



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

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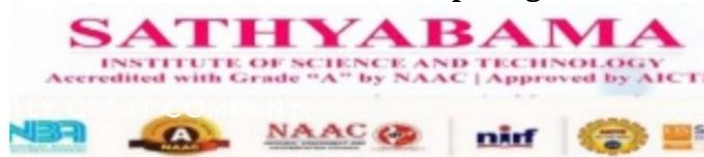
SCHOOL OF COMPUTING

DEPARTMENT OF INFORMATION TECHNOLOGY

1.3.3 VALUE ADDED COURSES DURING 2022-2023

S. No.	Title	Dates	No. of Students Enrolled	No. of Students Completed	Page No.
1	Cloud Computing	13.03.2023 to 25.03.2023	121	121	2
2	Big Data Analysis and Visualization	09.03.2023 to 31.03.2023	120	120	8
3	Java Programming	22.08.2022 to 08.09.2022	120	120	14
4	Data Structures	26.08.2022 to 13.09.2022	120	120	20

1. Cloud Computing



SCHOOL Of COMPUTING

Department of Information Technology

In Association with

CDAC, Government of India

Training Program on

CLOUD COMPUTING

Date: 13.03.2023 - 25.03.2023

Duration : 40 hours

Time : 9.00 AM - 3.15 PM

CHIEF PATRONS:

Dr. Mariazeena Johnson, Chancellor

Dr. Marie Johnson, President

Ms. Maria Catherine Jayapriya, Vice President

PATRON:

Dr. T. Sasipraba, Vice Chancellor

CONVENORS:

Dr. T. Sasikala, Dean, School of Computing

Dr. R. Subhashini, HOD, Dept of IT

FACULTY CO- ORDINATORS:

Dr. A.Sivasangari, Assoc Prof, Dept of IT

Dr. P. Ajitha, Assoc Prof, Dept of IT



COURSE OBJECTIVES

- Learn the basic concepts of cloud computing and cloud enables.
- Understand Virtualization and cloud services
- Learn the various models of cloud environments
- Learn the cloud computing infrastructure
- Learn Data Management
- Learn Cloud security.
- Understand and install AWS node setup
- Understand and develop Hadoop application

Course Content

Week 1

5 Hrs

Basic Concepts and Terminology - Cloud Computing Architectural Framework - Types of Clouds - pros and cons of cloud computing – Cloud Characteristics - key challenges in cloud computing - Major Cloud players – Cloud Enabling Technology

Week 2

5Hrs

Virtualization in Cloud Computing -Types of Virtualization – Virtualization OS – VMware, KVM – System VM – Process VM - Virtual Machine Monitor-Cloud services SaaS, PaaS,IaaS.

Week 3

5Hrs

Deployment models: Public cloud – Private Cloud –Hybrid cloud – Community cloud - Need for virtualization .

Week 4

5Hrs

Xen, Hyper V, Virtual Box, Eucalyptus

Week 5

5Hrs

Cloud data centres - Energy efficiency in data centre - Data Management in Cloud Computing

Week 6

5Hrs

Cloud security – Cloud security Threads – Security solutions a case study

Week 7

5Hrs

Assigning and Implementing a Data center Based cloud, Installing open source service , AmazonWeb Services(AWS)

Week 8

5Hrs

Hadoop installation-Hadoop program execution-develop Hadoop applications

COURSE OUTCOMES

On completion of the course, student will be able to

- Apply basic concepts of cloud computing and cloud services in real time applications.
- Perform virtualization and cloud services using various platform
- Install AWS node setup
- Develop Hadoop application

