



# NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

ERODE – 638 052 TAMILNADU

Email : [principal@nandhaengg.org](mailto:principal@nandhaengg.org) Mobile : 73737 12234

## Criteria II – Teaching Learning and Evaluation

2.3	<b>Teaching Learning Process</b>
2.3.1	<b>Student centric methods, such as experiential learning, participative learning and problem-solving methodology are used for enhancing learning experience</b>

### Experiential Learning

S.No	Description
1.	<u><a href="#">Internship</a></u>
2.	<u><a href="#">Project Based Learning</a></u>



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**Internship**

**NANDHA ENGINEERING COLLEGE (Autonomous)**

Erode - 52

*Department of Civil Engineering*

**INTERNSHIP 2019 - 2023**

S. No	Reg. No	Name (Initial at End)	Company	Stipend in Rs.
1	19CE001	ABDULLA BASHA.M	<i>Naaval Construction, Erode</i>	8000
2	19CE003	DHANASANJAI C	<i>Chandraa Builders, Bhavani</i>	13000
3	19CE004	GOKUL M	<i>Sri Andavar Construction, Dharapuram</i>	8000
4	19CE005	GUHAN K	<i>Greensky Builders Pvt. Ltd, Gobichettipalayam</i>	10,000
5	19CE006	ILAVARASAN S	<i>Shanmathi Construction, Erode</i>	10,000
6	19CE010	KIRAN KUMAR M	<b>KRC Construction, Tiruppur</b>	12000
7	19CE011	KIRUBHANAND S	<i>Shanmathi Construction, Erode</i>	10,000
8	19CE012	NABINESH S	<i>Naaval Construction, Erode</i>	8000
9	19CE015	NIRMAL R	<i>Chandraa Builders, Bhavani</i>	13000
10	19CE017	PRAVEEN G	<i>Shanmathi Construction, Erode</i>	10000
11	19CE018	PRAVEEN R	<i>Sridhar &amp; Co, Erode</i>	10000
12	19CE019	RAGAVENDRAN P	<i>Naaval Construction, Erode</i>	8000
13	19CE020	SHAMIM EBRAHIMS	<i>Naaval Construction, Erode</i>	8000
14	19CE022	SANTHOSH S	<i>Krishnamoorthi Contractor, Erode</i>	10000
15	19CE024	SELVAKUMAR M	<i>Design Wise Structurals, Erode</i>	8000
16	19CE026	SIVASAKTHI BALAN S	<i>Shanmathi Construction, Erode</i>	10000
17	19CE027	SRISHAASHTA S	<i>Sridhar &amp; Co, Erode</i>	10,000
18	19CE028	SUKUMAR R	RS Construction, Erode	8000
19	19CEL03	BASKAR.K	<i>Shanmathi Construction, Erode</i>	8000
20	19CEL04	GUNASEKARAN.M	<i>Sridhar &amp; Co, Erode</i>	10,000
21	19CEL06	NAVEEN.N.M	<i>Vijay Associates, Tiruppur</i>	8000
22	19CEL07	RAJA.P	<i>Nilam Surveyor, Kovilpatti</i>	12000
23	19CEL09	SHREENATH.S	<i>Shanmathi Construction, Erode</i>	10000
24	19CEL05	MANIMARAN A	Aravindh Builders	10000
25	19CEL01	BAMANG NEGAAKIN	Govt. of AP	10000
26	19CEL02	BAMANG TALANG		10000
27	19CE016	NOAH JAISINGH	<i>Sri Andavar Construction, Dharapuram</i>	8000





# ARAVINDH BUILDERS

515, Manalmedu Street,  
Chennimalai Road, Erode - 638 001.

Prop. R. ARULSELVAN

Cell : 97906 77875, 80568 83504

INTERNSHIP OFFER LETTER Date : ..... 15.02.2023 .....

Mr.A.MANIMARAN

ERODE

Re: Offer of Internship

Dear Manimaran,

“ARAVINDH BUILDERS” is pleased to offer you an educational internship opportunity as a “Site Supervisor” role for 4 months.It would be required of you to join us by February 15,under the following terms and conditions.

**Internship Period** : 15 February 2023-31 May 2023(Four Months).

**Stipend Amount** : Rs.8,000/-Per Month

Above mentioned salary will be applicable for the Internship period of four month from the date of joining.

Working hours will be following as,

Monday to Saturday (09:00 A.M-06:00 P.M)

Sing on the Second copy accept this offer on the space provided and return it to us. We look forward to welcoming you to our team at “ARAVINDH BUILDERS”.

Sincerely,

For ARAVINDH BUILDERS

with Regards,

Proprietor



LO  
Mr. E. K. Mohanraj  
04/09/2023

**GOVERNMENT OF ARUNACHAL PRADESH**  
**OFFICE OF THE EXECUTIVE ENGINEER :: CAPITAL DIVISION - A**  
**PWD :: AP :: ITANAGAR :: 791 111**

E-Mail: eecda@rediffmail.com

Tel :0360-2212438(0)

No. CDA/E-6/2022-23/

Dated Itanagar the 23/2 2023

To,

**The Assistant Engineer,**  
Capital Sub-Division – 5/A, PWD  
AP, Itanagar.

Sub:- **Industrial Training For Students.**

As recommended by the Nandha Engineering College, Tamil Nadu you are directed to impart necessary Industrial Training form 16/02/2023 to 23/04/2023 to the following students in any ongoing projects under your sub-division and direct them to report to the office of the undersigned alongwith a copy of completion report for issuance of necessary training certificate.

**Sl. No.**                      **Name of Candidates**

- |    |                   |
|----|-------------------|
| 1. | Bamang Negaakin ✓ |
| 2. | Bamang Talang ✓   |

**Head Assistant,**  
**( For Executive Engineer )**  
Capital Division – A, PWD: AP  
Itanagar.

No. CDA/E-6/2022-23/ 7309-10  
Copy to:-

Dated Itanagar the 23/02 2023

- 1 ✓ Dr. E. K. Mohanraj, Prof. & Dean, Nandha Engineering College, Tamil Nadu for information.

**Head Assistant,**  
**( For Executive Engineer )**  
Capital Division – A, PWD: AP  
Itanagar.

23/2/23  
04/08/2023





# Shanmathi Constructions (P) Ltd.

07.02.2023

To

Baskar K (19CEL03)  
Final year  
Department of Civil Engineering  
Nandha Engineering College (Autonomous)  
Erode - 638 052

Dear Baskar,

We would like to confirm that you have been selected for the internship in our organization. The training will be at our Irrigation Project near Sirkali. You are advised to following the terms and conditions while undergoing internship. You are asked to ensure the self-safety while mobilizing to various sites.

You are asked to report to Mr. Murugan, Project Manager (90035-27240) on 10<sup>th</sup> February 2023 and your internship has been approved till the end of April 2023. You will be designated as trainee and will be entitled with food and accommodation in our premises.

Wish you all success to pursue the internship and hope you will have a maximum technical take away after the training.

Copy to:

The Dean, Department of Civil Engineering

Nandha Engineering College (Autonomous), Erode

For SHANMATHI CONSTRUCTIONS

S. T. K.



# Shanmathi Constructions (P) Ltd.

07.02.2023

To

Shreenath S (19CEL09),  
Final year  
Department of Civil Engineering  
Nandha Engineering College (Autonomous)  
Erode - 638 052

Dear Baskar,

We would like to confirm that you have been selected for the internship in our organization. The training will be at our Irrigation Project near Sirkali. You are advised to following the terms and conditions while undergoing internship. You are asked to ensure the self-safety while mobilizing to various sites.

You are asked to report to Mr. Murugan, Project Manager (90035-27240) on 10<sup>th</sup> February 2023 and your internship has been approved till the end of April 2023. You will be designated as trainee and will be entitled with food and accommodation in our premises.

Wish you all success to pursue the internship and hope you will have a maximum technical take away after the training.

Copy to:

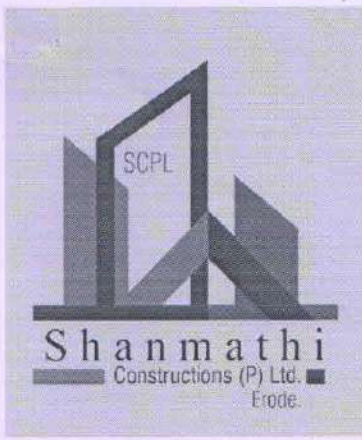
The Dean, Department of Civil Engineering

Nandha Engineering College (Autonomous), Erode

For SHANMATHI CONSTRUCTIONS

S. T. R.





# Shanmathi Constructions (P) Ltd.

07.02.2023

To

Sivasakthi Balan S (19CE026)  
Final year  
Department of Civil Engineering  
Nandha Engineering College (Autonomous)  
Erode - 638 052

Dear Baskar,

We would like to confirm that you have been selected for the internship in our organization. The training will be at our Irrigation Project near Sirkali. You are advised to following the terms and conditions while undergoing internship. You are asked to ensure the self-safety while mobilizing to various sites.

You are asked to report to Mr. Murugan, Project Manager (90035-27240) on 10<sup>th</sup> February 2023 and your internship has been approved till the end of April 2023. You will be designated as trainee and will be entitled with food and accommodation in our premises.

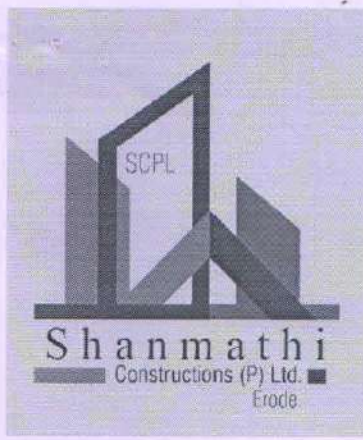
Wish you all success to pursue the internship and hope you will have a maximum technical take away after the training.

Copy to:

The Dean, Department of Civil Engineering  
Nandha Engineering College (Autonomous), Erode

For SHANMATHI CONSTRUCTIONS

S. T. 2



# Shanmathi Constructions (P) Ltd.

07.02.2023

To

Kirubhanand S (19CE011)  
Final year  
Department of Civil Engineering  
Nandha Engineering College (Autonomous)  
Erode - 638 052

Dear Baskar,

We would like to confirm that you have been selected for the internship in our organization. The training will be at our Irrigation Project near Sirkali. You are advised to following the terms and conditions while undergoing internship. You are asked to ensure the self-safety while mobilizing to various sites.

You are asked to report to Mr. Murugan, Project Manager (90035-27240) on 10<sup>th</sup> February 2023 and your internship has been approved till the end of April 2023. You will be designated as trainee and will be entitled with food and accommodation in our premises.

Wish you all success to pursue the internship and hope you will have a maximum technical take away after the training.

Copy to:

The Dean, Department of Civil Engineering  
Nandha Engineering College (Autonomous), Erode

For SHANMATHI CONSTRUCTIONS

S. T. 2





GOVERNMENT OF ARUNACHAL PRADESH  
OFFICE OF THE EXECUTIVE ENGINEER :: CAPITAL DIVISION - A  
PWD :: AP :: ITANAGAR :: 791 111

E-Mail: eeoda@rediffmail.com

Tel: 0380-2212438(O)

No. CDA/E-6/2022-23/

Dated Itanagar the ...../2023

To,

The Assistant Engineer,  
Capital Sub-Division - 5/A, PWD  
AP, Itanagar.

Sub:- Internship Training For Students - Reg.

As recommended by the Nandha Engineering College, Tamil Nadu you are requested to impart necessary Internship Training from 16/02/2023 to 23/04/2023 to the following students in any ongoing projects under your sub-division and direct them to report to the office of the undersigned alongwith a copy of completion report for issuance of necessary training certificate.

<u>Sl. No.</u>	<u>Name of Candidates</u>
1.	Bamang Negaakin
2.	Bamang Talang

( Head Assistant )  
For Executive Engineer  
Capital Division - A, PWD: AP  
Itanagar.

No. CDA/E-6/2022-23/ 7309-10  
Copy to:-

Dated Itanagar the 23/2.....2023

1. Dr. E. K. Mohanraj, Prof. & Dean, Nandha Engineering College, Tamil Nadu for information.
2. Concern Student.

*Bamang Negaakin*

( Head Assistant )  
For Executive Engineer  
Capital Division - A, PWD: AP  
Itanagar.





KATHIRESAN SHANMUGAM, B.E.,  
Civil Engineer

Land Survey Works | Building Planning & Designing | Elevation

## INTERNSHIP OFFER LETTER

Date: 05/02/2023

Mr. Raja.P  
Trichy.

Ref: Offer for internship

Dear Raja,

"Nilam Surveyor & Consultant" is pleased to offer you an educational internship opportunity as a "Site Supervisor" role for 3 months. It would be required of you to join us by 5<sup>th</sup> Feb 2023, under the following terms & conditions.

**Internship Period:** 05 February 2023 to 30 April 2023 (3 Months)

**Stipend Amount:** Rs. 9,500/- per month

Above mentioned salary will be applicable for the internship period 3 months from date of joining.

Working hours will be following as.

Monday to Saturday (8:30 am – 5:30 pm)

Sign on the second copy for accept this offer on the space provided and return it to us. We look forward to welcoming you to our team.

Sincerely,

With Regards,

*A. Kathiresan*

For Nilam Surveyor & Consultant



4/76, Mariamman Kovil St., Pottireddipatti, NAMAKKAL - 13.

80121 97733, 97897 66893 | nilamsurveyor@gmail.com | nilamsurveyor.com



**INTERNSHIP OFFER LETTER**

**Date :15.02.2023**

Mr.C.DHANA SANJAI  
Komarapalayam  
Re: Offer of Internship

Dear Dhana Sanjai,

“CHANDRAA BUILDER” is pleased to offer you an educational internship opportunity as a “Site Supervisor” role for 4 months. It would be required of you to join us by February 15, under the following terms and conditions.

**Internship Period : 15 February 2023 – 31 May 2023 (Four Months)**

**Stipend Amount : Rs.12,000/- Per Month**

Above mentioned salary will be applicable for the Internship period of four months from the date of joining.

Working hours will be following as.

Monday to Saturday (9:00 A.M – 06.00 P.M)

Sing on the Second copy accept this offer on the space provided and return it to us. We look forward to welcoming you to our team at “CHANDRAA BUILDER”

Sincerely,

with Regards,

**For CHANDRAA BUILDER**

*A. Shanmugam*  
**PARTNER**

**Er. K.P. Vijaya kumar** BE,  
Consulting Civil Engineer  
Registered Engineer - 037/RE  
Licensed Building Surveyor  
032/103/2016-17

# VIJAY ASSOCIATES

283/2,284, T.S.K. Nagar, 60 Feet Road,  
Tirupur - 641 604.

Cell : 93454 44400  
88833 57600

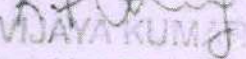
Date : 10/02/2023

## INTERNSHIP OFFER LETTER

### To Whom it may concern

This is to certify that **Mr. N. M. Naveen** Reg. no 19CEL06 of B.E. CIVIL ENGINEERING at Nandha Engineering College, Erode will be undergoing Internship program at **Vijay Associates**.

He will be undergoing his internship opportunity as a **Site Supervisor**. The internship will be of 3 months and shall commence from 06/02/2023 to 23/04/2023 in Tirupur location.

  
Er.K.P. VIJAYA KUMAR B.E. B.L.S.A.  
Consulting Civil Engineer  
Registered Engineer - 032/LS/2016/00047-II  
Registered Engineer - 037/RE-III  
283/2, 284, T.S.K Nagar,  
60 Feet, Dharapuram Road, TIRUPUR-4,  
Cell: 93454 44400, 88833 57600





**RANA CONSTRUCTIONS**  
Civil Engineers & Contractors


# 196, Cutchery street, Erode - 638 001  
Mob : 98432 72221, 98437 72225  
E-mail : ranaengineers2014@gmail.com

Date: 08/02/2023

**TO WHOM IT MAY CONCERN**

This is to certify that **Mr. K KAVIN (19CE009),**  
**Mr. S SALAMON RAJA (19CE021), Mr. B. THAROON**  
**(19CE029) of B.E CIVIL ENGINEERING Students of NANDHA**  
**ENGINEERING COLLEGE** has industrial project in **RANA**  
**CONSTRUCTIONS** from **February to April.**

For RANA CONSTRUCTION

  
Proprietor





Er.M. Nandakumar, M.E (Struct).,  
designwiseerd@gmail.com  
Cell: +9198659 - 55462

## INTERNSHIP OFFER LETTER

28/01/2023

**Mr. Selvakumar.M**

Erode

Re: Offer of Internship

Dear Selvakumar,

“**DESIGN WISE**” is pleased to offer you an educational internship opportunity as a “**Structural Rebar Detail Drafting Engineer**” role for **Four months** .it would be required of you to join us by **February 01/02/2023**, under the following terms and conditions.

**Internship Period: 01 February 2023 – 31 May 2023 ( Four Months)**

Working hours will be following as.

