21/09/2017	BITL201	A
3	54	hosting on Wordpress	21/09/2017	BITL201	A
2	55	Wordpress	23/09/2017	BITL201	A
6	40	Enterprise Architecture Types	25/09/2017	BITL201	A
6	41	J2ee Components, Containers	27/09/2017	BITL201	A
6	42	J2ee Components, Containers	28/09/2017	BITL201	A
3	56	Writing Javascript Into Html	30/09/2017	BITL201	A
6	43	Types Of J2ee Technology	04/10/2017	BITL201	A
6	44	Types Of J2ee Technology	05/10/2017	BITL201	A
3	57	Programming Techniques for Javascript	05/10/2017	BITL201	A
3	58	Javascript programming	07/10/2017	BITL201	A





# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Mathematical Applications in Computational  
Engineering

Faculty : Mr. Bhagwat Thakran

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Laplace Transform	18/08/2017	BAML204	D
1	2	Transform of derivatives and integrals	19/08/2017	BAML204	D
1	3	Evaluation of integrals by L.T. ,inverse L.T.& its properties	19/08/2017	BAML204	D
1	1	TUTORIAL-1	21/08/2017	BAML204	D
1	4	Convolution theorem	23/08/2017	BAML204	D
1	5	Laplace transforms of periodic function & unit step function	24/08/2017	BAML204	D
1	6	Inverse Laplace Transform	25/08/2017	BAML204	D
1	7	Application of Laplace transform to solve ordinary differential equation	26/08/2017	BAML204	D
2	8	The Z transform: Definition & Properties	26/08/2017	BAML204	D
2	2	TUTORIAL-2	28/08/2017	BAML204	D
2	9	Properties	30/08/2017	BAML204	D
2	10	Inverse Z-transform	31/08/2017	BAML204	D
3	3	TUTORIAL-3	04/09/2017	BAML204	D
2	11	Inverse Z-transform	06/09/2017	BAML204	D
2	12	Inverse Z-transform	07/09/2017	BAML204	D
2	13	Inverse Z-transform	08/09/2017	BAML204	D
2	14	Application of Z- transform to solve difference equation with constant coefficients	09/09/2017	BAML204	D
3	15	Fourier Series: Periodic Function	09/09/2017	BAML204	D
4	4	TUTORIAL-4	11/09/2017	BAML204	D
3	16	Even & odd function with examples	13/09/2017	BAML204	D
3	17	Change of interval	14/09/2017	BAML204	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Mathematical Applications in Computational

Faculty : Mr. Bhagwat Thakran

Engineering Unit	Topic Code	Topic Covered	Date	Course	Section
3	18	Fourier Transform: Fourier integral theorem, Fourier Transform and their simple properties	15/09/2017	BAML204	D
4	19	Partial Differential Equation and its application : P. D.E. of 1st order & 1st degree	16/09/2017	BAML204	D
4	20	Higher order PDE	16/09/2017	BAML204	D
5	5	TUTORIAL-5	18/09/2017	BAML204	D
4	21	method of separation of variable	22/09/2017	BAML204	D
4	22	Application of PDE	23/09/2017	BAML204	D
5	23	Random Variables: Random Variables	23/09/2017	BAML204	D
6	6	TUTORIAL-6	25/09/2017	BAML204	D
5	24	Distribution functions of continuous function	27/09/2017	BAML204	D
5	25	Joint distribution	28/09/2017	BAML204	D
5	26	Mathematical expectation	29/09/2017	BAML204	D
5	27	Moment generating function	30/09/2017	BAML204	D
6	28	Special probability distribution: Geometric expansion	30/09/2017	BAML204	D
6	29	Binomial expansion, Poisson's expansion	04/10/2017	BAML204	D
6	30	Normal, Exponential, Uniform Weibul probability distribution	05/10/2017	BAML204	D



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Object Oriented Programming Through C++