List of Participants

S. No.	Roll No.	Name
1	19S125001	AAKASH. S
2	19S125057	AARTHI. N
3	19S125090	ABHINAV KUMAR
4	19S125002	ADHITHYA. V
5	19S125003	AISHWARYA LAKSHMI. K
6	19S125004	AJAY. G
7	19S125110	AMAN. Gupta
8	19S125070	AMIRNENI KRISHNA TEJA
9	19S125092	ANGU KAUSHIK. S
10	19S125072	ANUBAMA. J
11	19s125007	ANVESH. N
12	19S125009	ARJUN. A
13	19S125010	ARUNACHALAM. R
14	19S125098	BALAJI. MANCHI
15	19S125012	BOOMESH. M
16	19S121017	BRUNDAVANAM DURGA SUMANTH MANI
17	19S125013	CHARAN. V
18	19S125082	DARSHAN. D S
19	19S125063	DARSHAN. ANAND
20	19S125076	DEEPAK.S
21	19S125014	DHINAKARAN. B
22	19S125071	DIGANTA PANDA
23	19s125015	DINESH KUMAR. S
24	19S121003	DIYA MARY. D
25	19S121006	DURGA PRASAD. K
26	19S125112	EDUPUGANTI SRIVALLI. E
27	19S121004	ESTHER. D
28	19S125122	EVANGELIN. E
29	19S125083	FEROSE MOOSHA. F J
30	19S125096	GOBIGA. B
31	19S125016	GOKUL KUMAR. S
32	19S125097	GOKULKRISSHNA. S
33	19S125115	GOKULNATH. SREE RANGAM
34	19S125089	HARISH. KATARI
35	19S125119	HARISH DHARAN. P
36	19S125018	HEMALATHA. V
37	19S125019	HEMANTH KUMAR. IRLA
38	19S125109	INIYADHARSINI. S
39	19S125020	JACOB RAJA. T
40	19S125021	JAGADEES. M
41	19S125022	JAYA PRADEESH. S L
42	19S121002	JAYADEEP. BOBBA
43	19S125008	JAYARAM. ARAVA
44	19S121013	JEBIN EARNEST. A
45	19S125023	JESTIN JOSE. P
46	19S125074	JOSHUA. J
47	19S125069	JUSHWANTH KUMAR. T

48	19S125024	KALAIVANI. M
49	19S125087	KARTHIKREDDY. MALIGIREDDY
50	19S125025	KAVEYHA. G
51	19S125067	KESHIHAA. M
52	19S125026	KIRAN. K
53	19S125027	KISHORE. D
54	19S121005	KISHORE KUMAR. A
55	19S121016	KOMAL. KONTEMUKKULA
56	19S125028	KUMARAN. B
57	19S125085	LAKSHMI VIGNESH. BEZAWADA
58	19S125093	LAKSHMINARAYANA. KANTE
59	19S125114	LIKITHA. KALARI
60	19S125029	LOKESH. N
61	19S129004	SANJAI KANTH
62	20S125091	AARTHI. R
63	20S125044	ABDUL AJEES. I
64	20S125021	ABEL PRIYAKUMAR. P
65	20S125015	ABHISHEIK. R
66	20S125067	ABINAYA . R
67	20S125065	AGASH. K
68	20S125060	AJAY. B
69	20S125022	ALINA MUSHTAQ
70	20S125055	ALOYSIUS JOSEPH
71	20S125066	AMAAN ALI
72	20S125025	AMRITHAA ASHOK
73	20S125077	ANISH KUMAR. A.S
74	20S125031	ANTON JUBIN . R
75	20S125010	AVINASH . K
76	20S121004	BANDARU MAHESH SAI
77	20S125103	BHARTI SINGH
78	20S125006	BHUVANESHWARAN . S
79	20S125056	BOOMINATHAN. D.M
80	20S125099	CHABATHULA VAZRA HIMA BINDHU
81	20S125012	CHARULATHA. K
82	20S121005	CHERUKU NITHESH REDDY
83	20S125088	CHINDULURI REDDY VENKATA MOHITHESWAR
84	20S125008	CLAUDIA PRINCY. V
85	20S121001	DANISH HARRISON. J
86	20S125050	DEEPAK. S
87	20S125053	DHANALAKSHMI. S
88	20S125090	DHANUSH RAJ. M
89	20S125033	DINESH RAJA RADHA
90	20S125092	DISHABHAVANI. M
91	20S125086	DIVYADHARSINI. P.S
92	20S125070	DON INIGO. S
93	20S125001	FELISHIA SELAS . C
94	20S125072	GUNNAM SMARAN
95	20S125035	HARIHARAN. V
96	20S125082	HARISH. A
97	20S125048	IDRIS AHMED
98	20S125040	JABIN RAJA SOLOMON. S
99	20S125064	JAGADEESH . V