Monday to Saturday (09:30 A.M – 06:00 P.M)

Sign on the second copy for accept this offer on the space provided and return it to us. We look forward to welcoming you to our team at “**DESIGN WISE**”

Sincerely,

*M. N. 28/01.23*

With Regards,

**Er.M.NANDAKUMAR, M.E(Str).**  
REGISTERED STRUCTURAL ENGINEER GRADE - I (RSE)  
REG NO: 056/LS/2019/00012  
DESIGN WISE, 545/A, 2<sup>nd</sup> Floor,  
Thilagam Building, Perundurai Road,  
Erode - 638 011. Cell: 98659 55462.

Er.M.Nandakumar M.E.,(Struct)





Date : 01.02.2023



## ACCEPTANCE CERTIFICATE

We are pleased to inform you that we have admitted **Selvan.GUHAN.K** (Reg.No.19CE005), Studying IV B.E. Civil Engineering at "NANDHA ENGINEERING COLLEGE PERUNDURAI " for Industrial Project training from 01.02.2023 to 31.05.2023. We assure you that he will learn all the aspects in the field of Civil Engineering and will gain the practical knowledge.

Founder & Chief Executive

**Er. V.SOUNDARA RAJAN,**  
 M.E (Struc.) (Ph.D), C.Eng,  
 Chief Executive, greensky Construction,  
 1<sup>st</sup> Floor, Chendhur Complex,  
 Erode Main Road, Karattur, Gobi.

❖ Registered Engineer Grade II (RE-II) Gobichettipalayam Municipality (Reg.No:057/LS/2019/00007)

❖ Registered Structural Engineer Grade-1 (SE-1) Gobichettipalayam Municipality (Reg.No:057/LS/2019/00005)

❖ Registered Engineer Grade-1 (RE-Gr.1) EDTCP. (Reg.No:04/2020/RE-Gr.1/EDTCP)

❖ Registered Structural Engineer Grade -1(RSE-Gr.1) EDTCP. (Reg.No:05/2020/RSE-Gr.1/EDTCP)

❖ Panel Engineer Class -1A in Erode district. R.Dis.18955/2020c2 dt.18.05.2021

❖ Chartered Engineer & Registered Valuer (Reg.No:AM175731-0)

**INTERNSHIP OFFER LETTER****Date: 31.01.2023**

Mr. R.NIRMAL ✓

Komarapalayam

Re: Offer of Internship

13/02/2023

Dear Nirmal,

“CHANDRAA BUILDER” is pleased to offer you an educational internship opportunity as a “Site Supervisor” role for 4 months. It would be required of you to join us by February 01 2023, under the following terms and conditions.

**Internship Period:** 01 February 2023-31 May 2023 (Four Months) ✓**Stipend amount:** Rs.12,000/- Per month ✓

Above mentioned salary will be applicable for the Internship Period of Four months from the date of joining.

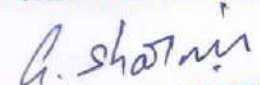
Working hours will be following as.

Monday to Saturday (9:00 A.M-06:00 P.M)

Sign on the second copy for accept this offer on the space provided and return it to us. We look forward to welcoming you to our team at “CHANDRAA BUILDER”

Sincerely,

With Regards,

**For CHANDRAA BUILDER****PARTNER**





# NAAVAL CONSTRUCTION

Branch Office : 45/4, Perundurai Road, Near SBI ATM, Collectorate, Erode\*- 638 011.  
Cell : 97897 32247, 97897 77247. Email : eromanimuthu@gmail.com

M.ABDULLA BASHA

S. NABINESH

P. RAGAVENDRAN

S. SHAMIM EBRAHIM

Re: Offer for Internship,

Dear Sir,

“NAAVAL CONSTRUCTION“ is pleased to offer you an educational internship opportunity as a “Site Supervisor” for 4 months, it would be required of you to join us by February 01 2023, under the following terms and conditions,

**Internship Period:** 01 February 2023 - 31 May 2023(Four Months)

**Stipend Amount:** 8,000/- per month

Above mentioned salary will be applicable for the Internship period of Four months from the date of joining.

Working Hours will be following as

Monday to Saturday (9:00 A.M - 06:00 P.M)

Sign on the second copy for accept this offer on the space provide and return it to us.

We look forward to welcoming you our team at “NAAVAL CONSTRUCTION”.

Sincerely,

With Regards,

For NAAVAL CONSTRUCTION

P. Mani  
Proprietor

TIN No. : 33853022241  
PAN No. : ABIFS8610F

# Sri Andavar Constructions

Govt. Registered Contractor & Engineers



**R. Ramesh D.C.E.,**  
99420 51717, 98438 10112

45, Sowndamman Kovil Street,  
Dharapuram - 638 656. Tirupur Dt.

Date: 01.02.2023

**From:**

Er. Kavin .M B.E ,  
Site Engineer,  
Sri Andavar Constructions,  
45, Sowndamman Kovil Street,  
Dharapuram,638656 .

**To:**

Dr. E. K. MOHAN RAJ, ME , MIE , MICI ,PhD,  
Professor & Dean,  
Department of Civil Engineering.

**Dear Sir,**

**Sub:** Acceptance of Request for Internship Training – Reg.

As you have requested for Internship training from the period of **FEB 2023** to **APRIL 2023** in our Organization for the student named **M.GOKUL ( 19CE004 ) & R.NOAH JAISINGH ( 19CE016 )** - We are accepting the request and permitting to undergo Internship training at our construction.

Thank You

Yours obediently,

M.Kavin,

Ph: No.7904491249

  
Er. KAVIN, M.B.E.,  
SITE ENGINEER,  
Ph.No :79044 91249





# NANDHA ENGINEERING COLLEGE (Autonomous), Erode-52

## Department of Electrical and Electronics Engineering

### Industrial Project & Internship Details for the Academic year (2022-23)

Sl. No.	Title of the activity	Name of the company with details	Name of the participant	Register number	Duration	Nature of the activity
1	Internship	KAAR Technologies, Chennai-600093	N Dhivya	20EEL05	23.11. 2022-31.05. 2024	Internship
2	Internship	KAAR Technologies, Chennai-600093	D Gunaa sri	19EE018	21.09.22 - 21.03.2023	Internship
3	Internship	KAAR Technologies, Chennai-600093	S Sukesh	19EE062	21.09.22 - 21.03.2023	Internship
4	Internship	Mobitech wireless solution pvt ltd, Erode-638052	A Ajayprakash	19EE001	12.09.2022 -12.12.2022	Internship
5	Internship	Mobitech wireless solution pvt ltd, Erode-638052	B Santhosh	19EE053	12.09.2022 -12.12.2022	Internship
6	Internship	Real tech GPS pvt ltd, Erode-638052	I Sasikumar	19EE054	21.09.2022-31.12.2022	Internship
7	Internship	TVS upasana limited, Hosur	V.Kavin	19EE028	02 jan 2023-01 jan 2026	Internship
8	Internship	TVS upasana limited, Hosur	S.Suhaskumar	19EE061	02 jan 2023-01 jan 2026	Internship
9	Internship	TVS upasana limited, Hosur	P S. Yewanth kumar	19EE066	02 jan 2023-01 jan 2026	Internship
10	Internship	Cliber emmbedded technologies india pvt, ltd,Erode	T.Mohanapriya	19EE041	01 feb 2023- 14 apr 2023	Internship
11	Internship	Cliber emmbedded technologies india pvt. Ltd,Erode	R R.Chowdry prakash	19EEL04	01 feb 2023- 14 apr 2023	Internship
12	Internship	AGRI IDART pvt. Ltd,Coimbatore-641041	S.Kaviya	19EE029	01 mar 2023-31 may 2023	Internship
13	Internship	Vinsinfo Private Ltd,Chennai-600018	G.Prithiga	19EE047	08 mar 2023-08 sep 2023	Internship

14	Battery pack modelling by batter management system of an hybrid electric vehicle using ANFIS	Caliber embedded technologies india P Ltd, Coimbatore	Bhuvanesh A	19EE005	01.02.23 to 25.04.23	Industrial project
15	Battery pack modelling by batter management system of an hybrid electric vehicle using ANFIS	Caliber embedded technologies india P Ltd, Coimbatore	Chowdryprakash R R	19EEL04	01.02.23 to 25.04.23	Industrial project
16	Battery pack modelling by batter management system of an hybrid electric vehicle using ANFIS	Caliber embedded technologies india P Ltd, Coimbatore	Kathirvel M	19EEL11	01.02.23 to 25.04.23	Industrial project
17	Battery pack modelling by batter management system of an hybrid electric vehicle using ANFIS	Caliber embedded technologies india P Ltd, Coimbatore	Aswin R	19EEL26	01.02.23 to 25.04.23	Industrial project
18	Smart wireless charging system for electric vehicles	Caliber virtual technologies, Salem	Dharanya K	19EE007	01.02.23 to 25.04.23	Industrial project
19	Smart wireless charging system for electric vehicles	Caliber virtual technologies, Salem	Gunaa sri D	19EE018	01.02.23 to 25.04.23	Industrial project
20	Smart wireless charging system for electric vehicles	Caliber virtual technologies, Salem	Kaviya S	19EE029	01.02.23 to 25.04.23	Industrial project
21	lot based air filter	SBI solvent extraction pvt Ltd, Salem	Gokul raj S	19EE011	01.02.23 to 25.04.23	Industrial project
22	lot based air filter	SBI solvent extraction pvt Ltd, Salem	Gowtham M	19EE016	01.02.23 to 25.04.23	Industrial project
23	lot based air filter	SBI solvent extraction pvt Ltd, Salem	Gunasekaran S	19EE019	01.02.23 to 25.04.23	Industrial project
24	lot based air filter	SBI solvent extraction pvt Ltd, Salem	Karthikeyan A	19EE026	01.02.23 to 25.04.23	Industrial project
25	IoT based smart energy monitoring and controlling system for home appliances using machine learning algorithm	Win solar industry, Salem	Gopal S	19EE012	01.02.23 to 25.04.23	Industrial project
26	IoT based smart energy monitoring and controlling system for home appliances using machine learning algorithm	Win solar industry, Salem	Jeevanandham E R	19EE023	01.02.23 to 25.04.23	Industrial project

27	IoT based smart energy monitoring and controlling system for home appliances using machine learning algorithm	Win solar industry, Salem	Dhamodharan P S	19EEL05	01.02.23 to 25.04.23	Industrial project
28	IoT based smart energy monitoring and controlling system for home appliances using machine learning algorithm	Win solar industry, Salem	Arun N	19EEL25	01.02.23 to 25.04.23	Industrial project
29	Control of permanent magnet chain driven drive system of an electric four wheeler	Jaai power distribution, Erode	Karthik M	19EE025	01.02.23 to 25.04.23	Industrial project
30	Control of permanent magnet chain driven drive system of an electric four wheeler	Jaai power distribution, Erode	Karthikeyan G	19EE027	01.02.23 to 25.04.23	Industrial project
31	Control of permanent magnet chain driven drive system of an electric four wheeler	Jaai power distribution, Erode	Arvind B K	19EEL03	01.02.23 to 25.04.23	Industrial project
32	Control of permanent magnet chain driven drive system of an electric four wheeler	Jaai power distribution, Erode	Navaneeth M	19EEL28	01.02.23 to 25.04.23	Industrial project
33	Multiple battery fast charging using multi-source input for E-vehicle	Caliber embedded technologies india P Ltd, Coimbatore	Mohanapriya.T	19EE041	01.02.23 to 25.04.23	Industrial project
34	Multiple battery fast charging using multi-source input for E-vehicle	Caliber embedded technologies india P Ltd, Coimbatore	Nirmala.M	19EEL17	01.02.23 to 25.04.23	Industrial project
35	Multiple battery fast charging using multi-source input for E-vehicle	Caliber embedded technologies india P Ltd, Coimbatore	Srima.R	19EEL23	01.02.23 to 25.04.23	Industrial project
36	Automated electric vehicle based on wireless communication	Caliber virtual technologies, Salem	Nivetha.P	19EE044	01.02.23 to 25.04.23	Industrial project
37	Automated electric vehicle based on wireless communication	Caliber virtual technologies, Salem	Prithiga.G	19EE047	01.02.23 to 25.04.23	Industrial project
38	Automated electric vehicle based on wireless communication	Caliber virtual technologies, Salem	Rachel.R	19EE049	01.02.23 to 25.04.23	Industrial project
39	Automated electric vehicle based on wireless communication	Caliber virtual technologies, Salem	Suganya.K	19EE060	01.02.23 to 25.04.23	Industrial project

40	Electricity generation using dynamic bifacial solar panel	Jaai power distribution, Erode	Santhosh.B	19EE053	01.02.23 to 25.04.23	Industrial project
41	Electricity generation using dynamic bifacial solar panel	Jaai power distribution, Erode	Sathananth.M.R	19EE055	01.02.23 to 25.04.23	Industrial project
42	Electricity generation using dynamic bifacial solar panel	Jaai power distribution, Erode	Vipin.S	19EE064	01.02.23 to 25.04.23	Industrial project
43	Electricity generation using dynamic bifacial solar panel	Jaai power distribution, Erode	Vivek.S	19EE065	01.02.23 to 25.04.23	Industrial project
44	Paralysis patient monitoring and health caring system by using IoT	SBI solvent extraction pvt Ltd, Salem	Krishna Prasath.K	19EEL13	01.02.23 to 25.04.23	Industrial project
45	Paralysis patient monitoring and health caring system by using IoT	SBI solvent extraction pvt Ltd, Salem	Sakthivel.S	19EEL21	01.02.23 to 25.04.23	Industrial project
46	Paralysis patient monitoring and health caring system by using IoT	SBI solvent extraction pvt Ltd, Salem	Vijay.S	19EEL32	01.02.23 to 25.04.23	Industrial project
47	Uninterruptible power supply with multiple power sources by using fuzzy controller	Win solar industry, Salem	Manikandan.V	19EEL15	01.02.23 to 25.04.23	Industrial project
48	Uninterruptible power supply with multiple power sources by using fuzzy controller	Win solar industry, Salem	Santhosh.M	19EEL22	01.02.23 to 25.04.23	Industrial project
49	Uninterruptible power supply with multiple power sources by using fuzzy controller	Win solar industry, Salem	Sudharshan.S	19EEL30	01.02.23 to 25.04.23	Industrial project

*P. J. [Signature]*  
Staff Incharge

*[Signature]*  
HoD/EEE





## OFFER LETTER

**Dear Ajayprakash**

We are happy to announce that you have been selected to fill the position of **Technical Engineer**. You will be paid a consolidated salary of **Rs.10,000.00** per month from the date of joining ( **12/09/2022**).

You will be on probation, for a period of three months from the date of joining. On successful completion of probation your service will be confirmed.

On behalf of the management, we welcome you to join hands and wish you an excellent career path. Read the " Human Resources policy and procedures" and follow it.

**Best Wishes**

For Mobitech Wireless Solution Private Limited



A handwritten signature in black ink, appearing to read "F. Dhruv".

Authorized Signatory



## Caliber Embedded

Technologies India (P) Ltd.

DATE : 01.02.2023

Dear **Chowdry Prakash.R.R.**,

We are pleased to inform you that Caliber Embedded Technologies has accepted your request to intern at our company **from 01/02/2023 to 15/04/2023**.

We look forward to welcoming you to our team and to providing you with a valuable learning experience. During your time here, you will have the opportunity to work with some of the most talented engineers and developers in the industry and gain hands-on experience with the latest technologies.

We are confident that you will make a valuable contribution to our team and will be an asset to our organization.

Thank you for choosing Caliber Embedded Technologies for your internship.

Sincerely,

**Caliber Embedded Technologies**

Authorized signatory

COIMBATORE – SALEM – ERODE – VELLORE – MADURAI - TRICHY

Contact No: 7867017811, 7708954811, 9789756065



## Interns Joining Formalities FY 24 - Batch II

2 messages

Humanresources <Humanresources@kaartech.com>

Tue, 22 Nov, 2022 at 5:46 pm

To: Humanresources <Humanresources@kaartech.com>, Employee Life Cycle Management <hrelm@kaartech.com>

Cc: Payroll <payroll@kaartech.com>, Gokulavani V <vgokulavani@kaartech.com>, Sanjai Kumar R <rsanjai@kaartech.com>,  
Muralidharan V <vmuralidharan@kaartech.com>, Asha Jayaraman <jasha@kaartech.com>, Vishnu R

<rvishnu@kaartech.com>, Alfred Sam Joes P <palfredsam@kaartech.com>

Dear Intern,

Welcome to the Kaar Family!

Hope you and family are doing well. We are happy to virtually onboard you for internship in FY24 FTF Batch 2 and the joining details are as follows. Kindly give attention to each line of this mail.

We request you to respond to this mail and fill the MS form immediately.

- 1 **Date of Internship Joining:** 23<sup>rd</sup> November 2022 (Wednesday).

Internship will be done virtually.

2. **Online Induction Programme:** On 23<sup>rd</sup> November 2022 (Wednesday) at 10.00AM IST via Zoom Meeting.

**Zoom Meeting Link is below.**

Kaar Training is inviting you to a scheduled Zoom meeting.

