



ANIL NEERUKONDA INSTITUTE OF TECHNOLOGY & SCIENCES
Department of Training & Placements

Date: 10th July 2019

To
The Principal,
ANITS,
Sangivalasa.

Sir,

Sub: Request for the facilities to conduct the CCC Training Program (Phase-II) from 13th July 2019 to 18th July 2019 at our college - reg.

In view of the CCC Training Program from 13th July 2019 to 18th July 2019 at our college for IV/IV B. Tech CSE, IT, ECE & EEE. I request you to grant the following facilities to conduct the CCC Training Program.

- 1) Provision of 100 systems in Salesforce Lab of IT department from 13th July 2019 to 18th July 2019 for Internet based CCC training program. Technicians / Programmers are to be present & assist during the training program **(including Sunday)** to maintain the Internet Speed properly. (Attn: HoD - IT)
- 2) Training Program timings from 8.40 A.M. to 4.30 P.M.
- 3) Uninterrupted high speed internet facility (Attn: HoD - CSE)
- 4) Availability of Stand-by Power Supply from 13th July 2019 to 18th July 2019 **(including Sunday)**. (Attn: ANITS Electrician)

Yours sincerely,

P.V. Srinivasa Sarma
Sri P.V. Srinivasa Sarma
Head - Corporate relations



Jermittid

10/7/19

Copy to the Concerned

To Pl. meet me today
placement coordinator
1. Mr. G. Ravi Teja
2. Mr. M. Ram Kumar
3. Mr. B. Devi Prasad
students IV/IV B
mc
11/7/19

Problem Solving through Coding

Syllabus

Course Objectives:

- ❖ Implement Advanced problem solving approaches to solve computational problems
- ❖ The course shall turn the learner into a good problem solver.

Learning Outcomes: Learners will be able to:

- ❖ Learn and use the Advanced coding applying problem solving skills.
- ❖ Perform iterative/recursive methods to find the solution of system of linear equations.
- ❖ Code solutions using advanced data-structures like trees and trie.
- ❖ Implement Standard Template Libraries for efficient coding
- ❖ Test driven development problem solving using elementary and abstract data structures
Arrays/Stacks/Queues/Linked Lists required for national level contests
- ❖ Code solutions for better sorting and searching of data

Phase - 2

Day 7

(Theory): *Linked Lists, Double Linked List, Circular Linked List* (3 hours)
Structure pointers, formation of links, Linked list traversals, Classical problems on linked lists: Comparison of two linked lists, detecting a cycle, Finding the merge point.

Introduction to Dual linked data, formation of a double linked list, traversals on DLL.

Introduction to Circular Linked List, Formation of a Circular linked list, traversals on CLL.

(Practice): (3 hours)
Coding for the basic traversals for linked list data. Classical problems on linked list like comparison of two linked lists, detecting a loop in the linked list etc. Problems on DLL and CLL

Day 8

(Theory): *Sorting Algorithms* (3 hours)
Search operations: linear search Vs. binary search.

Sorting algorithms: Basic sorting: $O(n^2)$ algorithms: Bubble sort, Selection sort, Insertion sort,

Classical sorting: $O(n \log n)$ algorithms, Quick sort, Merge sort, Shell sort

(Practice): (3 hours)
Programs include sorting the list data. Code for linear search and binary search.

Day 9

(Theory): *Abstract Data-structures* (3 hours)
Introduction to Stacks and queues, Function stack in the memory, Expression evaluation methods, stack/queue operations. Stack implementation using array/linked lists. Queue implementation using array/ linked lists.

(Practice): (3 hours)
Stack traversals, expression evaluation methods, queue traversals, Classical problems.

Day 10

(Theory): *Non-Linear Data* (3 hours)
Introduction to non-linear structures, Tree data. Tree structure formation. Inorder, preorder, post order and level-order traversals. Identifying tree by Inorder-Postorder, Size of a tree, Height of a tree, Comparison of trees.

(Practice): (3 hours)
Tree traversals, Classical problems like tree size, height of the tree structure and tree comparison etc.

Day 11

(Theory): *Binary Search Tree and Balancing Tree structure* (3 hours)
Applying search property on tree structure, $O(\log n)$ time for searching data. BST probe sequence validation. Traversals on a BST, Insertion/Deletion on a BST.