100	20S125026	JANANI. N
101	20S125052	JASON KEVIN
102	20S125003	JAYASRI. R
103	20S125068	KALVA POOJITHA
104	20S125087	KARRI DUNDY NAGAVEERA SAIPRANAY
105	20S129001	KAVITHA . V.R
106	20S125029	KAVIYA. S
107	20S125038	KIRTHIGA. V
108	20S125071	KISHORE. K
109	20S125002	KISHORE KUMAR. K
110	20S125024	KISHOREKUMAR. K
111	20S125076	KOLLIMARLA AKSHAY
112	20S125097	KRISHNA KUMAR VYAS
113	20S125079	KRISHNA PRIYA. R.S
114	20S125094	MANIKKAM. S
115	20S121002	MANISH SINGH
116	20S125102	MATTA VENKATA RAHUL
117	20S125074	MOHAMED ABDULLAH. K
118	20S125037	MONEESH. S
119	20S125005	MUKESH KUTTAN. C.P
120	20S125054	MUTHU YASHWANTH. S
121	20S125080	NALLA UDAY KIRAN





इलेक्ट्रॉनिक्स एवं
सूचना प्रौद्योगिकी मंत्रालय
MINISTRY OF
ELECTRONICS AND
INFORMATION TECHNOLOGY
सत्यमेव जयते



COURSE COMPLETION LETTER

It is certified that

Deepak S

Sathyabama Institute of Science and Technology

has successfully undergone the Bridge Course Training Program on

Cloud Computing Technology

Under "FutureSkills PRIME" Programme

commenced from 11 Mar, 2023

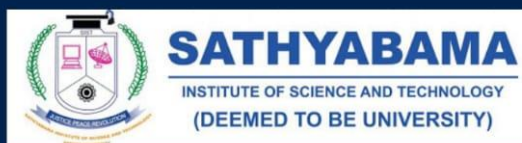
Shri. V. Sridharan
Chief Investigator
Cloud Computing Technology
Lead Resource Centre

L R PRAKASH

Digitally signed by L R PRAKASH
Date: 2023.04.26 03:24:38
+05'30'

Cdr.(Retd.) L.R. Prakash
Senior Director
Centre Head
C-DAC, Chennai

2. Big Data Analysis and Visualization



SCHOOL OF COMPUTING
Department of Information Technology
in Association with
NSIC,
Government of India

Skill Development Workshop on **Big Data Analysis and Virtualization**

Date: 09.03.2023 - 31.03.2023
Duration : 40 Hours

CHIEF PATRON

Dr. Mariazeena Johnson

Chancellor

Dr. Marie Johnson

President

Ms. Maria Catherine Jayapriya

Vice President

PATRON

Dr. T. Sasipraba

Vice Chancellor

CONVENORS

Dr. T. Sasikala

Professor & Dean, School of Computing

Dr. R. Subhashini

Professor & Head, Dept of IT

FACULTY CO - COORDINATORS

Dr. A. Sivasangari

Assoc. Professor - Dept of IT

Dr. P. Ajitha

Assoc. Professor - Dept of IT



COURSE OBJECTIVES

- Learn the basic concepts of Big data Analytics
- Understand big data classification
- Learn Big data management and visualization
- Understand Virtualization
- Case study using Big data Analysis

Course Content

Week 1

5 Hrs

Evolution of Big data- Best Practices for big data analytics- Understand big data storage- Overview of High performance Architecture

Week 2

5Hrs

Advanced Analytical Theory and Methods: Overview of clustering K-means, Determining the number of clusters- Decision Trees- Decision Tree in R- Naïve Bayes classifier

Week 3

5Hrs

Association Rules- Apriori Algorithm, Content based recommendation- Hybrid recommendation approaches

Week 4

5Hrs

Virtualized data management- Stream Data Model and Architecture- Sampling Data in a Stream

Week 5

5Hrs

Big data use cases-Clustering Use cases- Case studies- Real Time Sentiment Analysis, Stock Market Predictions- Using Graph Analytics for Big Data: Graph Analytics

Week 6

5Hrs

Advanced MapReduce. In-Memory Computing –Programming in MapReduce

Week 7

5Hrs

Distributed Analysis and Patterns-Case study

Week 8

5Hrs

Example, Collecting Raw Text, Representing Text and analysing

COURSE OUTCOMES

On completion of the course, student will be able to

- Understand concepts of Big data Analytics
- Apply big data classification in data analysis
- Manage Big data and visualization
- Understand Virtualization and apply big data analysis in various case study

List of Participants:

S. No.	Roll No.	Name
1	19S125111	JABIN RAJA
2	19S125033	NANDANA NAIR. S
3	19S121018	NIKHIL. KOKONDA
4	19S125073	NITHESHWER. V S
5	19S125034	NITHISH KUMAR. C M
6	19S125100	PALLAVI KUMARI
7	19S125103	PARTHA PRATIM. HALDER
8	19S125035	PORKODI. S
9	19S125117	PRABHAT KUMAR. P
10	19S125102	PRADEESH RAJ. K
11	19S125036	PRAVEEN. K S
12	19S125056	PREETHI. S
13	19S125099	PRITHIVIRAJ . M
14	19S125037	PRIYADHARSHANI. B
15	19S125078	RAHUL. AGARALA
16	19S125095	RAHUL ADESH. M
17	19S125038	RAHUMAN. M
18	19S125039	RAJAGANESH. A
19	19S125084	RAMANAN. B
20	19S125105	RAUSHAN KUMAR
21	19S121010	RAVI SHANKAR. M D
22	19S125088	RAVISHANKAR. D
23	19S121014	RICHA SHARMA. K M
24	19S125058	RITHIWIK. E
25	19S125040	ROJAR BENNY. K
26	19S125106	SAI HANEESH. SANGARJU
27	19S125041	SAKTHI GANESH. S
28	19S129002	SAKTHIVEL. R
29	19S121001	SAMRIHTA. A R
30	19S125079	SANKARI. K
31	19S125118	SARANYA. M
32	19S125068	SARATH. L
33	19S125059	SATHISH KUMAR. V S
34	19S125042	SHAJITH AHAMED. S
35	19S125043	SHAM VENKAT . S
36	19S125066	SHARIN. S
37	19S125044	SHARON SWETHA. X
38	19S125107	SHAURYA SAMEER. S S
39	19S125101	SHESHASENA REDDY. KESHAPALLY
40	19S121011	SHILP. GOHIL
41	19S125091	SIRANJEEVI.R
42	19S125062	SIVAPRIYA. P
43	19S121008	SNEHALATHA REDDY. LAKKU
44	19S129003	SOWMIYA. S
45	19S125104	SOWMYA SREE. T
46	19S125005	SRAVANTH SATYA RAMKI. AKULA

47	19S125048	SRI SWETHA. G
48	19S125047	SRIRANGAPRASATH. V
49	19S125049	SUJAY. R
50	19s125121	SURYA. S
51	19S125120	SUSHANT KUMAR
52	19S121007	SUSHANT KUMAR. L
53	19S125051	SUSIL KUMAR. R M
54	19S125116	TANIYA. VERMA
55	19S125075	THENDRAL. S
56	19S125113	TILAK. CHAUHAN
57	19S125086	VAMSHI. BALAGANI
58	19S121009	VAMSI. MOGALIPURI
59	19S125065	VASANTH. P
60	19S125111	NAGA SRI SAI. K
61	20S125030	KISHORE KUMAR K
62	20S125084	NARISSETTY SRINIVASA RAO
63	20S125014	NIKITA ANGELINE DAVID
64	20S125027	PAVITHRAA. S
65	20S125004	PRASANNA KUMAR. S
66	20S125020	PRASEMA FEMI GRACE. P.W
67	20S125011	PRAVEEN. N
68	20S125032	PRAVIN. S
69	20S125009	PRIYADARSHINI. R
70	20S125085	RAJA REGAN. A
71	20S125018	RAJALASHMI . R
72	20S125017	RAMASAMY. N
73	20S125019	REEYA B VARGHESE
74	20S125078	ROHITH. P
75	20S125041	SAGAR KUMAR
76	20S125062	SAKTHI VINAYAK
77	20S125007	SANJAIKANTH. J
78	20S125049	SANJAY. S
79	20S125036	SANJAYKUMAR . S.M
80	20S125096	SANTHOSH. J
81	20S125083	SARAGADAM LAYA NANDAN
82	20S125039	SELSYA JENIFER. L
83	20S125073	SHALOM JABARAJ. J
84	20S125063	SIMSON. J
85	20S125100	SOUMYADEEP DAS
86	20S125013	SOWMIYA . R.K
87	20S121003	SREERAMOJU SHRADDHA
88	20S125045	SRIDEVI. S
89	20S125101	SRIJITH. B
90	20S125023	SRINIVAS. K.N
91	20S125057	SRIRAM. J
92	20S125046	SRIVARDHAN. C
93	20S125047	SUDHARSAN. P
94	20S125069	SURAVARAM DHANUSH
95	20S125093	SURIYA. S
96	20S125028	TAMILINIYAN. P
97	20S125058	THIRISHA . A
98	20S125059	THIRUNAVUKARASAR. N
99	20S125095	TUFFIN SANDO. J
100	20S125075	VAIBHAV SINGH