**Topic:** FY24 FTF Batch 2

**Time:** This is a recurring Zoom Meeting

**Join Zoom Meeting**

<https://kaartech.zoom.us/j/81922041130?pwd=UWl1L1JxWEttZUdoTDNuSzVKZ2hYZZ09>

**Meeting ID: 819 2204 1130**

**Passcode: 977661**

**3) Required Documents:**

- Attached Joining Report
- Bank Passbook Copy/Cancelled Cheque Copy
- Address Proofs – Aadhar, PAN, Passport (If Available)
- 10<sup>th</sup>, 12<sup>th</sup>, UG Marksheets (Till Current Semester)
- **Click Here – to fill your other requested information\***

**Note :** Kindly share soft copies of the above requested documents and fill the Microsoft Forms as well.

**4) Other Preparation:**

- **Personal Laptop:** We will not be issuing official laptops owing to the BYOD (Bring Your Own Device) practice. Hence please use personal laptops.
- **Individual Talent Showcase:** Everyday 5 of you will be asked to showcase your unique talent (singing, dancing, mimicry, instrumental, etc.) for a few minutes.

**5) Other Important Information:**

- **Dress Code:** Business casuals. Associates are required to keep their hair clean, trim, and neat. Shoes for men and appropriate footwear for women is mandatory. No extreme, immodest, and revealing dress. Violation of dress code may lead to disciplinary action.
- **Work Location (If Applicable):** Work from Home.

Your acknowledgement for this mail is mandatory.

Looking forward for your onboarding...

**Warm Regards,**  
Human Resources



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20EEL05 Dhivya N <20eel05@nandhaengg.org>

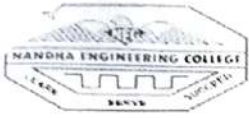
Thu, 24 Nov, 2022 at 7:32 am

To: Humanresources <Humanresources@kaaritech.com>

Cc: Employee Life Cycle Management <hrelm@kaaritech.com>, Payroll <payroll@kaaritech.com>, Gokulavani V <vgokulavani@kaaritech.com>, Sanjai Kumar R <rsanjai@kaaritech.com>, Muralidharan V <vmuralidharan@kaaritech.com>, Asha Jayaraman <jasha@kaaritech.com>, Vishnu R <rvishnu@kaaritech.com>, Alfred Sam Joes P <palfredsam@kaaritech.com>

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[19EE018 GUNAA SRI D <gunaasri.19ee018@nandhaengg.org>](mailto:19EE018_GUNAA_SRI_D<gunaasri.19ee018@nandhaengg.org>)

## Interns Joining Formalities FY 23 - Batch V

3 messages

Humanresources <Humanresources@kaartech.com>

Mon, Sep 19, 2022 at 2:07 PM

To: Humanresources <Humanresources@kaartech.com>, Employee Life Cycle Management <hrelm@kaartech.com>  
Cc: Payroll <payroll@kaartech.com>, Gokulavani V <vgokulavani@kaartech.com>, Sanjai Kumar R <rsanjai@kaartech.com>, Muralidharan V <vmuralidharan@kaartech.com>, Asha Jayaraman <jasha@kaartech.com>, Vishnu R <rvishnu@kaartech.com>

Dear Intern,

Welcome to the Kaar Family!

Hope you and family are doing well. We are happy to virtually onboard you for internship in Batch 5 and the joining details are as follows. Kindly give attention to each line of this mail.

We request you to respond to this mail and fill the MS form immediately.

1. **Date of Internship Joining:** 21<sup>st</sup> September 2022 (Wednesday).

Internship will be done virtually (work from home) as of now, until further orders from management.

2. **Online Induction Programme:** On 21<sup>st</sup> September 2022 (Wednesday) at 10.00AM IST via Zoom Meeting.

**Zoom Meeting Link is below.**

Kaar Training is inviting you to a scheduled Zoom meeting.

**Topic:** FY23 FTF Batch 5

**Time:** This is a recurring Zoom Meeting

**Join Zoom Meeting**

<https://kaartech.zoom.us/j/81455917156?pwd=SDJ5TkJHZzBjL0dMRklnbTI1WWF5QT09>

**Meeting ID: 814 5591 7156**

**Passcode: 379654**

**3) Required Documents:**

- Attached Joining Report
- Bank Passbook Copy/Cancelled Cheque Copy
- Address Proofs – Aadhar, PAN, Passport (If Available)
- 10<sup>th</sup>, 12<sup>th</sup>, UG Marksheets (Till Current Semester)
- **Click Here – to fill your other requested information\***

**Note :** Kindly share soft copies of the above requested documents and fill the Microsoft Forms as well.

**4) Other Preparation:**

- **Personal Laptop:** We will not be issuing official laptops owing to the BYOD (Bring Your Own Device) practice. Hence please use personal laptops.
- **Individual Talent Showcase:** Everyday 5 of you will be asked to showcase your unique talent (singing, dancing, mimicry, instrumental, etc.) for a few minutes.

**5) Other Important Information:**

- **Dress Code:** Business casuals. Associates are required to keep their hair clean, trim, and neat. Shoes for men and appropriate footwear for women is mandatory. No extreme, immodest, and revealing dress. Violation of dress code may lead to disciplinary action.
- **Work Location (If Applicable):** Work from Home.

Your acknowledgement for this mail is mandatory.

Looking forward for your onboarding...

**Warm Regards,**  
Human Resources


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 **Kaar -Intern Joining Report.docx**  
247K

**19EE018 GUNAA SRI D** <[gunaasri.19ee018@nandhaengg.org](mailto:gunaasri.19ee018@nandhaengg.org)>  
To: [gunaasri.2001@gmail.com](mailto:gunaasri.2001@gmail.com)

Mon, Sep 19, 2022 at 4:59 PM

[Quoted text hidden]

 **Kaar -Intern Joining Report.docx**  
247K

**19EE018 GUNAA SRI D** <[gunaasri.19ee018@nandhaengg.org](mailto:gunaasri.19ee018@nandhaengg.org)>

Tue, Sep 20, 2022 at 12:52 AM

To: Humanresources <[Humanresources@kaartech.com](mailto:Humanresources@kaartech.com)>

Cc: Employee Life Cycle Management <[hrelm@kaartech.com](mailto:hrelm@kaartech.com)>, Payroll <[payroll@kaartech.com](mailto:payroll@kaartech.com)>, Gokulavani V <[vgokulavani@kaartech.com](mailto:vgokulavani@kaartech.com)>, Sanjai Kumar R <[rsanjai@kaartech.com](mailto:rsanjai@kaartech.com)>, Muralidharan V <[vmuralidharan@kaartech.com](mailto:vmuralidharan@kaartech.com)>, Asha Jayaraman <[jasha@kaartech.com](mailto:jasha@kaartech.com)>, Vishnu R <[rvishnu@kaartech.com](mailto:rvishnu@kaartech.com)>

Greetings Sir/ Mam

DECLARATION:

I hereby declare that the below furnished details are true to the best of my



Date: 02/01/2023

Shri Kavin V  
S/O Veerappan R  
8/1, Pillayar Kovil Veethi, Aayipalayam  
Siruvalur, Gobi  
Erode (Dt),

Trainee ID: N170795

**Dear Kavin V**

## NEEM Trainee Contract Letter

We are pleased to engage you as **NEEM Trainee** subject to the following terms and conditions:

1. The period of training shall be **Thirty Six** months with start date **02/01/2023** and end date **01/01/2026**.
2. It shall not be obligatory on our part or of the Establishment / Company wherein you will undergo the on the job training to offer any employment to you during or on successful completion of your training period. As a NEEM Trainee undergoing training in the establishment, you shall be a trainee and not a workman / employee and as such, the provisions of any labour legislations shall not apply to you or in relation to you and your on the job training shall be solely governed by the provisions of All India Council for Technical Educational [National Employability Enhancement Mission (NEEM)] Regulations 2017.
3. You shall be given on the job training with **TVS Upasana Limited, Hosur** for the above mentioned period. You will be imparted training in shifts according to normal hours of work of the establishment to which you are attached for training.
4. During the tenure of your training, you shall abide by the rules and regulations from time to time as intimated to you by us and / or the Establishment wherein you will undergo on the job training including but not limited to all matters of conduct, discipline and safety and carry out all lawful orders of the establishment.
5. As NEEM Trainee you shall learn your subject field conscientiously and diligently and attend to practical and instructional classes regularly.
6. As NEEM Trainee you shall maintain a record of your Training during the period of the NEEM TRAINING in the proforma given by TVS Educational Society.
7. When the contract of Training is terminated for failure on your part to carry out the terms of contract, you shall refund to TVS Educational Society as cost of training such amount as may be determined by TVS Educational Society. In such event, you shall not be entitled to enter into another contract of training under the National Employability Enhancement Mission (NEEM).

8. Either party may terminate this contract by issuing 30 Days' Notice in writing or payment thereof.
9. The Contract of Training can be terminated without compensation payment to you:
  - a. If you secure gainful employment (on production of copy of the appointment letter); and
  - b. If you are unable to continue training on medical grounds (on production of a certificate to this effect from a medical officer not below the rank of a Civil Surgeon/surgeon attached to any Government Hospital).
10. During the period of Training, you shall be entitled to a Consolidated Stipend of **Rs.13806/-** per month. You hereby authorize TVS Educational Society to make all payment required to be made to you either by way of cheque or by directly crediting the amount to your bank account.
11. You can also earn Attendance Incentive of **Rs.1500/-** per month if you attend for On the Job training on all the scheduled training days during a month.
12. You will not be entitled to any other emoluments or payments during the period of training.
13. Continuance of payment of stipend shall depend on your satisfactory performance during the training period.
14. TVS Educational Society will formulate a "Training Program" for training the NEEM Trainees and shall make suitable arrangements for facilitating the same.
15. The Stipend for a particular month shall be paid on or before 10th of the following month.
16. Any disagreement or dispute between TVS Educational Society and the NEEM Trainee arising out of the terms and conditions of this Contract or incidental or ancillary thereto, shall be referred to and Governed by the provisions of the terms laid under the All India Council for Technical Education [National Employability Enhancement Mission (NEEM)] Regulations 2017.

#### ENDORSEMENT

I hereby confirm the acceptance of the above NEEM Contract letter, on the terms and conditions stipulated therein. I understand and agree that my signing this contract does not constitute employment by TVS Educational Society or any guarantee of employment. Also, I confirm that I am accepting this contract letter after understanding the clauses mentioned above and it will be conclusive proof of my acceptance to this letter.

For TVS Educational Society

Accepted and Agreed

*V R. Subbaraj*

Signature & Date  
(Kavin V)

Authorised Signatory



**AGTRS IDART PRIVATE LIMITED**

*Pioneer in Service...*

TAMILNADU • KERALA • ANDHRA PRADESH • PONDY

TM



## HEARTY CONGRATULATIONS!...

Dear : **S.KAVIYA**

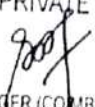
It gives me immense delight to formally welcome you to be a part of this great institution, which has grown tremendously over the years and looking forward to conquer new heights in the years to come. I am sure that you would definitely want to build a longer association with us, which will in turn offer you exciting and challenging career opportunities to grow and develop your selves. We have made necessary arrangements to facilitate a smooth cross over into our system and in case you need help, please feel free to contact us at [info@idartpvtltd.in](mailto:info@idartpvtltd.in), [hr@idartpvtltd.in](mailto:hr@idartpvtltd.in), [admin@idartpvtltd.in](mailto:admin@idartpvtltd.in) the details of the offer of appointment are annexed.

Once again hearty congratulations on your achievement. Wishing you all success and a wonderful life ahead....!

Wish you all success.

HR MANAGER

For AGTRS IDART PRIVATE LIMITED

  
HR MANAGER (COIMBATORE HO)

AGTRS IDART PVT LTD





TAMILNADU • KERALA • ANDHRA PRADESH • PONDY



07 Mar, 2023

EMP No : AID003921

NAME – S.KAVIYA

**Employment offer**

With reference to your application and recent interview with **AGTRS IDART PRIVATE LIMITED**

We are pleased to offer you the following.

**JOB TITLE : OFFICE ASSISTANT**

**CATEGORY : SCALE 1**

**GRADE : A**

- Probation period – 3 Months (90 Days )
- After completion of probation period your salary package Will be fixed per annum – 2,16,000 RS /-

The detailed break – up of your compensation and other terms and conditions of your employment and enclosed

You will be based at **COIMBATORE HO**

We look forward to having you on board by **07 Mar, 2023,**

We are an equal opportunity employer and advancement of employees of the company is a function of their abilities and performances. We place a lot of emphasis on ethical business conduct and believe that development of employees is a shared responsibility. We provide the means for employees to enhance their capabilities and knowledge and employees are expected to optimally utilize these opportunities.


We look forward to having you on board and can promise you an exciting career ahead

Yours sincerely,

For

**AGTRS IDART PRIVATE LIMITED**

For AGTRS IDART PRIVATE LIMITED

  
HR MANAGER (COIMBATORE HO)

HR Manager – Regular scope

### Employment offer

#### Terms and conditions

- Your initial place of work will be anywhere in Tamil Nadu. However, your service is transferable and can be transferred, seconded or deputed by the company to:
  - a). Any operation in India or abroad under the company or the ownership of AGTRS IDART PVT LTD, including any joint venture in which AGTRS IDART PVT LTD is a participant.You will report to the Manager operations – Regular scope, or to such person nominated by the AGTRS IDART PRIVATE LIMITED Management.
- You will be on probation period of minimum 3 months from the date commenced works but if the company work, but if the company is not satisfied with your work and conduct as per the applicable policies, your service shall be liable to be terminated without notice at any time during the probation period. Your probation period may be extended for further period as deemed fit by the company at its sole discretion. After completion of the probation period, you shall be deemed to have been confirmed in the service of the company unless you receive any communication in writing to the contrary. During the probation period, should you wish to terminate your service, you may do so by giving 7 days advance notice in writing and you want to pay a sum of 1832Rs/- including of GST for the purpose of Branch activation, uniforms, ID Cards and training charges.
- After confirmation the company may terminate your employment by giving one week advance notice in writing or payment of 7 days salary in lieu thereof at the sole discretion of the company. You may choose to resign from the company at any time after confirmation of service with on few weeks advance notice in writing or payment of 7 days salary in lieu thereof. The company may at, at its sole discretion, dispense with notice period of one week subject to recovery of one month salary. In case any disciplinary proceedings are either contemplated or pending against you, the company will have the right not to accept your resignation. Your resignation will become effective and final only after the acceptance thereof is communicated to you in writing. Resignation once accepted by the company cannot be unilaterally withdrawn by you. You are also liable to be terminated without any notice or payment of salary in lieu thereof, if you are found guilty of gross misconduct or any other act or omission resulting in disciplinary proceedings as per the applicable policies of the company.
- If you remain absent for three consecutive days without your manager's approval or any authorization, the company will serve you notice at your last known address calling upon you to report for duty immediately if you continue to remain absent without any communication or information to the company after 48 hours from the date of issuance of written notice or fail to furnish satisfactory explanation of your absence you shall be deemed to have abandoned your service and your services shall be terminated forthwith without any further notice. Loss of pay, per day calculated in your gross salary as 900 and 1,100 Rs for scale 1, 1400 Rs for scale 2, 1000 Rs for scale 3 and 4. No loss of pay for executive grade staffs.



- Your working hours leave, holidays and others prescribed service conditions / benefits will be as applicable to your category of employees at the office / establishment of the company in which you are for the time being posted.
- It is understood that this appointment is being offered to you on the basis of the particular submitted by you in your application for appointment. However, if at any time it emerges that, the particular furnished by you were false /incorrect are that any material are relevant information had been suppressed, concealed or measure presented, your appointment will be concentrate invalid and your services would be liable to be terminated by the company forthwith without notice and without prejudice to the rights of the company to take legal action against you.
- You will automatically retire from the services of the company at the end of the month in which you attain in the age of 60 years.
- You will be governed by the company's policies, rules and regulations applicable, enforced, amended or altered from time to time during course of your employment.
- You shall faithfully diligently and to the best of your ability perform the duties entrusted to you by the company from time to time and shall observed discipline decorum and discretion in the discharge of your duties. While in the employment of the company you shall not offer your services for a consideration to any person legal entity or public authority not the employed in any capacity on a permanent or temporary are part time basis with any entity other then the company.
- You confirm that you have disclosed fully to the company all of your business interested and investments whether or not they are similar to or in conflict with the business interest business or activities of the company and all circumstance in respect of which there is or there might be a conflict of interest between the company and you are any of your immediate relative. You agree to disclose fully to the company any such interest or circumstance of conflict which may arise during your employment immediately.
- You shall always have your personal postal address or communication address kept with the company updated with all changes immediately including at the time when you proceed on leave. All communication send by the company at such address shall be de made to have been received by you.
- The continuation of your employment shall always be subject to your medical fitness the company shall have the right to require you to subject yourself at any time during your employment for a medical examination by their own/ recommended doctor.
- You shall not without the express consent of the company in writing pledge the credit of the company or enter into commitments dealings are obligations on behalf of the company for which you have no express authority from the company .





