

G. NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE(For Women)
(AUTONOMOUS)
Shaikpet, Hyderabad ,Telangana

DEPARTMENT OF INFORMATION TECHNOLOGY

Course Name:	Advanced Algorithms (Edyst Course)	A.Y.:	2019-20
Duration of course:	48 Hr.	Class	III B. Tech

Syllabus:

1. Arrays
 - 1.1. Sorting, Searching
 - 1.2. Two Pointers Technique
2. Binary Search
3. Math
 - 3.1. Prime Numbers
 - 3.2. Modulo Arithmetic
4. Bit Manipulation
5. Strings
6. Data Structures
 - 6.1. Linked Lists
 - 6.2. Stacks
 - 6.3. Queues
 - 6.4. Maps
 - 6.5. Heaps
7. Tree Algorithms
 - 7.1. Binary Trees
 - 7.2. Binary Search Trees
 - 7.3. N-ary Trees
8. Graph Algorithms
9. Greedy Algorithms
10. Recursion and Backtracking
11. Dynamic Programming

G. Narayanamma Institute of Technology & Science for women**Dept: INFORMATION TECHNOLOGY**

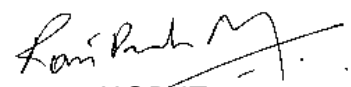
Course: VAC on Advanced Algorithms (Edyst online Course)

List of participants**Date :1/11/2019-11/6/2019 (7 months)**

S.NO	Full Name	Roll Number	Year	Branch
1	SRI UPPALAPATI AAKRUTI VARMA	17251A1201	III/IV	IT
2	APOORVA BANGALORE	17251A1202	III/IV	IT
3	BABBILI MARLYNE SILVANIA	17251A1203	III/IV	IT
4	BANDARU BHAVANA	17251A1204	III/IV	IT
5	BODA SWAPNA	17251A1205	III/IV	IT
6	BOLLU SHIVANI	17251A1207	III/IV	IT
7	CHITTURI SAHITHI	17251A1208	III/IV	IT
8	GINKA SAI LAKSHMI PRIYANKA	17251A1209	III/IV	IT
9	K CHAMUNDESHWARI	17251A1210	III/IV	IT
10	MADUR SHIRISHA	17251A1212	III/IV	IT
11	MUDUMBA DEEPIKA	17251A1213	III/IV	IT
12	N.SAI JYOTHI	17251A1214	III/IV	IT
13	NABEELA AKHTAR	17251A1215	III/IV	IT
14	NEELAM VENEELA	17251A1216	III/IV	IT
15	P.DIVYA RANI	17251A1217	III/IV	IT
16	P.LAVANYA REDDY	17251A1218	III/IV	IT
17	PARIMALA CHERUKURI	17251A1220	III/IV	IT
18	PODUGU YAMINI	17251A1221	III/IV	IT
19	PULIVARTHI PRANAVI	17251A1222	III/IV	IT
20	PULLA.SHRADHA REDDY	17251A1223	III/IV	IT
21	SALAGRAMA KIRANMAYEE	17251A1224	III/IV	IT
22	M.SPURITHA	17251A1225	III/IV	IT
23	TALLAPALLY TEJASWI	17251A1226	III/IV	IT
24	VEERAMALLA SIRI CHANDANA	17251A1227	III/IV	IT
25	VUTUKURI NAAGA PRANATHI	17251A1228	III/IV	IT
26	Y SANDHYA RANI	17251A1229	III/IV	IT
27	YELDUTI SAI LAKSHMI	17251A1230	III/IV	IT
28	AKHILA ANUMULA RANI	17251A1231	III/IV	IT
29	ALAVALA LAXMI TRIVENI	17251A1232	III/IV	IT
30	ARUKALA SAHITHI	17251A1233	III/IV	IT
31	BARISHETTY SWETHA	17251A1234	III/IV	IT
32	BINDULATHA KOLIMELA	17251A1235	III/IV	IT
33	CHANGAL SRAVANI REDDY	17251A1236	III/IV	IT
34	CHEGURI SHRUTHI	17251A1237	III/IV	IT
35	ASMA SHEHZAD	17251A1238	III/IV	IT
36	JANVI REDDY IPPAGUNTA	17251A1239	III/IV	IT
37	JAVVAJI PUNITHA	17251A1240	III/IV	IT
38	JINDE VAISHNAVI	17251A1241	III/IV	IT
39	KATTA NIKITHA	17251A1242	III/IV	IT
40	LAXMI HARIKA BIBIREDDY	17251A1243	III/IV	IT