Significance of height balance in search trees, Height balancing techniques. Introduction to Expression trees

(Practice): (3 hours)
Coding practice on tree algorithms, finding height of a BST, evaluating the BST structure.

Day 12**(Theory):** MST and Red-Black Trees, Trie structure

(3 hours)

Introduction to Multi-way search structures, Memory allocation for dynamic structures, 2-4 trees, Red-Black Trees, Generalization of a 2-4 tree, a-b trees, Trie structure formation, Insertion/Finding operations on Trie.

(Practice):

(3 hours)

Coding practice on trie data structure for storing and retrieval of data.



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
CCC Training Program- PHASE -II(2020 Batch)

List of students attended

S.No	AdmnNo	StudentName
1	316126512035	MOKA HITESH NARAYAN
2	316126512040	NIDADAVOLU NIHARIKA
3	316126512051	Shaik Riyaz Basha
4	316126512057	Sai MahidharVukkem
5	316126512066	BATCHU SURESH KUMAR
6	316126512073	DEVAVARAPU PAVAN
7	316126512079	JADA SHANMUKH RAO
8	316126512107	SABBELLA PAVAN SRINIVAS REDDY
9	316126512115	ETCHERLA KESAVA RAO
10	316126512122	ADDAGARLA SAI KRISHNA
11	316126512126	BADE SRAVAN KUMAR
12	316126512148	TARUN LAGUDU
13	316126512152	MASUPATHRI SHIVA
14	316126512154	MUTYALA VENKATA SATYA TEJA
15	316126512158	PARITALA ASHA SRIKAR
16	316126512170	SIMMA NAVEEN KUMAR
17	316126512172	TULAGAPU SARATH KUMAR
18	316126512178	YANGALA SUJITHA
19	316126512182	MICHERLA PAVAN KUMAR
20	316126512186	KADA SUDHEER
21	316126512189	PYLA KISHORE
22	316126512190	BANTUPALLI GANESH
23	316126512192	MADAKA MOUNIKA
24	316126512193	SONTYANA RUBY RAGHAVA
25	316126512194	SEELI KAMALA KUMAR
26	316126512197	BEESETTY BHANU JAGADEESH
27	316126512198	K JOGENDRA MANOK KUMAR
28	316126512201	YARRA SANTHOSH KUMAR
29	316126512202	VALLURI RAMA RAO
30	316126512203	TANAKALA MADAN MOHAN
31	316126512204	CHITIKELA SIRISHA
32	316126512206	VANAPALLI BHARGAV
33	316126512207	GANGIREDDY GAYATRI
34	316126512212	PATTIPATI TIRUMALA
35	316126512213	KUNUKU RADHIKA



Dr.V.Rajya Lakshmi

Prof. & HOD, Dept. of ECE
Head of the Department

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171	317126512164	R Deepesh
172	317126512165	Ruqaiyya
173	317126512166	Samireddy Venkata Varaha Sai Pradeep
174	317126512167	Shaik Mahaboob Subhani
175	317126512168	Singampalli Jitendra Ramana Murthy
176	317126512170	Sodadasi Mani Swaroop
177	317126512171	Sundru Sindhura
178	317126512172	Sura Divya
179	317126512173	Vajja Pavankalyan
180	317126512174	Vasupalli Rohit
181	317126512175	Vavilapalli Sai Roshini
182	317126512176	Venkumahanthi Siva Sai Puneeth
183	317126512177	Venna Pankaja Phani
184	317126512178	Vippili Charishma Devi
185	317126512179	Yesalapu Arjuna Rao
186	317126512180	Yashwanth Surya Kandregula
187	318126512L25	Bommu Lakshmana Sai
188	318126512L26	Challa Narayana Swamy
189	318126512L27	Kandregula Asha Surya Sirisha
190	318126512L28	Teeda Indu Priya
191	318126512L30	Narayana Dheeraj
192	318126512L31	Bonthu Mani Shankar
193	318126512L32	Kondapalli Lokesh
194	318126512L33	Pathi Mahendra
195	318126512L34	Tamarapalli Meghana
196	318126512L35	Yerra Bindu Srilekha
197	318126512L36	Indukuri Sushma


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