**AGTRS IDART PRIVATE LIMITED**

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- The position held by you is strictly of a confidential nature. You shall not disclose to any UN authorized person either during or after your employment with the company for any reasons, information about the interest or business of the company or any affiliated companies. You shall not communicate to any public papers, journals, pamphlets or leaflets or cause to be disclosing at any time any information or document official or otherwise relating to the company except with the prior approval of the company. The obligation of confidentiality shall continue to be valid and enforceable by the company for a period two years following retirement or termination of services for any reasons whatever .
- Any development process , discovery , plan specification program , design process adaptation or improvement in procedure or other matters or work including any artistic literary or other works which can be subject matter of copyright, patent , industrial design trade mark / service mark or other forms of intellectual property rights may developed discover by you either alone or jointly with any other person or persons while in the employment of the company in connection with are in any way affecting or relating to the business of the company are capable of being used or adequate for use their in or in connection there with shall for forthwith be disclosed to the company and shall belong to and be the absolute property of the company.
- Upon termination of your employment with your company you shall forthwith handover charge and return to the company all the assets and property of the company ( including any leased properties ) documents files, books ,papers, memos, laptop ,mobiles ,id card, batch , uniform or any other property of the company in your position , custody or control and your dues will be settled only after confirmation in the records is received from your manager .
- Your performance may be appraised at regular intervals as per the process specified by the company. subsequent salary adjustments and monetary or non-monetary benefits related to such performance appraisal will be decided by the company at its sole discretion in all matters relating to grant of increment and / or promotion merit will be the only criteria and no record shall be had to seniority in service the decision of the company will be final in this regard.
- Inspection officer should completed 500 calls per month mandatory. Minimum 25 working days are mandatory. Yearly increment will be 10% of basic salary.
- The terms of this employment offer are straightly confidential and any breach of confidentiality will be viewed seriously and may result into disciplinary proceeding as per the policies of the company.
- Any dispute arise in from this offer letter shall be subject to the exclusive jurisdiction of course at Coimbatore

(See sub - Rule (6) of Rule 11 of the Tamil Nadu shops and Establishments Rules, 1948)

Annexure - T / Pay slip (MODEL COPY)

<b>AGTRS IDART PRIVATE LIMITED (CIN : U01100TZ2017PTC029601)</b>							
Employee Name	*****			Employee Code	*****		
Designation	*****			Date of Joining	*****		
Scale / Grade	*****			Month of salary	From Date	To Date	
Branch Location	*****			Bank A/C	*****		
UIDAI Number	*****			Bank Name	*****		
Employee Address	*****			Pay Mode	*****		
ATTENDANCE		Present	Absent	Type of Leave	LOP	CL/EL/PL	OD
Total Working Days	0	0	0		0	0	0
(Form V - See sub - Rule (1) of Rule (16) of the Tamil Nadu shops and Establishments Rules, 1948)							

**Deductions**

Earnings		Deductions	
Basic Pay	10,000.00	Advance Salary	0.00
Special Allowance	5000.00	PF / NPS Contribution	0.00
Flexible Allowance	3000.00	ESIC Contribution	0.00
Fixed Personal Pay	0.00	PF Loan	0.00
Graduation Pay	0.00	LOP / LWP	0.00
House Rent Allowance	4000.00	Income Tax	0.00
CCA	0.00	Tax Deduction at source	0.00
Special Allowance Pay	0.00	Labor welfare Fund	0.00
Cycle Allowance	0.00	House Rent Recovery	0.00
Food Coupon	2500.00	House Rent Paid	4000.00
Mobile Allowance	0.00	Medical WF Allowance	0.00
Incentives Payment	0.00	Food coupon	2500.00
Transport Allowance	0.00	Professional Tax	0.00
Arrears	0.00	Other Deduction	0.00
Bonus Amount	0.00	Loans	0.00
Ex gratia Amount	0.00		
Other Earnings			
<b>Total Earnings (CTC)</b>	<b>24,500.00</b>	<b>Total Deductions</b>	<b>6500.00</b>
<b>Net payable</b>	<b>Rupees : 18,000.00 /-</b>		

(This is a system generated document hence does not require any signature)



# Caliber Embedded

Technologies India (P) Ltd.

DATE : 01.02.2023

**Dear MOHANAPRIYA.T ,**

We are pleased to inform you that Caliber Embedded Technologies has accepted your request to intern at our company **from 01/02/2023 to 15/04/2023**.

We look forward to welcoming you to our team and to providing you with a valuable learning experience. During your time here, you will have the opportunity to work with some of the most talented engineers and developers in the industry and gain hands-on experience with the latest technologies.

We are confident that you will make a valuable contribution to our team and will be an asset to our organization.

Thank you for choosing Caliber Embedded Technologies for your internship.

Sincerely,

**Caliber Embedded Technologies**

Authorized signatory

COIMBATORE - SALEM - ERODE - VELLORE - MADURAI - TRICHY

Contact No: 7867017811, 7708954811, 9789756065



AL/1828

23-Feb-2023

**Prithiga Gnanasigamani**  
8/37, Sellakumarapalayam,  
Poondurai Semur(Po),  
Aval Poondurai(Via),  
Erode - 638115

Dear Prithiga Gnanasigamani,

### Offer of Appointment

We are extremely pleased to offer you the job of "Associate Developer" in VINSINFO Private Limited on the following terms and conditions.

#### **Probation**

You will be on probation for a period of 180 calendar days or such extended period as may be decided by the company based on your performance.

*\*An early confirmation (<6 months) is possible for trainees who exhibit extraordinary performance.*

#### **Compensation**

Your annual compensation (CTC) will be Rs. 334799/- (Rupees Three Lakhs Thirty Four Thousand Seven Hundred and Ninety Nine Only). Refer attached Annexure for salary structure.

#### **Working Hours**

The hours of work will commence at 9.30 a.m. and will continue till 6.30 p.m. every day. However, you may have to work in different time zone as required in the assigned project which will be communicated by your Manager.

The office will be functioning 5 days a week beginning on Monday. Sunday will be weekly holiday. The office will be closed on first, second and fourth Saturdays of each month, 5 Government holidays in a year and 7 days will be on the option chosen at the beginning of the calendar year.

#### **Leave Policy**

You will be entitled to 14 days of earned leave a year. You are expected to take prior permission of your manager for availing leave.

We are committed to ensuring a family-friendly environment and a culture that builds a great work-life balance. Women are entitled to maternity leave with full pay for a period of 26 weeks. This policy is in line with latest Maternity Benefit (Amendment Act) 2017. Men will be entitled to paternity leave with full pay for a period of 5 continuous working days.

#### **Confidentiality**

The work developed at VINSINFO Private Limited is proprietary to the company and at no instance you will reveal to outsiders or competitors the information of clients, projects and products developed.

**Non-Disclosure and Service Agreement**

You will be required to sign a Non-Disclosure Agreement and Service Agreement (for 30 Months) on the joining day along with your appointment letter.

**Termination of Employment**

- a. During probation period, your services can be terminated by the company with a notice of one day and a month's salary.
- b. On confirmation, your services can be terminated with a minimum notice period of 1 month or completion of the project handled.
- c. If you resign from the services of the company, you will have to serve a notice period of 3 months.

**Higher Education**

During your employment at VINSINFO Private Limited, you cannot take up full time or part time employment elsewhere. If you join any educational institution school or college, you should inform the management 3 months in advance. You will be permitted to pursue higher education (through distance education) on completion of 1 year of service.

**Note**

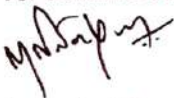
- o Your address noted above shall be treated as your correct address for all communications. If there is any change in your above address, the same should be intimated to the employer within three days of such change.
- o You will abide by all the rules and regulations of the Company which are in force from time to time and the Company shall have the right to vary or modify any or all of the above terms and conditions which shall be binding on you.
- o Any change in the terms and conditions of employment is at the Company's discretion and will be notified individually through e-mail communication.

Looking forward to a professionally meaningful and mutually rewarding relationship!

Welcoming you again to the VINS family!

Sincerely yours

For VINSINFO PRIVATE LIMITED,



Authorized Signatory

I hereby accept the Appointment Letter with the terms and conditions mentioned above and agree to join on **08-Mar-2023**.

Signature:



Name: PRITHIGA G

Date: Feb 24 2023 12:15 IST

Annexure

Salary Heads	Associate Developer	
	Monthly (INR ₹)	Annual (INR ₹)
Gross Salary	25250	
Basic	12625	
HRA	5813	
Special Allowance	4175	
Conveyance	1600	
<b>Gross Salary (A)</b>	25250	303000
Employee Contribution towards PF	1800	
Employee Contribution Towards ESI	0	
Professional Tax	208	
<b>Net Salary</b>	<b>23242</b>	<b>278904</b>
Employer Contribution towards PF (B)	1800	21600
Employer Contribution towards ESI (C)	0	0
<b>Gratuity (E)</b>		7284
<b>Medical Insurance Premium (F)</b>		2915
<b>Annual Cost to the Company ( A+B+C+E+F)</b>		<b>334799</b>
<b>Annual Cost to the company (in words): Rupees Three Lakhs Thirty Four Thousand Seven Hundred and Ninety Nine Only</b>		

Note: Employee Benefits such as Medical Insurance Coverage, Gift Cards on Birthdays, Anniversaries etc not included in the above structure.

The calculation for PF, ESI & Gratuity is based on prevailing norms and any change in government policy will have a necessary effect on that particular date.





## OFFER LETTER

**Dear Santhosh**

We are happy to announce that you have been selected to fill the position of **Technical Engineer**. You will be paid a consolidated salary of **Rs.10,000.00** per month from the date of joining ( **12/09/2022**).

You will be on probation, for a period of three months from the date of joining. On successful completion of probation your service will be confirmed.

On behalf of the management, we welcome you to join hands and wish you an excellent career path. Read the " Human Resources policy and procedures" and follow it.

**Best Wishes**

For Mobitech Wireless Solution Private Limited



A handwritten signature in black ink, appearing to read "F. Dharmaraj".

Authorized Signatory



# REAL TECH GPS

PRIVATE LIMITED

## OFFER LETTER

Dear SASI KUMAR

We are happy to announce that you have been selected to fill the position of Technical Engineer. You will be paid a consolidated salary of Rs.9,000.00/- per month from the date of joining (21/09/2022).

You will be on probation, for a period of three months from the date of joining. On successful completion of probation your service will be confirmed.

On behalf of the management, we welcome you to join hands and wish you an excellent career path. Read the "Human Resources policy and procedures" and follow it.

Best Wishes

For Real Tech GPS Private Limited



Authorized Signatory

Date: 02/01/2023

Shri Suhaskumar S  
S/O Sivan M  
4/406, Purathur (Vill), P.Chettihalli (Po)  
Palacode  
Dharmapuri (Dt).

Trainee ID: N170758

**Dear Suhaskumar S**

### NEEM Trainee Contract Letter

We are pleased to engage you as NEEM Trainee subject to the following terms and conditions:

1. The period of training shall be **Thirty Six** months with start date **02/01/2023** and end date **01/01/2026**.
2. It shall not be obligatory on our part or of the Establishment / Company wherein you will undergo the on the job training to offer any employment to you during or on successful completion of your training period. As a NEEM Trainee undergoing training in the establishment, you shall be a trainee and not a workman / employee and as such, the provisions of any labour legislations shall not apply to you or in relation to you and your on the job training shall be solely governed by the provisions of All India Council for Technical Educational [National Employability Enhancement Mission (NEEM)] Regulations 2017.
3. You shall be given on the job training with **TVS Upasana Limited, Hosur** for the above mentioned period. You will be imparted training in shifts according to normal hours of work of the establishment to which you are attached for training.
4. During the tenure of your training, you shall abide by the rules and regulations from time to time as intimated to you by us and / or the Establishment wherein you will undergo on the job training including but not limited to all matters of conduct, discipline and safety and carry out all lawful orders of the establishment.
5. As NEEM Trainee you shall learn your subject field conscientiously and diligently and attend to practical and instructional classes regularly.
6. As NEEM Trainee you shall maintain a record of your Training during the period of the NEEM TRAINING in the proforma given by TVS Educational Society.
7. When the contract of Training is terminated for failure on your part to carry out the terms of contract, you shall refund to TVS Educational Society as cost of training such amount as may be determined by TVS Educational Society. In such event, you shall not be entitled to enter into another contract of training under the National Employability Enhancement Mission (NEEM).



8. Either party may terminate this contract by issuing 30 Days' Notice in writing or payment thereof.
9. The Contract of Training can be terminated without compensation payment to you:
  - a. If you secure gainful employment (on production of copy of the appointment letter); and
  - b. If you are unable to continue training on medical grounds (on production of a certificate to this effect from a medical officer not below the rank of a Civil Surgeon/surgeon attached to any Government Hospital).
10. During the period of Training, you shall be entitled to a Consolidated Stipend of Rs.13806/- per month. You hereby authorize TVS Educational Society to make all payment required to be made to you either by way of cheque or by directly crediting the amount to your bank account.
11. You can also earn Attendance Incentive of Rs.1500/- per month if you attend for On the Job training on all the scheduled training days during a month.
12. You will not be entitled to any other emoluments or payments during the period of training.
13. Continuance of payment of stipend shall depend on your satisfactory performance during the training period.
14. TVS Educational Society will formulate a "Training Program" for training the NEEM Trainees and shall make suitable arrangements for facilitating the same.
15. The Stipend for a particular month shall be paid on or before 10th of the following month.
16. Any disagreement or dispute between TVS Educational Society and the NEEM Trainee arising out of the terms and conditions of this Contract or incidental or ancillary thereto, shall be referred to and Governed by the provisions of the terms laid under the All India Council for Technical Education [National Employability Enhancement Mission (NEEM)] Regulations 2017.

**ENDORSEMENT**

I hereby confirm the acceptance of the above NEEM Contract letter, on the terms and conditions stipulated therein. I understand and agree that my signing this contract does not constitute employment by TVS Educational Society or any guarantee of employment. Also, I confirm that I am accepting this contract letter after understanding the clauses mentioned above and it will be conclusive proof of my acceptance to this letter.

For TVS Educational Society

Accepted and Agreed

*V. R. Subbarao*

Signature & Date  
( Suhaskumar S )

Authorised Signatory



**19EE062 SUKESH S <sukesh.19ee062@nandhaengg.org>**

## Interns Joining Formalities FY 23 - Batch V

Humanresources <Humanresources@kaartech.com>

Mon, Sep 19, 2022 at 2:07 PM

To: Humanresources <Humanresources@kaartech.com> Employee Life Cycle Management <hrelm@kaartech.com>  
Cc: Payroll <payroll@kaartech.com>, Gokulavani V <vgokulavani@kaartech.com>, Sanjai Kumar R <rsanjai@kaartech.com>, Muralidharan V <vmuralidharan@kaartech.com>, Asha Jayaraman <jasha@kaartech.com>, Vishnu R <rvishnu@kaartech.com>

Dear Intern,

Welcome to the Kaar Family!

Hope you and family are doing well. We are happy to virtually onboard you for internship in Batch 5 and the joining details are as follows. Kindly give attention to each line of this mail.

We request you to respond to this mail and fill the MS form immediately.

1. **Date of Internship Joining:** 21<sup>st</sup> September 2022 (Wednesday).

Internship will be done virtually (work from home) as of now, until further orders from management.

2. **Online Induction Programme:** On 21<sup>st</sup> September 2022 (Wednesday) at 10.00AM IST via Zoom Meeting.

**Zoom Meeting Link is below.**

Kaar Training is inviting you to a scheduled Zoom meeting.

**Topic:** FY23 FTF Batch 5

**Time:** This is a recurring Zoom Meeting

**Join Zoom Meeting**

<https://kaartech.zoom.us/j/81455917156?pwd=SDJ5TkJKZzBJL0dMRklnbTI1WWF5QT09>

**Meeting ID: 814 5591 7156**

**Passcode: 379654**

**3) Required Documents:**

- Attached Joining Report
- Bank Passbook Copy/Cancelled Cheque Copy
- Address Proofs – Aadhar, PAN, Passport (If Available)
- 10<sup>th</sup>, 12<sup>th</sup>, UG Marksheets (Till Current Semester)
- **Click Here – to fill your other requested information\***

**Note :** Kindly share soft copies of the above requested documents and fill the Microsoft Forms as well.

**4) Other Preparation:**

- **Personal Laptop:** We will not be issuing official laptops owing to the BYOD (Bring Your Own Device) practice. Hence please use personal laptops.
- **Individual Talent Showcase:** Everyday 5 of you will be asked to showcase your unique talent (singing, dancing, mimicry, instrumental, etc.) for a few minutes.

**5) Other Important Information:**


- **Dress Code:** Business casuals. Associates are required to keep their hair clean, trim, and neat. Shoes for men and appropriate footwear for women is mandatory. No extreme, immodest, and revealing dress. Violation of dress code may lead to disciplinary action.
- **Work Location (If Applicable):** Work from Home.

Your acknowledgement for this mail is mandatory.

Looking forward for your onboarding...

**Warm Regards,**  
Human Resources

Disclaimer / Notice: "This transmittal and/or attachments have been issued by Kaar Technologies. The information contained here within may be privileged or confidential. If you are not the intended recipient, you are hereby notified that you have received this transmittal in error; any review, dissemination, distribution or copying of this transmittal is strictly prohibited. If you have received this transmittal and/or attachments in error, please notify us immediately by reply or by telephone (Tel. +91-44-40651555) or by E-mail [itconnect@kaartech.com](mailto:itconnect@kaartech.com) and immediately delete this message and all its attachments."