41	MARAMPALLY ANWITHA	17251A1244	III/IV	IT
42	NALAM VISHWA PRIYA	17251A1245	III/IV	IT
43	NALLA SRIPRIYA	17251A1246	III/IV	IT
44	NARAHARI SRILEKHA	17251A1247	III/IV	IT
45	NEELA SOWMYA	17251A1248	III/IV	IT
46	RIDAH TAHIRA	17251A1249	III/IV	IT
47	S.YASHASVI	17251A1250	III/IV	IT
48	SADAF NAAZ	17251A1251	III/IV	IT
49	SANDIRI RAJITHA	17251A1252	III/IV	IT
50	SEETHALA PRADEEP VISHARIKA	17251A1253	III/IV	IT
51	SUNKARI TEJASWI	17251A1254	III/IV	IT
52	TAKKALA SHARANYA	17251A1255	III/IV	IT
53	VEDA RISHITHA.J	17251A1256	III/IV	IT
54	VEJALLA RISHITHA	17251A1257	III/IV	IT
55	VEMULA DIVYA	17251A1258	III/IV	IT
56	VISWANADHAM NAGA SAI BRUHATHI	17251A1259	III/IV	IT
57	VITTAL BHARGAVI	17251A1260	III/IV	IT
58	DATLA GAYATRI ANOWSHKA	16251A1213	III/IV	IT
59	PANGA PRIYANKA	17255A1201	III/IV	IT
60	BANDI LAKSHMI PRASANNA	17255A1204	III/IV	IT
61	GUTTI BHAVANI NAGA SAI SUCHARITHA	18255A1201	III/IV	IT
62	SHESHAM AKSHITHA	18255A1203	III/IV	IT
63	AKULA DURGA SARANYA	17251A1261	III/IV	IT
64	ANUSHA GANJAE	17251A1262	III/IV	IT
65	DAMALANKA DHANYA	17251A1263	III/IV	IT
66	DUGAPUTI SRIPRIYA TEJA	17251A1264	III/IV	IT
67	ERUKULLA HARIKA	17251A1265	III/IV	IT
68	HIMA BINDU BADE	17251A1266	III/IV	IT
69	I.THANMAYEE	17251A1267	III/IV	IT
70	KARADDI PRIYADARSHINI REDDY	17251A1268	III/IV	IT
71	KAVUKUNTLA KAVYA	17251A1269	III/IV	IT
72	KORRAPATI NAGA RUTHVIKA	17251A1270	III/IV	IT
73	KOTHWAL SRUJANA	17251A1271	III/IV	IT
74	M JAHNAVI	17251A1272	III/IV	IT
75	MAKKALA VYSHNAVI DEVI	17251A1273	III/IV	IT
76	MANDALI SRIVARINI	17251A1274	III/IV	IT
77	MANGALAGIRI LAVANYA	17251A1275	III/IV	IT
78	JASMITHA MODUGU	17251A1276	III/IV	IT
79	MOHAMMAD SANEEM	17251A1277	III/IV	IT
80	MOSAM PRANAVA	17251A1278	III/IV	IT
81	NEHA KUMAWAT	17251A1279	III/IV	IT
82	PARIMI NIKHILA	17251A1280	III/IV	IT
83	PATLOLLA SAHITHI	17251A1281	III/IV	IT
84	PINDIPROLY SAI SHANMUKHI	17251A1282	III/IV	IT
85	POPURI SAI SREEVANI	17251A1283	III/IV	IT
86	R. SAAI ARPUTA	17251A1284	III/IV	IT
87	RACHARLA KEERTHANA	17251A1285	III/IV	IT