101	20S125081	VASANTHA KUMAR. M
102	20S125098	VELAN. S
103	20S125043	VIGHNESH. SU
104	20S125089	VIGNESH. K. S
105	20S125051	VIJAYSRINIVASAN. M
106	20S125034	VISHVASHWARRAN . V.B
107	20S125042	VISHWA. L
108	20S125061	VISHWA. B
109	20S125104	TULLURI KEERTHINADH
110	20S125105	KOLLI SRIKANTH
111	20S125106	PRANESH PRIYANSHU
112	20S125107	R.V.NITESH KUMAR
113	20S125108	NARAMAMIDI SURYA TARUNJEE
114	20S125109	SRIJITH SAI L
115	20S125110	OBINNI VEERA VENKATA DURGA SAI SUDHEER
116	20S125111	LEVESH KUMAR V
117	20S125112	ANKIT KUMAR
118	20S125113	KOMMURI VAMSI
119	20S125114	KUNAL KUMAR
120	20S125115	NALLA UDAY KIRAN





एन एस आई सी
N S I C

राष्ट्रीय लघु उद्योग निगम लिमिटेड

NATIONAL SMALL INDUSTRIES CORPORATION LIMITED

(A Govt. of India Enterprise)

NSIC - TECHNICAL SERVICES CENTRE

Sector B-24, Guindy Industrial Estate, Ekkaduthangal, Chennai - 600 032.

CERTIFICATE

This is to certify that Mr. **JABIN RAJA SOLOMON S.** S/o. Shri. **R. STEPHEN JEBAKUMAR**, student of III year B.Tech. (IT), Sathyabama Institute of Science and Technology has undergone "**SKILL DEVELOPMENT PROGRAM ON DATA ANALYTICS**" conducted by us for a period of one week (30 Hours) from 09.03.2023 to 14.03.2023.



Shimmi
HEAD OF TRAINING

[Signature]
HEAD OF CENTRE

3. Java Programming



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)



TRAINING PROGRAM ON "JAVA PROGRAMMING"

IN ASSOCIATION WITH **CDAC, GOVERNMENT OF INDIA**

*FROM 22/08/2022
TO 08/09/2022*

TRAINING
9am to 3.15pm
40 hours



CHIEF PATRONS:

Dr. Mariazeena Johnson, Chancellor

Dr. Marie Johnson, President

Ms. Maria Catherine Jayapriya, Vice President

CONVENORS:

Dr. T. Sasikala, Dean, School of Computing
Dr. R. Subhashini, HOD, Dept of IT

FACULTY COORDINATORS:

Dr.P.JAYANTHI
Dr.S.REVATHI

PATRON:

Dr. T. Sasipraba, Vice Chancellor

registration link

https://docs.google.com/forms/d/1rTEAtpQdLp4gus-6dLw0W9qfWEDPk1P_mfsm6h0gslhp/s1g7jy9tW62Wwmp0entw0p-0g-link



COURSE OBJECTIVES

Java Developer:
To impart knowledge on

- Fundamentals of Java ME 8 for IoT and connection framework
- Learn the ways to interface I/O devices with processor for task sharing.
- Recall the basics of processor and its ways to handle float values by its instruction set.
- Recognize the functionality of Raspberry pi, latest version processors and its applications.
- Acquire design thinking capability, ability to design a component with realistic constraints, to solve real world engineering problems and analyze the results.

Course Contents:

Week1: Introduction, Getting Started with Internet of Things, Setting Up Development Environment for IoT	5Hrs
Week2: Getting Started-Java, NetBeans IDE and Raspberry Pi, IoT Architecture, Raspberry Pi Basics Deep Dive into Java ME8 for IoT	5Hrs
Week3: Setting Up Software Components on Raspberry Pi, Building Java MEIM lets Programs for IoT Sensors Overview, Q2Qq3 waw Digital and Analog Sensors	5Hrs
Week4: CLDC Overview, Accessing Sensors by Using the Device Access API, Using the Logging API Generic Connection Framework(GCF)	5Hrs
Week5: Application Management System(AMS), Creating Notifications with Push Registry, Storing Data by Using the Record Management System, Cloud Overview	5Hrs
Week6: Oracle IoT Cloud Services Overview, Case Study-Solving Logistics Challenge Using IoT, Getting started with Python Programming, Student Projects	5Hrs