 **Kaar -Intern Joining Report.docx**  
247K



Date: 02/01/2023

Shri Yeswanth Kumar P S  
S/O Subramaniam P K  
22, Kinatru Street, Ponnatchipudur  
Perunthalaiyur (Po), Bhavani (Tk)  
Erode (Dt),

Trainee ID: N170794

Dear **Yeswanth Kumar P S**

## NEEM Trainee Contract Letter

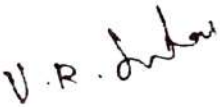
We are pleased to engage you as **NEEM Trainee** subject to the following terms and conditions:

1. The period of training shall be **Thirty Six** months with start date **02/01/2023** and end date **01/01/2026**.
2. It shall not be obligatory on our part or of the Establishment / Company wherein you will undergo the on the job training to offer any employment to you during or on successful completion of your training period. As a NEEM Trainee undergoing training in the establishment, you shall be a trainee and not a workman / employee and as such, the provisions of any labour legislations shall not apply to you or in relation to you and your on the job training shall be solely governed by the provisions of All India Council for Technical Educational [National Employability Enhancement Mission (NEEM)] Regulations 2017.
3. You shall be given on the job training with **TVS Upasana Limited, Hosur** for the above mentioned period. You will be imparted training in shifts according to normal hours of work of the establishment to which you are attached for training.
4. During the tenure of your training, you shall abide by the rules and regulations from time to time as intimated to you by us and / or the Establishment wherein you will undergo on the job training including but not limited to all matters of conduct, discipline and safety and carry out all lawful orders of the establishment.
5. As NEEM Trainee you shall learn your subject field conscientiously and diligently and attend to practical and instructional classes regularly.
6. As NEEM Trainee you shall maintain a record of your Training during the period of the NEEM TRAINING in the proforma given by TVS Educational Society.
7. When the contract of Training is terminated for failure on your part to carry out the terms of contract, you shall refund to TVS Educational Society as cost of training such amount as may be determined by TVS Educational Society. In such event, you shall not be entitled to enter into another contract of training under the National Employability Enhancement Mission (NEEM).

8. Either party may terminate this contract by issuing 30 Days' Notice in writing or payment thereof.
9. The Contract of Training can be terminated without compensation payment to you:
  - a. If you secure gainful employment (on production of copy of the appointment letter); and
  - b. If you are unable to continue training on medical grounds (on production of a certificate to this effect from a medical officer not below the rank of a Civil Surgeon/surgeon attached to any Government Hospital).
10. During the period of Training, you shall be entitled to a Consolidated Stipend of **Rs.13806/-** per month. You hereby authorize TVS Educational Society to make all payment required to be made to you either by way of cheque or by directly crediting the amount to your bank account.
11. You can also earn Attendance Incentive of **Rs.1500/-** per month if you attend for On the Job training on all the scheduled training days during a month.
12. You will not be entitled to any other emoluments or payments during the period of training.
13. Continuance of payment of stipend shall depend on your satisfactory performance during the training period.
14. TVS Educational Society will formulate a "Training Program" for training the NEEM Trainees and shall make suitable arrangements for facilitating the same.
15. The Stipend for a particular month shall be paid on or before 10th of the following month.
16. Any disagreement or dispute between TVS Educational Society and the NEEM Trainee arising out of the terms and conditions of this Contract or incidental or ancillary thereto, shall be referred to and Governed by the provisions of the terms laid under the All India Council for Technical Education [National Employability Enhancement Mission (NEEM)] Regulations 2017.

**ENDORSEMENT**

I hereby confirm the acceptance of the above NEEM Contract letter, on the terms and conditions stipulated therein. I understand and agree that my signing this contract does not constitute employment by TVS Educational Society or any guarantee of employment. Also, I confirm that I am accepting this contract letter after understanding the clauses mentioned above and it will be conclusive proof of my acceptance to this letter.

**For TVS Educational Society****Accepted and Agreed**Signature & Date  
( Yeswanth Kumar P S )

Authorised Signatory



IT - Internship

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

DEPARTMENT OF INFORMATION TECHNOLOGY

INTERNSHIP DETAILS 2022-2023

S-NO	REG NO	NAME	COMPANY NAME	DURATION	STIPEND
1	19IT002	AKASH CHANDRU S	VABGO	01/12/2022 TO 31/12/2022.	15,000/-
2	19IT007	ARUN T	VIRTUSA	27-06-2022 TO 27-04- 2023.	NIL
3	19IT020	DINESH KUMAR T	PURPLESLATE	JAN 17,2023 TO 15 <sup>th</sup> JUNE 2023.	NIL
4	19IT041	NITHISH KUMAR M	VABGO	01/12/2022 TO 31/12/2022	15,000/-
5	19IT053	SRIRANJANI B	KAAR TECHNOLOGY	SEPT 22,2022 TO MAR 2023.	5000/-
6	20IT004	ARUNACHALAM G	KAAR TECHNOLOGY	23 <sup>rd</sup> NOV 2022 TO APRIL 2023.	5000/-
7	20IT016	JEEVITHA K	KAAR TECHNOLOGY	23 <sup>rd</sup> NOV 2022 TO APRIL 2023.	5000/-
8	20IT048	SUDHARSHINI V M	KAAR TECHNOLOGY	23 <sup>rd</sup> NOV 2022 TO APRIL 2023.	5000/-

  
FACULTY INCHARGE

  
HOD

November 30, 2022

## INTERNSHIP OFFER LETTER

This is to certify that Akash Chandru S a student of the IT Department studying at Nandha Engineering College, Erode. Enrollment ID 19IT002 will be undergoing an internship program at Vabgo.

He will be undertaking an internship in Front End Development. The internship will be for 1 month probationary. Later it can be extended based on student and college, from 1/12/2022 to 31/12/2022 at location Perundurai.

### **Indicative Roles & Responsibilities:**

- You will be responsible for building the front end of the web application.
- Translating wireframes and designs to good-quality code.
- Collecting data on consumers, competitors, and the marketplace. Consolidating information into actionable items, reports, and presentations.
- Develop responsive web-based U

For Vabgo





Vabgo

FOR ALL YOUR BUSINESS NEEDS

November 30, 2022

## INTERNSHIP OFFER LETTER

This is to certify that Nithish Kumar M a student of the IT Department studying at Nandha Engineering College, Erode. Enrollment ID 19IT041 will be undergoing an internship program at Vabgo.

He will be undertaking an internship in Front End Development. The internship will be for 1 month probationary. Later it can be extended based on student and college, from 1/12/2022 to 31/12/2022 at location Perundurai.

### **Indicative Roles & Responsibilities:**

- You will be responsible for building the front end of the web application.
- Translating wireframes and designs to good-quality code.
- Collecting data on consumers, competitors, and the marketplace. Consolidating information into actionable items, reports, and presentations.
- Develop responsive web-based U

For Vabgo



Virtusa Consulting Services Pvt Ltd  
No. 34 IT Highway, Navallur, Chennai - 600 130 | www.virtusa.com  
CIN: U93000TN2008FTC128079 Telephone: 044 3987 3000 | website: www.virtusa.com | Fax: 044 2743 5128

### EXPERIENCE & SERVICE CERTIFICATE

05-05-2023

Dear Arun T,

Please find your Employment Record and Relieving date with Virtusa Consulting Services Pvt Ltd as per the details below.

Name	Arun T
Employee Code	8133806
Designation on Relieving	Intern-Delivery
Date of Joining	27-06-2022
Date of Resignation	27-04-2023
Date of Relieving	27-04-2023

We wish you all the best for your future endeavors.

For Virtusa Consulting Services Pvt Ltd,

Rahul Sahay

Senior Vice President (Level II)-HR





3<sup>rd</sup> February 2023

To whomsoever it may concern

This is to confirm that Dinesh Kumar T is pursuing his internship with us from 17<sup>th</sup> January 2023 and the internship program is expected to last up to 15<sup>th</sup> June 2023.

Thanks and Regards

Manjula A G  
PurpleSlate Private Limited

# Dhyan

## Offer Letter

September 02, 2022

Mr. Nithish Kumar M,  
52, Arasanthootam,  
Vellankovil,  
Gobichettipalayam,  
Erode – 638054.

Dear Mr. Nithish Kumar M,

We are pleased to offer you a Software Internship position at **Dhyan Networks and Technologies Private Limited** ("Company").

The Software Internship is being offered at the Company under the following terms:

- Your monthly pay will be INR 15,000/-.
- The Software Internship at the Company is from October 17, 2022, until June 30, 2023.
- You will be required to start the Software Internship at the Company no later than October 17<sup>th</sup>, 2022.
- As a software intern you will be required to abide the policies of the Company.

You will be working with a Company Mentor who will help you in learning software technologies to enable you to meet your course requirements and successfully graduate from Nandha Engineering College, Erode ("College").

Upon successfully graduating with a bachelor's degree in Information Technology from your College no later than June 30, 2023, and upon satisfactorily completing the software internship at the Company, we would be pleased to offer you the role of a **Software Engineer-Trainee** at Dhyan Networks and Technologies Private Limited under the following terms and conditions

1. Your annual pay will be INR 4,00,463/-. Please refer to Annexure for the details.
2. Initially you will be on probation for a period of 6 months. You will be deemed to be on probation until confirmed to services in writing.
3. You will be based at CHENNAI. You should be prepared to work anywhere in India or abroad. The Company reserves the right to transfer you to any office, department or establishment forming a part of our company or any establishment wherever our company will be having interest.
4. You will report to the Head Engineering or his/her nominee.
5. You will be eligible for leave in accordance with the rules of the Company.
6. You will be required to sign a service agreement prior to starting employment with the Company.

**Dhyan Networks and Technologies Private Limited**

33B, 3<sup>rd</sup> Floor, Olympia Platina, South Phase, Thiru Vi Ka Industrial Estate, Guindy, Chennai - 600 032.  
Phone: +91 446 633 2000 Fax: +91 446 633 2002

[www.dhyan.com](http://www.dhyan.com)



# Dhyan

taxes will be recoverable from the payments payable. The perquisites and benefits shall cease on termination or separation. In addition, if any of the conditions of your employment or post-employment with Dhyan Networks and Technologies Private Limited are violated the Company or its representatives will take suitable actions against you as per the Indian law for damages.

12. During the period of your service with the Company, you will be required to give three months' notice or salary thereof in case you decide to leave the services, subject to the Company's discretion. In the event if you have any incomplete assignment, the Company will have the discretion to relieve you only at the end of three-month notice period. Similarly, the Company can terminate your services by giving you three months' notice or salary thereof.
13. Breach of any of the above conditions will render you liable to termination of your employment without notice or compensation.
14. You are required to submit to us at the time of your joining.
  - Photocopies of your educational qualifications
  - 4 passport size photographs & 2 stamp size photographs
  - Photocopy of your Passport, Pan card and Aadhar Card
15. Kindly indicate your acceptance by returning a signed copy of this letter so that it reaches us by **September 05, 2022**. If your offer acceptance letter is not received by us by the above-mentioned date, then the offer is automatically withdrawn.

We take great pleasure in welcoming you to our organization and are looking forward to a mutually rewarding relationship!



**Mahendran Kulandasamy**  
Authorized Signatory

## ACCEPTANCE

I have carefully and consciously gone through the entire covenants, terms and conditions of employment and have fully read and understood the above terms and conditions of employment and am accepting the same with full satisfaction without any coercion, or compulsion or duress or any misrepresentation. I will be reporting for employment on \_\_\_\_\_

Address:

Signature and Date

Name:



## Kaar Technologies

Level B Shyamala Towers,  
No 136, Arrot Road,  
Chennai - 600 093, TN, INDIA  
CIN: U72200TN2005PTC087063  
t | +91 (44) 4065 1500  
f | +91 (44) 4065 1512  
e | info@kaar.tech.com  
w | www.kaar.tech.com

Date: September 22, 2022

Name of the Student: Sriranjani Badrinath

Name of the College: Nandha Engineering College

### Letter of Intent to Hire

This letter is evidence that you have successfully completed our selection process for the "Trainee – SAP Sergeant" role.

With reference to your participation in the on-campus hire process, and subsequent interview you had with us, we are happy to extend an Intent to hire letter.

The offer Letter will be issued after your successful completion of your academic coursework in compliance with our recruitment criteria of 80% In 10<sup>th</sup> Std, 80% In 12<sup>th</sup> Std and 75% In UG / PG score without history or standing arrears. Employment is subject to you being medically fit, and subject to satisfactory references, background verifications.

All campus hires will get an opportunity to do internship from 7th semester for the period of one year. During the first 6 months, interns will be exposed to ERP, Digi-Tech, SAP Full Stack Technical and Functional Modules along with Project Management training. During this phase they are expected to complete multiple mini projects to get hands on experience in SAP along with a learning stipend of Rs 5000/-.

On successful completion of project review and assessments, interns will be eligible to enter second 6 months, and they will undergo project related training and participate in live projects along with the learning stipend of Rs.10000. (Rupees Ten Thousand Only) The above-mentioned stipend is inclusive of Provident Fund as per the statutory act, and Interns will be elevated to the role of full-time employee based on the final assessment in live project and they are eligible to get their full salary. Your salary from 1<sup>st</sup> month of probation will fall under Rs. 650000 (Rupees Six Lakhs and Fifty Thousand Only) Annual CTC. All the salary components will be subject to statutory compliance. The details are enclosed in the annexure.


We will be issuing the offer letter at the time of Joining.

The DOJ is subject to business requirement and market conditions. Your Joining batch and the date will be communicated by Human Resource Department separately

You will be required to sign a Proprietary Information and Inventions agreement on joining. Your employment with us will be governed by the terms and conditions of the organization.

We welcome you to Kaar Technologies and look forward to a long and mutually rewarding association with you.

Yours Sincerely,  
For Kaar Technologies India Pvt Ltd.,

  
Authorized Signatory.

I accept the above terms and conditions.

Candidate Signature  
Date  
Date of Joining

## ANNEXURE

<b>Name: Sriranjani Badrinath</b>
<b>Designation: Trainee</b>
<b>Band: II-D</b>

<b>Compensation Structure in Rs.</b>	<b>Annual</b>	<b>Monthly</b>
<b>Basic</b>	260000	21667
<b>HRA</b>	130000	10833
<b>Flexi Benefit Allowance</b>	218900	18242
<b>Gross Salary</b>	<b>608900</b>	<b>50742</b>
<b>Employer's Contribution to PF</b>	21600	1800
<b>Gratuity</b>	13000	NA
<b>Medical Insurance</b>	6500	NA
<b>Annual Cost to Company</b>	<b>650000</b>	





**Kaar Technologies**  
Level B Shyamala Towers,  
No 136, Arund Road,  
Chennai - 600 053, TN, INDIA  
CIN: U72200TN2005PTC087065  
t +91 (44) 4065 1500  
f +91 (44) 4065 1512  
e info@kaartech.com  
w www.kaartech.com

Date: 17 July 2023

Name of the Student: Arunachalam Gurusamy

Name of the College: Nandha Educational Institutions

### Letter of Intent to Hire

This letter is evidence that you have successfully completed our selection process for the "Trainee – SAP Sergeant" role.

With reference to your participation in the on-campus hire process, and subsequent interview you had with us, we are happy to extend an **Intent to hire letter**.

The offer letter will be issued after your successful completion of your academic coursework in compliance with our recruitment criteria of **80% in 10<sup>th</sup> Std, 80% in 12<sup>th</sup> Std and 75% in UG / PG score without history or standing arrears**. Employment is subject to you being medically fit, and subject to satisfactory references, background verifications.

All campus hires will get an opportunity to do internship from 7th semester for the period of one year. During the first 6 months, interns will be exposed to ERP, Digi-Tech, SAP Full Stack Technical and Functional Modules along with Project Management training. During this phase they are expected to complete multiple mini projects to get hands on experience in SAP along with a learning stipend of Rs 5000/-.

On successful completion of project review and assessments, interns will be eligible to enter second 6 months, and they will undergo project related training and participate in live projects along with the learning stipend of **Rs.10000**. (Rupees Ten Thousand Only) The above mentioned stipend is inclusive of Provident Fund as per the statutory act, and interns will be elevated to the role of full-time employee based on the final assessment in live project and they are eligible to get their full salary. Your salary from **1<sup>st</sup> month** of probation will fall under **Rs. 650000** (Rupees Six Lakhs and Fifty Thousand Only) Annual CTC. All the salary components will be subject to statutory compliance. The details are enclosed in the annexure.

We will be issuing the offer letter at the time of joining.

The DOJ is subject to business requirement and market conditions. Your joining batch and the date will be communicated by Human Resource Department separately.

You will be required to sign a Proprietary Information and Inventions agreement on joining. Your employment with us will be governed by the terms and conditions of the organization.

We welcome you to Kaar Technologies and look forward to a long and mutually rewarding association with you.

Yours Sincerely,

For Kaar Technologies India Pvt Ltd.,

Authorized Signatory.

I accept the above terms and conditions.