88	R. LAXMI TEAJAWINI	17251A1286	III/IV	IT
89	RUSHITHA AKULA	17251A1287	III/IV	IT
90	SAI SRI MUKKA	17251A1288	III/IV	IT
91	UPPATI ROSHINI	17251A1289	III/IV	IT
92	AITHA GREESHMA	17251A1291	III/IV	IT
93	AKULA SHIVAPRIYA	17251A1292	III/IV	IT
94	A.RENUKA	17251A1293	III/IV	IT
95	BHUKYA MANASA	17251A1294	III/IV	IT
96	DARA HARSHA VARDHANI	17251A1295	III/IV	IT
97	DURGAM VAISHNAVI GOUD	17251A1296	III/IV	IT
98	G.HARIKA	17251A1297	III/IV	IT
99	GADEPU LIKITHA	17251A1298	III/IV	IT
100	GANTA POOJITHA REDDY	17251A1299	III/IV	IT
101	G. PREETHIKA	17251A12A0	III/IV	IT
102	KASIREDDY SNEHA	17251A12A1	III/IV	IT
103	LAKKIREDDY THANVI	17251A12A2	III/IV	IT
104	MUMMADI HASHITA	17251A12A3	III/IV	IT
105	MUTHAMSETTY SAI PRIYA	17251A12A4	III/IV	IT
106	NALAM VAISHNAVI	17251A12A5	III/IV	IT
107	NANDURI LAKSHMI KOUSALYA	17251A12A6	III/IV	IT
108	NANGUNURI RACHANA	17251A12A7	III/IV	IT
109	PAYARDHA SARAH	17251A12A8	III/IV	IT
110	SAMA SHREYA REDDY	17251A12B0	III/IV	IT
111	SANDHYA BALIKIRI	17251A12B1	III/IV	IT
112	SANGANNAGARI SRILAYA	17251A12B2	III/IV	IT
113	SEETHA SOWMYA	17251A12B3	III/IV	IT
114	SEETHAMSETTY BHAVYA PRANAVI	17251A12B4	III/IV	IT
115	SHIFA NAYAN	17251A12B5	III/IV	IT
116	TEJASWI KURAPATI	17251A12B6	III/IV	IT
117	THODUPUNURI PAVANI	17251A12B7	III/IV	IT
118	TIRUMALLA SIRI CHANDANA	17251A12B8	III/IV	IT
119	VINDUR PRASANNA DEVI	17251A12B9	III/IV	IT
120	YERRABOLU BHARGAVI REDDY	17251A12C0	III/IV	IT
121	PURMA HARSHITHA REDDY	17251A12A9	III/IV	IT
122	GOSU SAI PRIYA	17255A1203	III/IV	IT
123	NALLAVENI RAMYA	18255A1202	III/IV	IT


HOD IT

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DEPARTMENT OF INFORMATION TECHNOLOGY
A. Y. : 2019-20

Course Title: Advanced Algorithms (Edyst online Course)

Dates: 1/11/2019-11/6/2019 (7 months)

Class: III B. Tech

No of Participants: 123

Value added course on Advanced Algorithms was conducted by using online platform for around 48 Hours by the department of IT in association with Edyst. The Course was intended for III B.Tech students of IT department. To provide knowledge of how to use different data structures in real life and how to analyse complexity of different problems solution.

Topics Covered:	
Arrays	Queues
Sorting, Searching	Maps
Two Pointers Technique	Heaps
Binary Search	Tree Algorithms
Math	Binary Trees
Prime Numbers	Binary Search Trees
Modulo Arithmetic	N-arry Trees
Bit Manipulation	Graph Algorithms
Strings	Greedy Algorithms
Data Structures	Recursion and Backtracking
Linked Lists	Dynamic Programming
Stacks	



Coordinator



HOD IT



AI-Enabled Training, Assessments and Placements

To,

Mr. Narendra Babu
Training & Placement Officer
G. Narayanamma Institute of Technology & Science
Hyderabad

Proposal: Advanced Algo's & Data Structures - 019
Date: 30th Oct, 2020

Proposal: Edyst Advanced Algos & Data Structures Training at GNITS

Dear Mr. Narendra Babu,

Greetings from Edyst.