Faculty : Kapil K.Wankhade

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to C++ history	14/06/2017	BITL202	A
1	2	Differences between C and C++	16/06/2017	BITL202	A
1	3	Object oriented programming paradigm, basic concepts of OOP, Benefits of OOP	19/06/2017	BITL202	A
1	4	basic concepts of OOP, Benefits of OOP	19/06/2017	BITL202	A
1	5	basic concepts of OOP, Benefits of OOP	21/06/2017	BITL202	A
1	6	OO languages, A sample program, structure of C++ program.	23/06/2017	BITL202	A
1	7	OO languages, A sample program, structure of C++ program.	28/06/2017	BITL202	A
1	8	Introduction to OOPS, What is Object Oriented Programming	03/07/2017	BITL202	A
1	9	Some C++ fundamentals, Headers & Name Spaces, Introducing C++ Classes,	03/07/2017	BITL202	A
1	10	Function overloading	05/07/2017	BITL202	A
1	11	Operator overloading	06/07/2017	BITL202	A
1	12	Inheritance	07/07/2017	BITL202	A
1	13	Constructors & Destructors, Function & Operator Overriding	10/07/2017	BITL202	A
2	14	Constructor functions, Localizing variables	12/07/2017	BITL202	A
2	15	Function overloading & Ambiguity	13/07/2017	BITL202	A
2	16	Finding the address of an overloaded function	14/07/2017	BITL202	A
2	17	this Pointer,	20/07/2017	BITL202	A
2	18	Operator overloading, References	21/07/2017	BITL202	A
2	19	Creating own exception subclasses	24/07/2017	BITL202	A
2	20	Using reference to overload a unary operator	28/07/2017	BITL202	A



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Object Oriented Programming Through C++

Faculty : Kapil K.Wankhade

Unit	Topic Code	Topic Covered	Date	Course	Section
2	50	Operator Overloading	31/07/2017	BITL202	A
2	51	Operator Overloading	31/07/2017	BITL202	A
2	21	Overloading [], overloading ( ), Applying operator overloading	02/08/2017	BITL202	A
3	22	Inheritance and the access specifiers	03/08/2017	BITL202	A
3	23	Constructors and Destructors in derived classes	04/08/2017	BITL202	A
3	24	Multiple Inheritance, Passing parameters to a basic class	09/08/2017	BITL202	A
3	25	Pointers and references to derived types	10/08/2017	BITL202	A
3	26	Virtual Functions, Why virtual functions?,	11/08/2017	BITL202	A
3	27	Pure virtual functions and abstract types	14/08/2017	BITL202	A
3	28	Early Vs Late binding.	16/08/2017	BITL202	A
1	61	Introduction to OOP language, basics of C++, class, object, constructor	19/08/2017	BITL202	A
4	29	Static & Dynamic allocation using new and delete	21/08/2017	BITL202	A
1	62	Class, object, constructor, Constructor overloading, function overloading	22/08/2017	BITL202	A
4	30	static class members, Virtual base classes	23/08/2017	BITL202	A
4	31	const member functions and mutable	24/08/2017	BITL202	A
2	63	Overloading- constructor and operator overloading	26/08/2017	BITL202	A
4	32	volatile member functions	28/08/2017	BITL202	A
4	33	Using the asm keyword, linkage specification	30/08/2017	BITL202	A
4	34	The .* and ->* operators	31/08/2017	BITL202	A
4	35	Creating conversion functions, Copy constructors	01/09/2017	BITL202	A



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Winter 2017

Course : Object Oriented Programming Through C++

Faculty : Kapil K.Wankhade

Unit	Topic Code	Topic Covered	Date	Course	Section
4	36	Granting access, namespaces	04/09/2017	BITL202	A
2	64	this pointer, new and delete operator	05/09/2017	BITL202	A
4	37	Explicit constructors	06/09/2017	BITL202	A
4	38	typename and export	07/09/2017	BITL202	A
5	39	Class templates,	08/09/2017	BITL202	A
3	65	Inheritance & its type	09/09/2017	BITL202	A
5	40	class templates with multiple parameters	11/09/2017	BITL202	A
3	66	Virtual functions & pure virtual function	12/09/2017	BITL202	A
5	41	function templates	15/09/2017	BITL202	A
5	42	function templates with multiple parameters	15/09/2017	BITL202	A
3	67	Polymorphism in inheritance	16/09/2017	BITL202	A
6	43	Exception Handling, fundamentals	18/09/2017	BITL202	A
6	44	options the uncaught exception ( )	20/09/2017	BITL202	A
6	45	Applying exception Handling	21/09/2017	BITL202	A
6	46	RTTI, casting operators	22/09/2017	BITL202	A
4	68	Static and dynamic allocation	23/09/2017	BITL202	A
6	47	Recent trends in Object Oriented Programming in C++	25/09/2017	BITL202	A
4	69	pointer to base class, copy constructor, use of reference operator	26/09/2017	BITL202	A
6	48	Advanced topic- Graphics	27/09/2017	BITL202	A
4	70	Run-time polymorphism	03/10/2017	BITL202	A
6	49	Introduction to OpenGL	04/10/2017	BITL202	A