Candidate Signature  
Date of Joining

## ANNEXURE

<b>Name: Arunachalam Gurusamy</b>
<b>Designation: Trainee</b>
<b>Band: II-D</b>

<b>Compensation Structure in Rs.</b>	<b>Annual</b>	<b>Monthly</b>
<b>Basic</b>	260000	21667
<b>HRA</b>	130000	10833
<b>Flexi Benefit Allowance</b>	218900	18242
<b>Gross Salary</b>	<b>608900</b>	<b>50742</b>
<b>Employer's Contribution to PF</b>	21600	1800
<b>Gratuity</b>	13000	NA
<b>Medical Insurance</b>	6500	NA
<b>Annual Cost to Company</b>	<b>650000</b>	





## Interns Joining Formalities FY 24



- Batch II Inbox



Humanresources 22/11/2022



to Humanresources, Employee...

**Dear Intern,**

Welcome to the **Kaar** Family!

Hope you and family are doing well. We are happy to virtually onboard you for internship in FY24 FTF Batch 2 and the joining details are as follows. Kindly give attention to each line of this mail.

We request you to respond to this mail and fill the MS form immediately.

1. **Date of Internship Joining: 23<sup>rd</sup> November 2022 (Wednesday).**

Internship will be done virtually.

2. **Online Induction Programme: On 23<sup>rd</sup> November 2022 (Wednesday) at 10.00AM IST via Zoom Meeting.**

**Zoom Meeting Link is below.**

**Kaar Training is inviting you to a scheduled Zoom meeting.**

**Topic: FY24 FTF Batch 2**

**Time: This is a recurring Zoom Meeting**





# NANDHA ENGINEERING COLLEGE

(Autonomous)

Affiliated to Anna University Chennai ★ Approved by AICTE ★ Accredited by NBA-New Delhi  
Pitchchandampalayam (PO), Vaikkalmedu , Erode, Perundurai Road, ERODE –638 052.



## DEPARTMENT OF MANAGEMENT STUDIES

### INTERNSHIP ACADEMIC YEAR 2022-2023

Reg No	Student Name	Name of the Company
21BA001	Aishwarya. A	Apex Association
21BA002	Akash Raju. A	Rhythm Knit India Pvt Ltd
21BA003	Akila. B	Dsv Solution Pvt Ltd
21BA004	Amitha R	Real Tech Systems
21BA005	Bala Abhirami.R	Eatman Foods India (P) Ltd
21BA006	Bhuvaneshwari. S	R.K.Ganapathi Chettiar
21BA007	Brindha.S	Gdn Export Pvt Ltd
21BA008	Chidiraiselvan.B	My Daddy Business Solution
21BA009	Dhanesh. T	SHRi Ganga Food Products
21BA010	Dineskumar. D	Icici Prudential
21BA011	Elakeya.M	Vivarttana Technology Pvt. Ltd.
21BA012	Gowthamrajan.N	Mehala Machines India Limited
21BA013	Gunashree.G	Ic Tech Engineering Solutions
21BA014	Indhuja.S	Kavitha Dyeings
21BA015	Jayasurya.J	Podaran Snacks
21BA016	Jayasurya. R	Peps Industries Pvt Ltd
21BA017	Jeevitha. P	Poppys Knitwear Pvt Ltd





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Pitchandampalayam (PO), Vaikkalmedu, Erode, Perundurai Road, ERODE -638 052.



## DEPARTMENT OF MANAGEMENT STUDIES

21BA018	John Varghese	Sakthi Sugars Limited
21BA021	Karthikeyan	Sri Venkateswara
21BA022	Kavin.D	Iridescent Apparels Pvt Ltd
21BA024	Kavin Sangar. M	Sakthi Sugars Limited
21BA025	Lokeshwaran. T	Meythoma International
21BA026	Mabhu Balan.V	My Daddy Business Solution
21BA027	Madhumidha	Kmch Speciality Hospital
21BA028	Manikandan.S	Feather Touch Cura
21BA029	Mathivanan.D	Sbb Stainless Steel Fabrication
21BA030	Mohamed Arsath Allaudeen. M	Otbito Asia Mechatronics Pvt Ltd
21BA031	Mohanraj. K	Sakthi Onfra Tex Private Limited
21BA032	Nagulan. M	Bojoraj Tex Mills Ltd
21BA033	Naveenkumar.N	Peps Industries Pvt Ltd
21BA034	Pavithra Devi.V	Dynamic Electricals
21BA035	Praveen Paul.H	Maxsell
21BA036	Punniavathi,S	Siva Apparels
21BA037	Raghul.D	Vijay Raja Homes Private Limited
21BA038	Rajendra Prasad. R	Baer Shoes India Private Limited
21BA039	Ramachandran. S	Spin Aqm
21BA040	Ramyam.M	Soli Food Company





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Pitchchandampalayam (PO), Vaikkalmedu, Erode, Perundurai Road, ERODE -638 052.



## DEPARTMENT OF MANAGEMENT STUDIES

21BA041	Sairamanan	Natart Aprarels
21BA042	Santhiya.S	Subasri Tex
21BA043	Sankar.M	Dharani Industries
21BA044	Saranya.A	Spinpack Industries Co
21BA045	Saraawathi. E	Star Tex
21BA046	Sathya Narayana.N	Beter Place Select
21BA048	Sitheshwaran.I	Spac Starch Products (India) Private Limited
21BA050	Sivaramakrishnan.S	Srs Country Chicken
21BA051	Siva Ranjini.N	Irel (India) Limited
21BA052	Sneha. R	Bikiman Industries
21BA053	Srisharshini. R	Pick And Pack Appliance
21BA054	Sugumar.R	Deccan Industries
21BA055	Suthish.K	Rhythm Knit India
21BA056	Swetha.S	Foods And Inns Limited
21BA057	Tarunvineswaran	Avm Printers
21BA058	Tharani. V	Roots Indutries India Ltd
21BA060	Visshalbharath	Bry Air (Asia) Pvt. Ltd

  
HEAD OF THE DEPARTMENT  
DEPARTMENT OF MANAGEMENT STUDIES  
NANDHA ENGINEERING COLLEGE,  
ERODE - 638 052



26.08.2022

## INTERNSHIP CONFIRMATION LETTER

TO

**M.AISHWARYA. II-MBA,**

**NANDHA ENGINEERING COLLEGE( Autonomous),**

**PERUNDURAI MAIN ROAD,**

**ERODE-638052.**

**Sub : Regarding Your Internship In Our Company's Human Resource  
Department.**

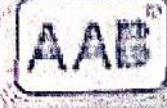
Dear Aishwarya,

We Would Like To Confirm You That Your Application  
For Internship For The Position Of HR In Human Resource Department Has  
Been Accepted With Duration From 26.08.2022 To 23.09.2022

For Apex associates,



Deals with :







INTERNSHIP COMPLETION LETTER

Date: 25 09 2022

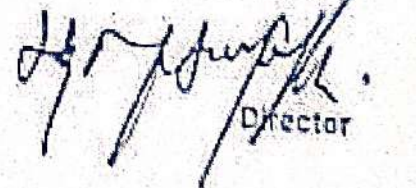
Sub: Internship completion letter.

This is to certify that Akash Raju Arivezhil has completed his Internship program as a Executive in all Departments at RHYTHM KNIT INDIA (P) LTD., (Unit-1) Tirupur.

During his Internship he has demonstrated his skills with self-motivation to learn new skills. His performance exceeded our expectations and he was able to complete the project on time.

"We wish him all the best for his upcoming career".

For RHYTHM KNIT INDIA (P) LTD.

  
Director





# NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

ERODE – 638 052 TAMILNADU





Email : [principal@nandhaengg.org](mailto:principal@nandhaengg.org) Mobile : 73737 12234

## Project Based Learning

## 4. Project Based Learning

Innovative projects lead the students for lively learning experience. To motivate the students for innovation, projects are given for second and third year students apart from the regular curriculum to encourage them for group learning and having hands on experience and it is also exhibited during the symposium.

Innovation Day is conducted by the institution every year and the best project is awarded with cash prizes.

 <b>CONCRETE LAMP LIGHT</b>  <b>17CEC11 – CONCRETE TECHNOLOGY</b> <i>(A PROJECT BASED LEARNING REPORT)</i>  <i>Submitted by</i>  <b>MIDHUN M            21CE010</b> <b>SARITHA K         21CE015</b> <b>THAMIZHARASI S  21CE016</b> <b>DHARSANA S       21CEL02</b>  <i>in partial fulfilment for the award of the degree</i> <i>of</i> <b>BACHELOR OF ENGINEERING</b> <b>IN</b> <b>CIVIL ENGINEERING</b>  <b>NANDHA ENGINEERING COLLEGE</b> <i>(An Autonomous Institution, Affiliated to Anna University, Chennai)</i> <b>ERODE – 638 052</b>  <b>APRIL 2023</b>	<b>NANDHA ENGINEERING COLLEGE</b> <i>(An Autonomous Institution, Affiliated to Anna University, Chennai)</i>  Certified that this PBL report “CONCRETE LAMP LIGHT ” is the bonafide work of  <b>MIDHUN M            21CE010</b> <b>SARITHA K         21CE015</b> <b>THAMIZHARASI S  21CE016</b> <b>DHARSANA S       21CEL02</b>  who carried out the PBL work under my supervision. Further that to the best of my knowledge the work reported here in does not form part of any other PBL work on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidates.   SIGNATURE <b>Dr. E. K. MOHANRAJ,ME,Ph.D.</b> HEAD OF THE DEPARTMENT DEPARTMENT OF CIVIL ENGINEERING NANDHA ENGINEERING COLLEGE ERODE - 638 052   SIGNATURE <b>Mrs. K. SELVI, ME.,</b> ASSISTANT PROFESSOR DEPARTMENT OF CIVIL ENGINEERING NANDHA ENGINEERING COLLEGE ERODE – 638 052  Submitted for the PBL Viva-Voce examination held on <b>15/05/2023</b>
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## Sample PBL Report



## Sample PBL Projects



## 5. Teaching through Industrial Practices.


Industry Persons are used to assess the students project during 7<sup>th</sup> and 8<sup>th</sup> Semester Design Project and Project Work in the curriculum at 7<sup>th</sup> and 8<sup>th</sup> semesters.




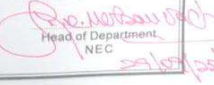


**Project review by Industry Expert**

## 6. In-plant training

Students are asked to undergo in-plant training in the semester holidays, through which they will get to know about the field exposure and knowledge of using the analysis software and drawing tools that are used in those industries. They will experience the industry environment and get some adequate knowledge about the activities and team work involved in the industry. Each student can have an IPT booklet. They have to update their IPT details undergone in that booklet.

 <b>NANDHA</b> <b>ENGINEERING COLLEGE</b> (Autonomous) (Approved by AICTE, Accredited By NBA & NAAC New Delhi & Affiliated to Anna University Chennai) ERODE - PERUNDURAI MAIN ROAD ERODE - 638 052, TAMILNADU.	
<b>IN - PLANT TRAINING RECORD</b>	
Name of the Student	: R. Deek Jaisingh
Branch	: B-E CIVIL
Reg No.	: 19CE016
Batch	: 20-19-20-23

<b>SUMMARY OF THE WORK DONE DURING IN - PLANT TRAINING</b> (Should be prepared by the student)	
<p>The following are the work details: gather during this training period: least about the material used for site works Learn how to handle the different customers. Learn how to manage the labours.</p>	
 Plant Officer	 Faculty in Charge
 Training Officer NEC	 Head of Department NEC

**Sample IPT Record**

### **Project Based Learning (PBL)**

Students are assigned to do a project, typically aimed at developing knowledge across several core subject areas (for e.g., mass transfer, heat transfer, reactor design, materials science and process dynamics control), and work in teams, under a faculty guide's supervision. The specific structure of the course promotes independent, yet supervised learning, and leadership as well as team work, in solving a problem. The flexibility in learning modes. The flexibility in learning modes as well as in assessment, provides a strongly encouraging and motivating environment, while yet ensuring academic rigor.

Project Based Learning is a teaching method in which students' gains knowledge and skills by doing project as part of their course. This method of teaching inculcates planning, critical thinking, reasoning and creativity. Experience gained during the PBL gives students a sense of accomplishment and further instills responsibility towards learning.

Sample Project : **SMART PLANT MONITORING SYSTEM**

Project Students: PABINESH P (20CH017)  
PAVITHR A R (20CH018)  
PRAKADESH U (20CH019)



**Smart plant monitoring system**



Sample Project : **THE TOUCH LESS DOOR BELL USING IR SENSOR**

Project Student : KENNEDY DIWAKAR J (20CHL15)

MURALHIDHARAN A (20CHL16)

PALANIAPPAN K (20CHL17)



**The touch less door bell using IR sensor**

17AGC18 DESIGN OF MICRO IRRIGATION SYSTEM						
			L	T	P	C
			2	2	0	3
PREREQUISITE : 17AGC14			QUESTION PATTERN: TYPE – III			
COURSE OBJECTIVES AND OUTCOMES:						
Course Objectives			Course Outcomes: The Students will be able to			
1.0	To learn the various water lifting devices	1.1	Categorize the different types of pumps and water lifting devices			
2.0	To understand the types of valves	2.1	Differentiate, select and maintain pump valves			
3.0	Gain knowledge on traditional and micro irrigation methods and advantages	3.1	Imply modern irrigation concepts			
4.0	Acquire knowledge on components, design, operation and maintenance of drip irrigation system	4.1	Design drip irrigation system			
5.0	Acquire knowledge on components, design, operation and maintenance of sprinkler irrigation system	5.1	Design sprinkler irrigation system			

<b>UNIT I - WATER LIFTS AND PUMPS</b>	<b>(6+6)</b>
Pump classification Variable displacement pumps-Centrifugal pump- Submersible pump- Vertical Turbine pumps mixed flow – Jet and Airlift pumps-Pump selection and installation- Pump troubles and Remedies.	
<b>UNIT II - PUMP VALVES</b>	<b>(6+6)</b>
Types of valves- Pressure relief valve- Gate valve-Isolated valve- Non return valve- Butterfly valve-Solenoid valves- Automated control valve- selection, repair and maintenance.	
<b>UNIT III - MICRO IRRIGATION CONCEPT AND APPLICATIONS</b>	<b>(6+6)</b>
Micro irrigation- Comparison between Traditional and Micro irrigation methods -Merits and demerits of micro-irrigation system, Types and components of micro irrigation system- Scope and potential problem of micro irrigation - Low cost Micro irrigation Technologies- Gravity fed micro irrigation -Care and maintenance of micro-irrigation System- Economics of micro-irrigation system automation in micro-irrigation-Surge and cabled irrigation- Greenhouse irrigation system- hydroponics- aeroponics- soilless cultivation	
<b>UNIT IV - DRIP IRRIGATION DESIGN</b>	<b>(6+6)</b>
Drip irrigation - Components- Dripper- types and equations governing flow through drippers-Wetting pattern- Chemigation application- Pump capacity-Installation- Operation and maintenance of Drip irrigation system. - Design of surface and sub-surface drip irrigation.	
<b>UNIT V - SPRINKLER IRRIGATION DESIGN</b>	<b>(6+6)</b>
Sprinkler irrigation- Components and accessories - Hydraulic design - Sprinkler selection and spacing- Capacity of sprinkler system - types - Sprinkler performance- Sprinkler discharge- Raingun and POP irrigation. Water distribution pattern- Droplet size, filtering unit, fertigation - System maintenance.	
<b>TOTAL (L: 30+T:30) = 60 PERIODS</b>	



**NANDHA ENGINEERING COLLEGE (Autonomous) - ERODE-52**  
**DEPARTMENT OF AGRICULTURE ENGINEERING**  
**17AGC18 – DESIGN OF MICRO IRRIGATION SYSTEMS**  
**B.E. AGRICULTURE ENGINEERING**  
**III YEAR VI SEMESTER**  
**PROJECT BASED LEARNING (PBL)**

S. No	Batch No	Name of the Students	Reg No	Title of the project	Guide Name
1.	1	Aravind G	20AG002	Installation of Rain Gun	A.Priyanka AP/Agri
2.		Mugesh A	20AG022		
3.		Mebaraj R	20AG027		
4.		Sharma E	20AG045		
5.	2	Gobinath M	20AG008	Electrically Powered Persian Wheel	A.Priyanka AP/Agri
6.		Kuvinesh R	20AG016		
7.		Nithish S	20AG033		
8.		Ravi Pravin P	20AG041		
9.	3	Indresh J.V	20AG011	Analysis of Drip Irrigation with Plastic Sheet Mulching	A.Priyanka AP/Agri
10.		Karthikeyan Y	20AG014		
11.		Kowthesh S	20AG021		
12.		Adarsh D.	20AGL01		
13.	4	Kavin S	20AG015	Survey on Drip Irrigation	A.Priyanka AP/Agri
14.		Manivasan K	20AG024		
15.		Sanjay M.P	20AGL05		
16.		Mugil M	20AG043		
17.	5	Jayapandi J	20AG013	Layout of drip Irrigation	A.Priyanka AP/Agri
18.		Kavinraj R	20AG017		
19.		Mukesh K	20AG029		