It was a pleasure talking to you to understanding your requirements, feedback and observations from the 2021 batch to improve the program deliverables and engagement for the 2022 batch and help them get placed in the top tier IT Software Product development companies

Based on our discussion and understanding your specific requirement to

- **Outcome based:** Focus on outcome-based learning of the students (engagement and learning)
- **Training for product companies:** Identifying a select set of students for product-based companies through a pedagogy of intensive coding in Adv. Algo and Data Structures
- **Aptitude:** Provide Aptitude Preparation Modules with recorded videos and practice questions and assessments
- **Reporting:** Leveraging learning analytics to gather insights to ensure stronger student engagement and learning

We have put forth a very comprehensive proposal keeping in view the long-term relation we want to have with your esteemed college.

If you have any questions, please do not hesitate to contact me – raviteja.botta@edyst.com or +91 8801976396.

I'll be happy to share any additional details you may require and I am looking forward to a long-term association with your college.

Thank you and kind regards.

Raviteja Botta

Head-Campus Relations | Edyst

+91 8801976396

To
TPO
K. Narayanamma

Syllabus: Advanced Algorithms & Data Structures (AA&DS) program is aimed at helping the student prepare and succeed at the coding rounds at top tier companies.

The program starts with the Induction and a warm-up to have the select students in the cohort to be ready for the intensive AA&DS course.

Sl. No	Course Details
1	<p>Advanced Algorithms & Data Structures</p> <p>With sufficient warm-up and practice in the basics of the language, we can move the students to honing the logical aspects and explore algorithmic questions.</p> <p>We shall cover the following topics</p> <ol style="list-style-type: none">1. Arrays<ol style="list-style-type: none">a) Sorting, Searchingb) Two Pointers Technique2. Binary Search3. Math<ol style="list-style-type: none">a) Prime Numbersb) Modulo Arithmetic4. Bit Manipulation5. Strings6. Data Structures:<ol style="list-style-type: none">a) Linked Listsb) Stacksc) Queuesd) Mapse) Heaps7. Tree Algorithms<ol style="list-style-type: none">a) Binary Treesb) Binary Search Treesc) n-ary trees8. Graph Algorithms9. Greedy Algorithms10. Recursion & Backtracking11. Dynamic Programming
2	Hackathons

Learning touch-points for students – Advanced Algo's and Data Structures:

This course has **Advanced Algorithms and Data Structures**

	Daily	Weekly	Monthly	Quarterly
Virtual online sessions		Yes (~20 Sessions)		
Online support	Yes (9 AM – 9 PM)			
Online Assessments		Yes	Yes	Yes - Milestone
Industry Webinars			Yes	
Hackathons				Yes- 1/semester

Approx. 20-22 full day Online Session are required to cover the AA&DS program in addition to the industry webinars and online support.

Management reports:

The college management will be provided reports and dashboards to know the status of the students on the following dimensions

1. Participation
2. Learning progress
3. Progress within the course
4. Pace of progress (relative to their batch)
5. Learning attributes: Initiative, Self-discovery, Relentlessness, Problem solving, Social construction etc.

Annexure 3: Edyst offerings

Edyst's program is a comprehensive and engaging program for the students at GNITS, through Live and online training. The following are the list of offerings in this program;

Edyst Offering	AA&DS Product Companies
Assessment and detailed report to management	Yes
In-person ~20 LIVE virtual sessions on zoom	Yes
In-person LIVE sessions at campus (As & when covid situation settles)	Yes
Fundamentals of Algo's (14 Day Course for selection of batch)	Yes
Question bank in C/C++/Java/Python	Yes

Annexure 4: Commercial

Year	Course	No. of Students (access)	Price
ONLY Select students (3 rd year)	Program track for Product companies: Advanced Algorithms and Data Structures & Aptitude Preparation (APEX)	Only for select students in the 3 rd year based on the Fundamentals of Algo's Performance	Rs. 5,900/- per student + 18% GST

For Advanced Algorithms and Data Structures program

- 50 % of the amount before the start the program
- 50% after completing half of the agreed-on sessions are delivered

Bank details:

Edyst Consulting Pvt. Ltd
 Bank: HDFC
 Account Number: 50200037153168
 IFSC: HDFC0002019
 City: Hyderabad

To
 The chairman,
 kindly approve to train III B.Tech.
 students of 2020-21. by M/s Edyst.
 * Because of M/s Edyst, the No. of
 placements with high package have increased.
 This is the third year to associate with
 this organisation.

Approved @ Rs. 5,900 per student + 18% GST
 10/11

12/11/2020