COURSE OUTCOMES

On completion of the course, student will be able to

- Understand JavaME8 for IoT and connection framework
- Apply the ways to interface I/O devices with processor for task sharing.
- Understand the basics of processor and its ways to handle float values by its instruction set.
- Apply the functionality of Raspberry pi, latest version processors in various applications

List of Enrolled Students

Sl.No	RollNo	Name
1	21S125164	AATHI SIVABALAN D
2	21S125104	ABHILASH B
3	21S125064	ABINAYA V
4	21S125061	ADCHAYA J V
5	21S125015	ADDANKI RAMYA SRI
6	21S125155	ADRIEL SAMUEL JEYANATH
7	21S129004	AFIYA M
8	21S125049	H AJAY SRINIVASAN
9	21S125098	AJONITHAS J
10	21S121015	AKALYA S
11	21S125088	AKASH C
12	21S125130	AKASH M
13	21S125082	AKASH P
14	21S125009	S AKASH
15	21S125008	ALLAGADDA KARTHIK KUMAR REDDY
16	21S125010	AMAY KANCHHIT
17	21S125067	AMIRTHASRI V
18	21S121016	ANAND SAI SATHVIK YELURI
19	21S125001	ANBUNITHI E
20	21S125132	ANGELIN E TANYA
21	21S125033	ANKIT PRAJAPATI
22	21S125147	ANTHUS JHONES A
23	21S125157	ARAVIND GURUSAMY
24	21S125149	ARAVIND T
25	21S125020	ARCHI SHAW
26	21S125143	S B ARCHITH
27	21S125173	ARGHYA CHANDRA
28	21S125081	ARUN BALAJI V S
29	21S125117	ARUN KUMAR K
30	21S125136	ARJUN A
31	21S125022	ASHLYN TIMOTHEY D
32	21S125127	ASHWANTH R
33	21S125071	ASHWIN M R
34	21S125030	AVINASH KUMAR GUPTA
35	21S125123	AYUSHI KAREENA
36	21S125167	BALACHANDRA KUMAR S
37	21S125162	BANDARI MANIKANTA
38	21S125078	BARATH C
39	21S125178	BAVIN A
40	21S128002	BENITA S
41	21S125053	HENNY STEPHEN M
42	21S125169	INNANI SWAYAM
43	21S125079	JAMES EDVIN S
44	21S125073	JAWAGAR SRI G
45	21S125118	JEFFRE J
46	21S125070	K JEGADEESH
47	21S125145	M JENITH ASHWIN
48	21S125119	JOHNSINA JOTHI S
49	21S125184	JONNA MOHIT
50	21S125055	JOSHINA VICTOR J
51	21S125051	JOYCE DAVID

52	21S125091	JUDITH SHALOM JOY J
53	21S125006	KAMALESH K
54	21S125076	KAMILATH RIFKA S
55	21S125075	KARAN
56	21S125109	KARTHIK A
57	21S125185	G KARTHIK
58	21S125026	KASA SAI MANIKANTA
59	21S125174	KAVISELVAN A
60	21S125144	KAVITHA K
61	19S129004	MYTHILI. V
62	20S125091	AARTHI. R
63	20S125044	ABDUL AJEES. I
64	20S125021	ABEL PRIYAKUMAR. P
65	20S125015	ABHISHEIK. R
66	20S125067	ABINAYA . R
67	20S125065	AGASH. K
68	20S125060	AJAY. B
69	20S125022	ALINA MUSHTAQ
70	20S125055	ALOYSIUS JOSEPH
71	20S125066	AMAAN ALI
72	20S125025	AMRITHAA ASHOK
73	20S125077	ANISH KUMAR. A.S
74	20S125031	ANTON JUBIN . R
75	20S125010	AVINASH . K
76	20S121004	BANDARU MAHESH SAI
77	20S125103	BHARTI SINGH
78	20S125006	BHUVANESHWARAN . S
79	20S125056	BOOMINATHAN. D.M
80	20S125099	CHABATHULA VAZRA HIMA BINDHU
81	20S125012	CHARULATHA. K
82	20S121005	CHERUKU NITHESH REDDY
83	20S125088	CHINDULURI REDDY VENKATA MOHITHESWAR
84	20S125008	CLAUDIA PRINCY. V
85	20S121001	DANISH HARRISON. J
86	20S125050	DEEPAK. S
87	20S125053	DHANALAKSHMI. S
88	20S125090	DHANUSH RAJ. M
89	20S125033	DINESH RAJA RADHA
90	20S125092	DISHABHAVANI. M
91	20S125086	DIVYADHARSINI. P.S
92	20S125070	DON INIGO. S
93	20S125001	FELISHIA SELAS . C
94	20S125072	GUNNAM SMARAN
95	20S125035	HARIHARAN. V
96	20S125082	HARISH. A
97	20S125048	IDRIS AHMED
98	20S125040	JABIN RAJA SOLOMON. S
99	20S125064	JAGADEESH . V
100	20S125026	JANANI. N
101	20S125052	JASON KEVIN
102	20S125003	JAYASRI. R
103	20S125068	KALVA POOJITHA
104	20S125087	KARRI DUNDY NAGAVEERA SAIPRANAY