20.		Raja N	20AG040		
21.	6	Harish R	20AG009	Submersible Pump	A.Priyanka AP/Agri
22.		Nilavarasan T	20AG031		
23.		Dheeneshwaran K	20AGL02		
24.		Gunal K	20AGL03		
25.	7	Agalya S	20AG001	Surface Drip Irrigation in banana	A.Priyanka AP/Agri
26.		Dharani N	20AG005		
27.		Kavitha V	20AG018		
28.		Megala P	20AG026		
29.		Mounika K	20AGL04		
30.	8	ShibiArasi M	20AG046	Overhead sprinkler irrigation system in Green House	A.Priyanka AP/Agri
31.		Swetha N	20AG049		
32.		Tharani M	20AG051		
33.		Yogya S	20AG054		
34.	9	Fiza Tabassum A	20AG007	Vertical Farming	A.Priyanka AP/Agri
35.		Manoranjini P	20AG025		
36.		Nivashini S	20AG034		
37.		Vidhya Sree G	20AG053		
38.	10	Krithika S	20AG020	Green House with Drip Irrigation system	A.Priyanka AP/Agri
39.		Malathi K	20AG023		
40.		Mythili J	20AG030		
41.		Nishanthini S	20AG032		
42.		Preetha A R	20AG038		
43.	11	Deepika S	20AG003	Estimation For Drip Irrigation	A.Priyanka AP/Agri
44.		Dharani S	20AG006		



45.		Soniya Sree P	20AG047		
46.		Soniya V	20AG048		
47.	12	Harsini M	20AG010	Design and analysis of Disc filter	A.Priyanka AP/Agri
48.		Indhu M	20AG012		
49.		Kiruba A	20AG019		
50.		Swetha R	20AG050		
51.	13	Nouvshika E T	20AG035	Soilless culture - Hydroponics	A.Priyanka AP/Agri
52.		Priyanka S	20AG039		
53.		Selin Princy A	20AG044		
54.		Varsnica B	20AG052		
55.	14	Dharani B	20AG004	Sprinkler irrigation system	A.Priyanka AP/Agri
56.		Pavithra S	20AG036		
57.		Pooja M	20AG037		
58.		Rithika T	20AG042		

AP  
14/5/23  
Project Guide

PBL Coordinator

HoD



# DESIGN OF MICRO IRRIGATION SYSTEM



## ESTIMATION OF DRIP IRRIGATION

A PROJECT-BASED LEARNING REPORT

*Submitted by*

DEEPIKA S	(20AG003)
DHARANI S	(20AG006)
SONIYA SREE P	(20AG047)
SONIYA V	(20AG048)

*In partial fulfilment from the award of the degree*

*of*

**BACHELOR OF ENGINEERING**

*in*

**AGRICULTURE ENGINEERING**

**DEPARTMENT OF AGRICULTURE**

**ENGINEERING**

**NANDHA ENGINEERING COLLEGE**

**(An Autonomous Institution, Affiliated to Anna University, Chennai)**

**ERODE – 638 052**

**JUNE -2023**



# NANDHA ENGINEERING COLLEGE

(An Autonomous Institution, Affiliated to Anna University, Chennai)

## BONAFIDE CERTIFICATE

Certified that this Project-Based Learning (PBL) report on "ESTIMATION OF DRIP IRRIGATION" is the bonafide work of

DEEPIKA S (20AG003)

DHARANI S (20AG006)

SONIYA SREE P (20AG047)

SONIYA V (20AG048)

who undergone a PBL project under my supervision. Further to the best of my knowledge, the work reported herein does not form part of any other work based on which a degree or award was conferred on an earlier occasion on this or any other candidates.

SIGNATURE

Mr. K. Pradeep Kumar, M.E., (Ph.D.,)  
Head of the Department  
Department of Agriculture  
Engineering,  
Nandha Engineering College,  
Erode – 638052.

SIGNATURE

Ms. A. Priyanka, M.Sc.,(AGRI)  
Project guide  
Department of Agriculture  
Engineering,  
Nandha Engineering College,  
Erode – 638052.

Submitted for the End Semester Project Based Learning review held on ...25:05:2023

STAFF IN CHARGE

INTERNAL EXAMINER

From

Mr.A.AMARNATH PRABHAKARAN,  
Assistant Professor/BME,  
Nandha Engineering College (Autonomous),  
Erode.

To

The Principal,  
Nandha Engineering College (Autonomous),  
Erode.

Respected Sir,

**Sub: Requesting permission to conduct Value added course-Reg**

As per the Autonomous regulations, the Department of Biomedical Engineering have planned to conduct Value added course for II year BME students. The Value added course will be handled by the Prashan Medical Technologies, Coimbatore on the title "17BMI02 – "Medical Equipment & it's Calibration" on 12.11.2022 & 13.11.2022 at Block - 3 Human Physiology Lab. The assessment for the same is tentatively planned on 13.11.2022 (AN). So I kindly request you to give permission to conduct the course.

Thanking you,

(34 students)

*[Signature]*  
Yours Faithfully,  
(A. Amarnath Prabakaran)

10  
OK  
11/11/2022

Place: NEC

Date: 08.10.2022

*[Signature]*  
HOD/BME



**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**

**Namelist**

**Degree:** B.E  
**Branch/SEM :** BIOMEDICAL III  
**Subject Type :** VALUE ADDED COURSE  
**Subject Code :** 17BM102  
**Subject Title:** MEDICAL EQUIPMENT AND ITS CALIBRATION

S. No.	Reg No.	Name
1	21BM001	AAKASH R
2	21BM002	ABISHEK T
3	21BM003	AKALYA K
4	21BM004	ARUL M
5	21BM005	BHARATHI K
6	21BM006	BHAVANAPRAVANTHIKA S
7	21BM007	BHUVANESWARI M
8	21BM008	BRIGHTON DANIEL R J
9	21BM009	DEVAPRASATH M
10	21BM010	DHANUSHMATHI S
11	21BM011	DHARANEESH S
12	21BM012	DHARANI K
13	21BM013	DIVYA S
14	21BM014	GAYATHRI P
15	21BM015	HARIHARAN B
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17	21BM017	MAHARAJA N
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19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M
20	21BM020	MOHAMED HUSSAIN S
21	21BM021	POORANI S
22	21BM022	RAMANIKA K
23	21BM023	ROJA M
24	21BM024	SANJAY KUMAR C
25	21BM025	SANJAY KUMAR N
26	21BM026	SANTHOSH N
27	21BM027	SRIKANTH R
28	21BM028	SUDALAIKUMAR P
29	21BM029	SUGANYA R
30	21BM030	SUSVINTH S
31	21BM031	VISHNU R
32	21BM032	WAHITHA BEGUM M
33	21BM033	YASAR ALI A
34	21BML01	SUREN S


  
(Arunachal Prabhakaran)

  
11/03/2022



**NANDHA ENGINEERING COLLEGE,(Autonomous)**  
**DEPARTMENT OF BME**  
**ACADEMIC YEAR(2022-2023) ODD SEM**  
**VALUE ADDED COURSE SCHEDULE**

S.No	Year/Sem	Course code	Course Name	Course Conduct date	Registered count	Exam date	Company Name& Contact Person
1	II/3	17BMI02	MEDICAL EQUIPMENT AND IT'S CALIBRATION	12.11.2022&13.11.2022	34	13.11.2022	Prashan Medical Technologies, Coimbatore & Boopathi Sakthivel - Biomedical Engineer

  
(A. Ananth Prabhakaran)

  
HOD/BME

  
11/10/22  
PRINCIPAL



**B.E. BIOMEDICAL ENGINEERING**  
**MEDICAL EQUIPMENTS TROUBLESHOOTING & CALIBRATION**

**COURSE OUTCOME**

On successful completion of the course, students will be able to Integrate on clinical and technical application of critical care products, anaesthesia.

**PATIENT MONITORING SYSTEMS**

**(4Hours)**

Application of ECG, SPO<sub>2</sub>, NIBP, IBP, Temp, Respiration, Cardiac Output, Etco<sub>2</sub>, BIS - Function of each module used in the patient monitors - ECG methods & Lead wire systems - Different Arrhythmia – Cardiac output methods - Spo<sub>2</sub> technology- Etco<sub>2</sub>(Main stream, side stream, Micro stream) measurement and types.

**ICU VENTILATOR & ANESTHESIA WORKSTATION OVERVIEW**

**(3Hours)**

Respiratory breathing System - Different Blocks of Ventilator - Modes of ventilation (Pressure & Volume) - Simulation demonstration on Ventilator on all modes - Purpose of ICU ventilator & Anesthesia workstation.

**CRITICALCARE EQUIPMENTS TECHNICAL & APPLICATION**

**(3+2+2=7Hours)**

**SYRINGE & INFUSION PUMP:** Different blocks - modes of syringe pump - bolus - purge- Volume, Time & Flow - Internal Parts of Syringe pump.

**DIATHERMY:** Basics blocks of Diathermy- Monopolar & Bi-polar modes - Internal blocks of Diathermy.

**CPAP & BIPAP:** Basic Blocks of CPAP & its purpose - Internal parts of CPAP.

**ROLE OF BIOMEDICAL ENGINEERS IN CRITICAL CARE**

**(1Hour)**

Know the technology- Easy Handling - Troubleshooting - Maintenance - Calibration – MIS.

**(Total Hours: 15)**

**REFERENCES**

1. Joseph J Carr, John M Brown, "Introduction to Biomedical Equipment Technology", Pearson Education, New Delhi, 2011.
2. Fred A Mettler Jr, Milton J Guiberteau, "Essentials of Nuclear Medicine Imaging", Elsevier, 5th Edition, 2006
3. Rüdiger Kramme, Klaus-Peter Hoffmann, Robert S. Pozos (Eds.), "Handbook of Medical Technology". Springer, 2011

To  
The Head of Department  
Nandha Engineering College  
Erode

Ref No: QT/PMT/017/22-23

Date : 10.10.2022

**Subject: Quotation toward Value added course**

Dear Sir,  
Greetings from Prashan Medical Technologies!!!  
Kindly find the below quotation  
your reference.

SR No	Product Description	Unit Price	No of unit	Price in INR
1	Value added course on "Medical Equipment Calibration & Troubleshooting"	12,712	1	12,712
<b>Sub Total</b>				<b>12,712</b>
<b>GST @18% (CGST9% + SGST9%)</b>				<b>2288.16</b>
<b>Total(Rupees fifteen thousand only)</b>				<b>15,000</b>

**TERMS & CONDITIONS:**

1. Tax : GST @18% Extra Included
2. Validity: This offer is valid for 1 weeks from the date of contract.

We assure you our best services.



**Boopathi Sakthivel**  
**Founder, CEO & Biomedical Engineer**  
**Prashan Medical Technologies**  
**Mobile: +91 8883774112**





**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**  
**ATTENDANCE SHEET**

Degree: **B.E**  
Branch/SEM: **BIOMEDICAL III**  
Subject Type: **VALUE ADDED COURSE**  
Subject Code: **17BM102**  
Subject Title: **MEDICAL EQUIPMENT and ITS CALIBRATION**

DATE: 03.12.2022

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	Aakash R	Aakash R
2	21BM002	ABISHEK T	T. Abishek K. Akalya	T. Abishek K. Akalya
3	21BM003	AKALYA K		
4	21BM004	ARUL M	M. Arul	Arul. M
5	21BM005	BHARATHI K	K. B	K. B
6	21BM006	BHAVANAPRAVANTHIKA S	S. Princy	S. Princy
7	21BM007	BHUVANESWARI M	M. Dhruv	M. Dhruv
8	21BM008	BRIGHTON DANIEL R J	Daniel	Daniel
9	21BM009	DEVAPRASATH M	M. Devaprakash	M. Devaprakash
10	21BM010	DHANUSHMATHI S	S. Dhruv	S. Dhruv
11	21BM011	DHARANEESH S	S. Dhruv	S. Dhruv
12	21BM012	DHARANI K	K. Dhruv	K. Dhruv
13	21BM013	DIVYA S	S. Divya	S. Divya
14	21BM014	GAYATHRI P	P. Gayathri	P. Gayathri
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	K. Kowshalya	K. Kowshalya
17	21BM017	MAHARAJA N	N. Mahiraj	N. Mahiraj
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Sidique	M. Sidique
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain	S. Mohamed Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	K. Ramani	K. Ramani

23	21BM023	ROJA M	R.j.a.m	R.j.a.m.
24	21BM024	SANJAY KUMAR C	C. Sanjay	C. Sanjay
25	21BM025	SANJAY KUMAR N	Sanjaykumar N	N. sanjaykumar
26	21BM026	SANTHOSH N	AB	AB
27	21BM027	SRIKANTH R	← Discontinued →	
28	21BM028	SUDALAIKUMAR P	P. S. S.	P. S. S.
29	21BM029	SUGANYA R	R. Suganya	R. suganya.
30	21BM030	SUSVINTH S	S. S. S.	S. S. S.
31	21BM031	VISHNU R	R. Vishnu	R. Vishnu
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Y. A.	A. Y. A.
34	21BML01	SURENDER C	← DPS continued →	

DATE: 03/12/22



  
INDUSTRY EXPERT





**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
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**ATTENDANCE SHEET**

Degree: **B.E**  
Branch/SEM: **BIOMEDICAL III**  
Subject Type: **VALUE ADDED COURSE**  
Subject Code: **17BM102**  
Subject Title: **MEDICAL EQUIPMENT and ITS CALIBRATION**

DATE: 04.12.2022

S. No.	Reg No.	Name	FN	AN
1	21BM001	AAKASH R	Aakash. R	Aakash. R
2	21BM002	ABISHEK T	T. Abishek	T. Abishek
3	21BM003	AKALYA K	K. Akalya	K. Akalya
4	21BM004	ARUL M	Arul. m	Arul. m
5	21BM005	BHARATHI K	K. Bhanthi	K. Bhanthi
6	21BM006	BHAVANAPRAVANTHIKA S	S. Bhavanya	S. Bhavanya
7	21BM007	BHUVANESWARI M	M. Bhuv	M. Bhuv
8	21BM008	BRIGHTON DANIEL R J	Daniel	Daniel
9	21BM009	DEVAPRASATH M	M. Devaprasath	M. Devaprasath
10	21BM010	DHANUSHMATHI S	S. Dhani	S. Dhani
11	21BM011	DHARANEESH S	S. Dhani	S. Dhani
12	21BM012	DHARANI K	K. Dhani	K. Dhani
13	21BM013	DIVYA S	S. Divya	S. Divya
14	21BM014	GAYATHRI P	P. Gayathri	P. Gayathri
15	21BM015	HARIHARAN B	B. Hariharan	B. Hariharan
16	21BM016	KOWSALYA K	K. Kowsalya	K. Kowsalya
17	21BM017	MAHARAJA N	N. Mahaja	N. Mahaja
18	21BM018	MANIKANDAN S	S. Manikandan	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Siddiq	M. Siddiq
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain	S. Mohamed Hussain
21	21BM021	POORANI S	S. Poorani	S. Poorani
22	21BM022	RAMANIKA K	K. Ramani	K. Ramani

23	21BM023	ROJA M	Roya.m	Roya.m.
24	21BM024	SANJAY KUMAR C	C. Sanjay	C. Sanjay
25	21BM025	SANJAY KUMAR N	AB	AB.
26	21BM026	SANTHOSH N	As	As
27	21BM027	SRIKANTH R	← Discontinued →	← Discontinued →
28	21BM028	SUDALAIKUMAR P	P. S. S.	P. S. S.
29	21BM029	SUGANYA R	R. Suganya	R. Suganya
30	21BM030	SUSVINTH S	S. S. S.	S. S. S.
31	21BM031	VISHNU R	R. Vishnu.	R. Vishnu.
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Yasar Ali	A. Yasar Ali
34	21BML01	SURENDER C	← Discontinued →	← Discontinued →

DATE: 04/10/22.  


  
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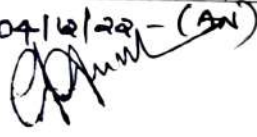
NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52  
OFFICE OF CONTROLLER OF EXAMINATIONS  
SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)  
EXAM ATTENDANCE SHEET

Degree: **B.E**  
Branch/SEM : **BIOMEDICAL III**  
Subject Type : **VALUE ADDED COURSE**  
Subject Code : **17BM102**  
Subject Title: **MEDICAL EQUIPMENT and ITS CALIBRATION**

S. No.	Reg No.	Name	SIGNATURE
1	21BM001	AAKASH R	Aakash R
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3	21BM003	AKALYA K	K. Akalya
4	21BM004	ARUL M	m. Arul
5	21BM005	BHARATHI K	K. Poo
6	21BM006	BHAVANAPRAVANTHIKA S	Bhavana
7	21BM007	BHUVANESWARI M	M. Bhuv
8	21BM008	BRIGHTON DANIEL R J	Daniel
9	21BM009	DEVAPRASATH M	m. Devapr
10	21BM010	DHANUSHMATHI S	S. Dh
11	21BM011	DHARANEESH S	S. Dh
12	21BM012	DHARANI K	K. Dh
13	21BM013	DIVYA S	S. Div
14	21BM014	GAYATHRI P	P. Gay
15	21BM015	HARIHARAN B	B. Hariharan
16	21BM016	KOWSALYA K	K. K
17	21BM017	MAHARAJA N	N. Maha
18	21BM018	MANIKANDAN S	S. Manikandan
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	M. Sid
20	21BM020	MOHAMED HUSSAIN S	S. Mohamed Hussain
21	21BM021	POORANI S	S. poorani
22	21BM022	RAMANIKA K	K. Ram
23	21BM023	ROJA M	M. Roja
24	21BM024	SANJAY KUMAR C	C. Sanjay



25	21BM025	SANJAY KUMAR N	AB
26	21BM026	SANTHOSH N	AB
27	21BM027	SRIKANTH R	AB
28	21BM028	SUDALAIKUMAR P	P. S. S.
29	21BM029	SUGANYA R	R. Suganya .
30	21BM030	SUSVINTH S	S. S. S.
31	21BM031	VISHNU R	R. Vishnu
32	21BM032	WAHITHA BEGUM M	M. Wahitha Begum
33	21BM033	YASAR ALI A	A. Y. A.
34	21BML01	SURENDER C	AB .

