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Phones: 08678 - 273535 / 94914 57799 / 73826 16824
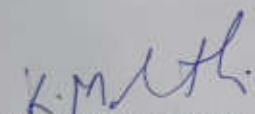E mail: office@mictech.ac.in, Website: www.mictech.edu.in

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NAAC
With Grade A

Department of Artificial Intelligence

List of Value Added Courses

A.Y:2022-23

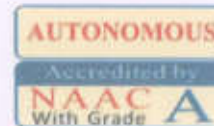| S.No	Name of The Course	Dates	Year	No. of Students Attended
1	Training Programme On DS with Python and C	28-11-2022 to 21-12-2022	II B. Tech AIDS III Semester	70
2	Training Programme on JAVA and C with DS	12-04-2023 to 06-05-2023	II B. Tech AIDS IV Semester	70

Signature of Coordinator

Signature of HoD

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DEPARTMENT: Training and Placement

DATE: 25-12-2022

ACADEMICYEAR:2022-23

ORIGINATOR	Principal
CIRCULATED TO	HODs, Faculty and II B. Tech (CSE,ECE,IT,MECH,CIVIL,EEE,AIML,AIDS)Students – All Departments

Training Programme

All the HOD's, staff and studentsare here by informed that the training andplacement section is conducting training classes on **Data Structures with python** for II B.Tech (CSE,ECE, IT, MECH, CIVIL, EEE, AIML, AIDS) student's from 28.11.22 to 21.12.22. The training schedule is as follows.

Training schedule:

Timings:9.15AMto12.30PM(Forenoon)

1.15 PMto4.30PM(Afternoon)

Venues:

CSESeminarHall   CSE&ECEBatch1

ECESeminarHall   CSE&ECEBatch2

EEESeminarHall   IT, MECH, CIVIL, EEE

Room no:1108   AIDS,AIML

HODs are here by informed to depute their T&P Coordinator & faculty(as per timetable) at the venues.

Principal

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Department of AI

DS WITH PYTHON AND C

byte XL

28-11-2022
to
21-12-2022

Registration Free

RESOURSE PERSON FROM
BYTEXL India Private Limited
Software Company
Hyderabad, Telangana

Coordinator
Mr.G.RAMAMOHANA RAO
Assistant Professor
Department of IT

Principal
Dr.K.Srinivas

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Kanchikacherla, NTR Dt.
Andhra Pradesh, India - 521180
M.Tech, Ph.D

TOPICS COVERED

1.INTODUCTION
2. PYTHON DSA
3 BIT MAGIC
4. LISTS
5. RECURSION
6, SEARCHING
7.SORTING
8.HASHING
9.STRINGS
10.LINKED LISTS
11.STACK
12.QUEUQE
13DEQUE
14.TREE
15 BINARY SEARCH TREE
16.HEAP
17.GRAPH
18.GREEDY METHOD
19.BACKTRACKING
20.TRIE

Name of the Event: DATA STRUCTURES **Date: 23-12-2022**

Department: AIDS **Academic Year: 2022-23**

Topic: DATA STRUCTURES WITH PYTHON

Date of the Event: 28-11-2022-21-12-2022

Resource Person:

Name of the coordinator: G.RAMAMOHANA RAO
  Asst Professor, Dept of IT
Target Audience: B. Tech AIDS II YEAR students

Total no of Participants: 70

Learning Outcomes

1. To understand basic data structures, their implementation and some of their standard applications.

2. To develop the ability to design and analyze basic algorithms and prove their correctness using the appropriate data structure learned in the course.

Course Objectives

- Be familiar with basic techniques of algorithm analysis
- Be familiar with writing recursive methods
- Master the implementation of linked data structures such as linked lists and binary trees
- Be familiar with advanced data structures such as balanced search trees, hash tables, priority queues and the disjoint set union/find data structure
- Be familiar with several sub-quadratic sorting algorithms including quick sort, merge sort and heap sort.

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Description:

DVR & Dr. HS MIC College of Technology
Syllabus for DATA STRUCTURES with Python

Topic	Sub Topic
Python for DS	Revision of Python and Problems on arrays
ASYMTOTIC NOTATIONS	Introduction To Performance Analysis(Best, Average Worst). Introduction To Space And Time Complexities. Introduction To Asymptotic Notations, types Of Asymptotic Notations, Time Complexities Of Different Types Like (Constant Time, Logarithmic Time, Linear Time, Quasilinear Time, Quadratic Time, Exponential Time, Factorial Time), Master'S Theorem
LINKED LISTS	Introduction About Linked Lists, All Types(Single) And Its Operations
	Deletion Of Duplicates(Sorted And Unsorted),K Th Swapping Problem, Linkedlist Rotations
STACKS	Introduction To Stacks And Its Operations And Applications, Stacks As Linked List And Stack As Array, Balancing Parenthesis, Expression Conversion - (Infix, Prefix, Postfix), Expression Evaluation (Infix, Prefix, Postfix)
QUEUES	Introduction To Queue And Its Operations And Applications, Queue As Linked List And As Array. Types Of Queue and Circular Queue. , Priority Queue, Deque, Queue Implementation Using Stacks, Queue Programs
TREES	Introduction To Trees And Its Applications, Tree Terminologies And Its Types. Binary Tree representations - array, Linked List, Tree representations - Full, complete, binary, skewed, Formulae and programs
	Tree Traversals (Inorder, Preorder, Postorder, and Level Order), Tree Construction From Traversals, Depth Of Tree
	Binary Search Tree - Creation, Insertion(all types), BST construction from preorder, Binary tree to BST, array to BST(level order,preOrder), BST - deletion(all types), Traversals, all Standard Operations, BST Programs
GRAPHS	Introduction To Graphs And Its Applications Graph Terminologies And Types Of Graphs Graph Representation Using Adjacency List And Matrix
	Traversals(Bfs And Dfs) Cycle Detection In Graphs Programs, minimum spanning tree (kruskal's and Prim's algorithm)