105	20S129001	KAVITHA . V.R
106	20S125029	KAVIYA. S
107	20S125038	KIRTHIGA. V
108	20S125071	KISHORE. K
109	20S125002	KISHORE KUMAR. K
110	20S125024	KISHOREKUMAR. K
111	20S125076	KOLLIMARLA AKSHAY
112	20S125097	KRISHNA KUMAR VYAS
113	20S125079	KRISHNA PRIYA. R.S
114	20S125094	MANIKKAM. S
115	20S121002	MANISH SINGH
116	20S125102	MATTA VENKATA RAHUL
117	20S125074	MOHAMED ABDULLAH. K
118	20S125037	MONEESH. S
119	20S125005	MUKESH KUTTAN. C.P
120	20S125080	SIVA PRIYA P





SATHYABAMA

**INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)**



CERTIFICATE OF COMPLETION

This is to certify that

ARJUN.A

has attended and successfully completed the course on

JAVA PROGRAMMING conducted by **Department of Information Technology**

on 22/08/2022

to

08/09/2022

Dr.R.Subashini
HOD-Department of IT

Dr.T.Sasikala
Dean School of Computing

4. Data Structures



COURSE OBJECTIVES

Data structure using C and C++:

- Implement abstract data types using arrays and linked list.
- Apply the different linear data structures like stack and queue to various computing problems. Implement different types of trees and apply them to problem solutions.
- Discuss graph structure and understand various operations on graphs and their applicability.
- Analyze the various sorting and searching algorithms.
- Understand the hashing technique and hash functions.

Course Contents:

Data structure using C and C++

Week 1:

Introduction to Data Structure, Arrays, Linear and Binary Search
Implementation using Arrays

5Hrs

Week 2: 5Hrs
Implementation of Stack Operations using Array, Implementation of Stack Applications Using C and C++

Week 3: 5Hrs
Introduction to Queues, Implementation of Queue Operations using Array, Implementation of Queue Applications using C and C++

Week 4: 5Hrs
Introduction to Linked List, Singly Linked List, Implementation of Singly Linked List Operations

Week5: 5Hrs
Introduction to Double Linked List, Implementation of doubly Linked List Operations

Week 6: 5Hrs
Introduction to Circular Linked List, Circular Linked List, Implementation of circular Linked List Operations Introduction to trees, Binary search tree, AVL tree

COURSE OUTCOMES

On completion of the course, student will be able to

- Implement arrays and linked list.
- Apply stack and queue to various computing problems.
- Implement trees and apply them to various real world applications
- Understand various operations on graphs.
- Implement the various sorting and searching algorithms.
- Apply the hashing technique and hash functions in computing problems

List of Enrolled Students

Sl.No	RollNo	Name
1	21S125164	AATHI SIVABALAN D
2	21S125104	ABHILASH B
3	21S125064	ABINAYA V
4	21S125061	ADCHAYA J V
5	21S125015	ADDANKI RAMYA SRI
6	21S125155	ADRIEL SAMUEL JEYANATH
7	21S129004	AFIYA M
8	21S125049	H AJAY SRINIVASAN
9	21S125098	AJONITHAS J
10	21S121015	AKALYA S
11	21S125088	AKASH C
12	21S125130	AKASH M
13	21S125082	AKASH P
14	21S125009	S AKASH
15	21S125008	ALLAGADDA KARTHIK KUMAR REDDY
16	21S125010	AMAY KANCHHIT
17	21S125067	AMIRTHASRI V
18	21S121016	ANAND SAI SATHVIK YELURI
19	21S125001	ANBUNITHI E
20	21S125132	ANGELIN E TANYA
21	21S125033	ANKIT PRAJAPATI

22	21S125147	ANTHUS JHONES A
23	21S125157	ARAVIND GURUSAMY
24	21S125149	ARAVIND T
25	21S125020	ARCHI SHAW
26	21S125143	S B ARCHITH
27	21S125173	ARGHYA CHANDRA
28	21S125081	ARUN BALAJI V S
29	21S125117	ARUN KUMAR K
30	21S125136	ARJUN A
31	21S125022	ASHLYN TIMOTHEY D
32	21S125127	ASHWANTH R
33	21S125071	ASHWIN M R
34	21S125030	AVINASH KUMAR GUPTA
35	21S125123	AYUSHI KAREENA
36	21S125167	BALACHANDRA KUMAR S
37	21S125162	BANDARI MANIKANTA
38	21S125078	BARATH C
39	21S125178	BAVIN A
40	21S128002	BENITA S
41	21S125053	HENNY STEPHEN M
42	21S125169	INNANI SWAYAM
43	21S125079	JAMES EDVIN S
44	21S125073	JAWAGAR SRI G
45	21S125118	JEFFRE J
46	21S125070	K JEGADEESH
47	21S125145	M JENITH ASHWIN
48	21S125119	JOHNSINA JOTHI S
49	21S125184	JONNA MOHIT
50	21S125055	JOSHINA VICTOR J
51	21S125051	JOYCE DAVID
52	21S125091	JUDITH SHALOM JOY J
53	21S125006	KAMALESH K
54	21S125076	KAMILATH RIFKA S
55	21S125075	KARAN
56	21S125109	KARTHIK A
57	21S125185	G KARTHIK
58	21S125026	KASA SAI MANIKANTA
59	21S125174	KAVISELVAN A
60	21S125144	KUNAL KUMAR C
61	21S125029	KAVIYA NIVASHINI V
62	21S125090	KEERTHANA C
63	21S125086	KEERTHANA ANUSHA.C
64	21S121013	KIRAN M
65	21S125063	KISHORE S
66	21S125087	KOLLA UDAY
67	21S125102	KOTERU AMRUTHA
68	21S125074	KRISHNAPATEL M
69	21S125080	KUMARA VADIVEL P
70	21S125057	LEOSHARLIN JOHNSON
71	21S125182	LINGA PRAVIN K S
72	21S125059	LOKESH RAJ J
73	21S125148	MADALA GOPI KRISHNA
74	21S125040	V MADHULIKA
75	21S125072	MADHUMITHA R
76	21S125002	MAGESHWARAN K
77	21S121014	MAJID FASI AHMED
78	21S121017	MANDAPAKA GANESH
79	21S121004	MANOJ KUMAR K

80	21S125125	MIRUDHUBASHINI B S
81	21S125133	PRAGYA SHARMA
82	21S125096	PRATHIMA S
83	21S121007	PRATIK
84	21S128003	PRINCY ANGELIN B
85	21S125124	PRIYADHARSHINI S
86	21S125028	PRIYADHARSINI K
87	21S125003	RAGAV SUBRAMANIAN R
88	21S125039	RAGHULPRASATH R
89	21S121011	RAHUL RAM P
90	21S125037	RAMACHANDRAN.G
91	21S125161	RANGINENI JAYA VARDHAN
92	21S125151	RESHEBKUMAR C P
93	21S125056	RETHISHA R
94	21S121010	ROJA MUTHIAH N
95	21S125024	ROYSTER A
96	21S125032	SANTHOSH H
97	21S125017	SAI DEEPAK S
98	21S125154	SAIRAM S
99	21S125165	SAMAYAMANTHULA NAGAVENKATADURGAMOHAN
100	21S121005	SAMBRATHA S
101	21S125085	SANGEETHA S
102	21S125138	SANJEETHA T
103	21S125054	SANTHIYA M
104	21S125095	SANTHIYA MARY X
105	21S125046	SARUHASHINI H
106	21S125112	SASHAANTH S
107	21S125146	SASIKUMAR I
108	21S125171	SHAIK NAZIA
109	21S125066	SHAKTHI GANESH S
110	21S125021	SHALINI D
111	21S125036	SHARON CHRISTY R
112	21s125158	SHILPA S
113	21S125035	SHIVAGANAPATHY RAAJ C S S
114	21S125013	SIVA SREE S J
115	21S125137	SOWRIRAJAN M
116	21S125019	SREETAL ADHVAIT AAHLAAD
117	21S125062	SUBBIAH S
118	21S125134	SURUGU ALEKYA
119	21S125152	R D SURYA
120	21S125121	SUTHIR KUMAR M