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Website : www.mictech.edu.in

HEAPS & HASHING	Implementation of Heaps, Binary Heap , Applications of hashing, Discussion on Direct Address Table, Collision handling, Problem on Heaps and Hashing
SEARCHING AND SORTINGS	Introduction To Searching And Sortings Linear Search And Binary Search Bubble Selection Insertion, Quick,Merge,Heap, Radix
DYNAMIC PROGRAMMING & BACK TRACKING	Greedy vs Dynamic programming. Top down and bottom up approach, Longest Common Subsequence, longest increasing subsequence, Edit distance, 0-1 Knapsack, Coin change problem and Problems on dynamicprogramming

Photographs:

vivo Y51A
Aug 25, 2022, 12:58

Signature of Coordinators

(Mr.G.Ramamohana Rao)

Signature of HOD

(Mrs.A.Anuradha)

Signature of Principal

(Dr.K.Srinivas)

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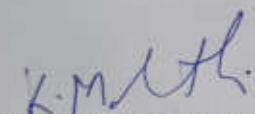E-mail: office@mictech.ac.in, Website: www.mictech.edu.in

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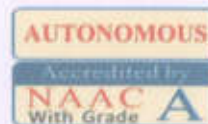| S.No	Name of The Course	Dates	Year	No. of Students Attended
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Signature of Coordinator

Signature of HoD

DEPARTMENT: Training and Placement

DATE: 10-04-2023
ACADEMICYEAR:2022-23

ORIGINATOR	Principal
CIRCULATED TO	HODs, Faculty and III B. Tech (CSE,ECE,IT,MECH,CIVIL,EEE,AIML,AIDS)Students – All Departments

Training Programme

All the HOD's, staff and studentsare here by informed that the training andplacement section is conducting technical training classes on Data Structures using Java and C Programming Training for II B. Tech (CSE,ECE,IT,MECH,CIVIL,EEE,AIML,AIDS) student's from 12.4.23 to 06.05.23. The training schedule is as follows.

Training schedule:

Timings:9.15AMto12.30PM(Forenoon)
1.15PMto4.30PM(Afternoon)

Venues:

CSESeminarHall	CSE&ECEBatch1
ECESeminarHall	CSE&ECEBatch2
EEESeminarHall	IT, MECH, CIVIL, EEE
Room No:1108	AIDS,AIML

HODs are here by informed to depute their T&P Coordinator &faculty(as per time table)

Principal

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Department of AI

JAVA AND C WITH DS

RESOURSE PERSON FROM

BYTEXL India Private Limited
Software Company
Hyderabad, Telangana

byteXL

12-04-2023
to
06-05-2023

Registration Free

TOPICS COVERED

1. INTRODUCTION
2. PYTHON DSA
3. BIT MAGIC
4. LISTS
5. RECURSION
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13. DEQUEUE
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17. GRAPH
18. GREEDY METHOD
19. BACKTRACKING
20. TRIES

Coordinator

Mr.K.Mahanti
Assistant Professor
Department of AI

Principal

Dr.T.Vamsee Kiran

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Name of the Event: Java & C with DS   **Date: 12-04-2023 to 06-05-2023**

Department: AIDS   **Academic Year: 2022-23**

Topic: JAVA & C with DS

Date of the Event: 12-04-2023 to 06-05-2023

Resource Person: BYTEXL

Name of the coordinator: K.Mahanthi

Asst Professor, Dept of AI

Target Audience: B. Tech AIDS II YEAR students

Total no of Participants: 70

Objective of the Course:

To help students improve their C programming skills and also to help develop logic for the given problem.

It will help students to face placement.

Outcome of the Course: Students will be able to develop C,JAVA AND DS programs for the given problem.

Contents:

DVR & Dr. HS MIC College of Technology		
40 HOURS Plan for C-Language		

DAY 1	INTODUCTION TO C & DATA TYPES	3
DAY 2	Operators & CONDITIONAL STATEMENTS	3
DAY 3	LOOPS	3

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DAY 4	JUMPING STATEMENTS and BASICS OF POINTERS	3
DAY 5	Pointers and FUNCTIONS	3
DAY 6	FUNCTIONS and STORAGE CLASES	3
DAY 7	Intoduction to arrays	3
DAY 8	ARRAYS & DM	3
DAY 9	DMA and INTRODUCTION TO STRINGS	3
DAY 10	STRINGS	3
DAY 11	STRUTURS ,ENUMERATORS	3
DAY 12	TYPEDEF,FILES & PREPROCESSOR DIRECTIVES	3
DAY 13	PREPROCESSOR DIRECTIVES Continued	3
DAY 14	COMMAND LINE ARGUMENTS	3

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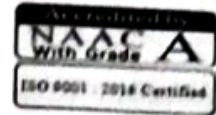# MIC College of Technology
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GREEDY ALGORITHMS	Introduction to Greedy algorithms, Activity Selection problem, Fractional Knapsack and Problems on Greedy algorithms

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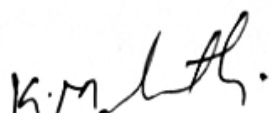Kanchikacherla, NTR Dt.
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Photographs:

Signature of Coordinators Signature of HOD Signature of Principal
(K. Mahanthi)   (Mrs.A.Anuradha) (Dr.T.Vamsee Kiran)