DATE: 04/10/22 - (AN)  


  
INDUSTRY EXPERT





**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**  
**Degree: BE/B.Tech/M.E/MCA/MBA**  
**Namelist - Mark Sheet**

DATE : 04/12/2022

Branch		BIOMEDICAL ENGINEERING		
Elective Subject Type		VALUE ADDED COURSE		
Elective Subject Code		17BM102		
Elective Subject Title		MEDICAL EQUIPMENT AND ITS CALIBRATION		
S.No	Reg. No	Student Name	MARKS (50)	MARKS IN WORDS
1	21BM001	AAKASH R	27	TWO SEVEN.
2	21BM002	ABISHEK T	43	FOUR THREE
3	21BM003	AKALYA K	38	THREE EIGHT
4	21BM004	ARUL M	36	THREE SIX
5	21BM005	BHARATHI K	35	THREE FIVE
6	21BM006	BHAVANAPRAVANTHIKA S	39	THREE NINE
7	21BM007	BHUVANESWARI M	42	FOUR TWO
8	21BM008	BRIGHTON DANIEL R J	42	FOUR TWO
9	21BM009	DEVAPRASATH M	46	FOUR SIX
10	21BM010	DHANUSHMATHI S	35	THREE FIVE
11	21BM011	DHARANEESH S	35	THREE FIVE
12	21BM012	DHARANI K	39	THREE NINE
13	21BM013	DIVYA S	39	THREE NINE
14	21BM014	GAYATHRI P	39	THREE NINE
15	21BM015	HARIHARAN B	37	THREE SEVEN
16	21BM016	KOWSALYA K	45	FOUR FIVE
17	21BM017	MAHARAJA N	36	THREE SIX
18	21BM018	MANIKANDAN S	40	FOUR ZERO
19	21BM019	MOHAMED ABUBAKKAR SIDDIQ M	42	FOUR TWO
20	21BM020	MOHAMED HUSSAIN S	39	THREE NINE
21	21BM021	POORANI S	37	THREE SEVEN
22	21BM022	RAMANIKA K	43	FOUR THREE
23	21BM023	ROJA M	35	THREE FIVE
24	21BM024	SANJAY KUMAR C	37	THREE SEVEN
25	21BM025	SANJAY KUMAR N	AB	-
26	21BM026	SANTHOSH N	AB	-

	21BM027	SRIKANTH R	AB	
28	21BM028	SUDALAIKUMAR P	39	THREE NINE
29	21BM029	SUGANYA R	42	FOUR TWO
30	21BM030	SUSVINTH S	36	THREE SIX
31	21BM031	VISHNU R	46	FOUR SIX
32	21BM032	WAHITHA BEGUM M	41	FOUR ONE
33	21BM033	YASAR ALI A	40	FOUR ZERO
34	21BML01	SURENDER C	AB	

*[Handwritten Signature]*  
02/10/22

INDUSTRY CO-ORDINATOR





OBJECTIVE TEST

VALUE ADDED COURSE ON BIOMEDICAL EQUIPMENTS AND ITS CALIBRATION

1. On an average, a person can live without oxygen for how many minutes?  
1) 3 minutes  
2) 4 minutes  
3) 5 minutes  
4) 6 minutes
2. What is CPR..?  
1) Cardia output  
2) cardio pulmonary resuscitation  
3) Cardia activity  
4) cardiac conductio,
3. Fuel for our body is...?  
1) Oxygen  
2) Glucose  
3) Oxygen & Glucose  
4) None of the above
4. How does every single cell in your body receives this fuel?  
1) Respiratory System  
2) Nervous system  
3) circulatory system  
4) All the above
5. How many valves heart have..?  
1) 2 Valves  
2) 3 Valves  
3) 4 Valves  
4) 5 Valves
6. How many valves heart have..?  
1) 2 Valves  
2) 3 Valves  
3) 4 Valves  
4) 5 Valves
7. Oxygenated blood can be carried by...?  
1) Veins  
2) Arteries  
3) None of the above  
4) All the above
8. Name the valve which is there between right atrium and right ventricle...?  
1) Tricuspid valve  
2) Bicuspid valve  
3) Pulmonary valve  
4) Aortic valve
9. ECG Stands for...?  
1) Electrocardiogram  
2) Electro cardiac output  
3) Electromyograph  
4) None of the above
10. Why do we require ECG...?  
1) Suspected heart attack  
2) Pulmonary embplism  
3) Fainting and collapse  
4) All the above
11. The event of cardiac conduction system is...?  
1) PQBST complex  
2) QRS  
3) PB segment  
4) ST segment
12. The heart rate more than 100bpm is called...?  
1) Arrythmia  
2) Bradycardia  
3) Tachycardia  
4) Normal sinus rhythm



13. The formation of QRS complex due to following activity ?  
 1) Atrial depolarisation  
 2) Ventricular depolarisation  
 3) Ventricular repolarisation  
 4) None of the above
14. How many lead systems available in ECG ?  
 1) 3Lead  
 2) 7Lead  
 3) 12Lead  
 4) All the above
15. Name some limb leads in the following..?  
 1) Lead I  
 2) aVL  
 3) V1  
 4) aVR
16. What are the rules used to calculate heart rate. ?  
 1) 300 rule  
 2) 1500rule  
 3) 10sec rule  
 4) All the above
17. The device used to check/identify cardiac arrest is..?  
 1) CATH Lab  
 2) Patient monitor  
 3) ECG machine  
 4) Syringe Pump
18. HRV Stands for..?  
 1) Heart rate variability  
 2) Heart respiration variability  
 3) Heart response variability  
 4) All the above
19. The purpose of using pacemaker is..?  
 1) to control respiration rate  
 2) to monitor the cardiac conduction  
 3) to help control abnormal heart rhythms  
 4) to help clearing CO2
20. What kind of electrodes used in internal defibrillator..?  
 1) Catheter  
 2) Spoon electrode  
 3) sytetic electrode  
 4) paddle electrode
21. Which mode of defibrillation consumes more current..?  
 1) Biphasic  
 2) Monophasic  
 3) Monophasic & Biphasic  
 4) None of the above
22. Respiration rate can be measured by..?  
 1) Counting breath per minute  
 2) ECG  
 3) Capnography  
 4) All the above
23. What is the typical respiration rate?  
 1) 5-10bpm  
 2) 7-10bpm  
 3) 12-16bpm  
 4) 20-30bpm
24. What is the normal blood pressure level( systolic/diastolic).?  
 1) 120/80 mmHg  
 2) 80/120 mmHg  
 3) 100/200 mmHg  
 4) 150/200 mmHg
25. IBP stands for..?  
 1) Intermittent blood pressure  
 2) Invasive blood pressure  
 3) Incorrect blood pressure  
 4) immediate blood pressure





26. ICP stands for..?  
1) Intra cranial blood pressure  
3) Intra cranial blood pressure  
2) Intra cranial blood pressure  
4) Intra cranial blood pressure
27. Purpose of spo2 is to check..?  
1) Oxygen percentage in blood  
3) Heart rate  
2) Oxygen percentage in blood  
4) Respiration rate
28. Which light absorbs oxygenated hemoglobin..?  
1) Red light  
3) Laser light  
2) Infrared light  
4) None of the above
29. Volume of blood pumped by the heart (RV/LV) per unit time....?  
1) Heart rate  
3) Stroke Volume  
2) Cardiac output  
4) Respiration rate
30. Etco2 stands for....?  
1) End Tidal Co2  
3) Expected Tidal Co2  
2) End time Co2  
4) None of the above
31. Etco2 stands for....?  
1) End Tidal Co2  
3) Expected Tidal Co2  
2) End time Co2  
4) None of the above
32. What kind of motor used in syringe pump and infusion pump..?  
1) Servo motor  
3) DC motor  
2) AC motor  
4) Stepper motor
33. KVO Stands for..?  
1) Keep Vein Open  
3) Keep Vein Oscillate  
2) Keep Vein Open  
4) None of the above
34. What kind of battery used in syringe pump  
1) Lead Acid  
3) Ni-Cd  
2) Lithium Ion  
4) None of the above
35. Flow rate can be set in syringe and infusion pump as..?  
1) ml/min  
3) ml/hr  
2) ml/sec  
4) None of the above
36. Purpose of purge in syringe pump is used for..?  
1) to remove air bubbles  
3) to increase the flow  
2) to warm the infusion  
4) None of the above
37. Sudden pause in the breathing is called..?  
1) Apnea  
3) hypoxmia  
2) respiration pause  
4) Anemia
38. CPAP stands for..?  
1) Continuous Positive Airway Pressure  
3) Chronic Positive Airway Problem  
2) Contact Positive Airway Pressure  
4) None of the above





39. CPAP stands for...?  
 1) Bidirectional Airway pressure  
 2) Bilevel Positive Airway Pressure  
 3) Bilevel Positive Airway Pressure  
 4) Bilevel Positive Airway pressure  
 5) All the above
40. What is the maximum syringe size can be used in syringe pump...?  
 1) 50ml  
 2) 100ml  
 3) 150ml  
 4) 200ml
41. Defibrillator can be used in...?  
 1) Ambulance  
 2) ICU  
 3) Operation theatre  
 4) All the above
42. QxCG stands for...?  
 1) Qxycardio Respirogram  
 2) Qxycardio Respirogram  
 3) Operational cardiac respiration  
 4) None of the above
43. Purpose of humidifier in the CPAP/Bi-RAP is to...?  
 1) To maintain/regulate the humidity  
 2) To increase the flow  
 3) To reduce the flow  
 4) To reduce the pressure
44. What kind of mechanism used in Infusion pump...?  
 1) Piston pump  
 2) Linear actuating  
 3) Curvilinear Peristaltic  
 4) None of the above
45. Amount of blood pumped out by heart each beat is called...?  
 1) Stroke volume  
 2) Cardiac output  
 3) Etco2  
 4) Respiration
46. Types of Etco2...?  
 1) Main Stream  
 2) Side Stream  
 3) Microstream  
 4) All the above
47. What parameter indicates the arterial oxygen level in brain  
 1) Intraarterial Pressure  
 2) Intracardiac pressure  
 3) Atrial Pressure  
 4) Bispectral Index
48. Unit used in surgical defibrillator is...?  
 1) joules  
 2) Resistance  
 3) Watts  
 4) All the above
49. What is myocardial infarction...?  
 1) cardiac arrest  
 2) Heart attack  
 3) Blockage on the coronary artery  
 4) All the above
50. What is the purpose of calibration...?  
 1) To check accuracy & performance of the device  
 2) To service  
 3) To sell the device  
 4) None of the above



## Contact

[www.linkedin.com/in/boopathi-sakthivel-668a5469](https://www.linkedin.com/in/boopathi-sakthivel-668a5469) (LinkedIn)

## Top Skills

Biomedical Research & Development

Biomedical Device Design

Biomedical Engineering

## Languages

Tamil (Native or Bilingual)

English (Professional Working)

Kannada (Elementary)

## Certifications

Natus Sales & Product Training with theory and practice on using Natus Hearing & Balance assesment, Fitting & Verification solution

## Honors-Awards

Best Service-MES 2019

## Publications

SIMULATION AND PERFORMANCE ANALYSIS OF NANOWIRE WITH DIFFERENT DIAMETERS

# Boopathi Sakthivel

Founder, CEO & Biomedical Engineer at Prashan Medical Technologies

## Summary

Experienced Technical Support Engineer with a demonstrated history of working in the hospital & health care industry. Skilled in Technical Support, Biomedical Devices, PSoC, Keil, and Biomedical Device Design. Strong information technology professional with a Bachelor of Engineering (B.Eng.) focused in Biomedical/Medical Engineering from PSG College of Technology.

## Experience

Prashan Medical Technologies

Founder, CEO & Biomedical Engineer

July 2020 - Present (2 years 1 month)

Medial Equipment Sales | Service | Calibration & Testing | Training  
Authorised Service Partner for Schiller India

NMC Trading LLC

Technical Specialist

January 2019 - December 2020 (2 years)

1. Providing excellent Customer & Technical support to UAE customers for the products of Schiller, Stephan, Terumo, Welchlyalyn, Healthometer, Dantsky Ganshorn, etc
2. Providing excellent support to end user on installation, Preventive maintenance & service calls
3. Handing connectivity parts for Schiller products
4. Providing training to the end users & Engineers on the products which we installed
5. Spare parts suggestion to be ordered
6. Maintaining HIS/EMS connectivity of Cardiology products in Healthplus Diabetic Centre(Abu Dhabi) and Holistic Medical Centre(Abu Dhabi)
7. Excellent knowledge on Primary care and Critical care products
8. Comprehensive knowledge of problem solving



## Schiller India

4 years 2 months

### Senior Technical Support Engineer

December 2015 - January 2019 (3 years 2 months)

1. Technical support to the engineers and customers of India and overseas
2. Technical training provided to Schiller engineers and Schiller Dealers
3. Technical support provided to end users and engineers for the products like patient monitors, Infusion pump, syringe pump, fetal monitors, diathermy, suction machine, central nursing station, defibrillator, ECG machines, Ventilator, Spirometer, Radiology
4. Components level repair activity for defective board
5. Presentation preparation for the products which are handled
6. Online support provided to overseas engineers and end users
7. Coordinated with the suppliers like Biolight(China), JYM(Daiwan), Yuwell, SAP, Biometric Cables(Chennai), Lub Dub Medicals(Chennai)
8. Stock allocation for all Schiller branches in India and Overseas
9. Physics stock verification
10. Ensured comprehensive knowledge to the engineers and dealers
11. Organized training for Engineers and End user
12. Part number creation for Device, PCB's, Spares and Consumables
13. Price list preparation based on import and export details
14. Excellent skills on MS office for MIS documentations
15. Supported for Repair Report software implementation for Schiller Service team
15. Failure Analysis & Escalation to principle supplier to take preventive action
16. Local development of PCB's and Consumables
17. Demonstration on Tenders and Big orders
18. Busted customer places for Critical calls

### Technical Support Engineer

December 2014 - December 2015 (1 year 1 month)

## ARIES BIOMED TECHNOLOGY PVT LTD

1 year 4 months

### Product Development Engineer

September 2013 - December 2014 (1 year 4 months)



1. Medical Product Development, Biomedical Calibration and Service, Technical Support, Document Preparation, Biomedical Instrument Demonstration for Doctors & Biomedical Engineers in Hospital
2. Worked in Labview, Arduino and Embedded to develop products for end users
3. Developed Medical Socket tester to check the electrical socket outlet in hospitals to ensure the electrical safety and to avoid leakage current
4. Developed an Algorithm for Anesthesia ventilator for Avasarala Technologies
5. Developed ventilator breathing circuit test jig for Biometric Cables, Chennai
6. Developed Venturi test Jig product for Lakshmi Life Sciences, Coimbatore to measure output flow, oxygen & temperature
7. Developed Electrical patient bed actuator current measurement test jig for Lakshmi Life Sciences, Coimbatore
8. Developed & prototype designed for Oxygen monitor and Oxygen conservation device
9. Prepared the Manuals and Presentation for all the products which I have developed
10. Schematic design & Hardware circuit testing
11. Medical equipments calibration conducted in Madurai Meenakshi mission hospital(Madurai)and KG Hospitals(Coimbatore)

#### Intern

September 2013 - December 2013 (4 months)

1. Schematic designs, hardware circuit assembling and testing
2. Developed Medical Socket tester to ensure hospitals Electrical safety

**PSG INSTITUTE OF MEDICAL SCIENCES AND RESEARCH (Inst. Code - 446), COIMBATORE**

#### Training

June 2011 - April 2013 (1 year 11 months)

#### Bharat Scans Pvt Ltd

#### Training

April 2012 - May 2012 (2 months)

1. Learnt all kind of radiology equipments like CT, X-Ray, MRI, PET scanner, SPECT scanner and it's imaging modalities

**G.Kuppuswamy Naidu Memorial Hospital**  
**Training**  
June 2011 - April 2012 (11 months)

1. It was an opportunity to learn all kind of medical equipments including Critical care, cardiology & Radiology
2. Application level training received from the hospital doctors and biomedical technician
3. Worked with the equipments like CT, MRI, Gamma Camera, Cobalt 60, Ventilator and UltraSound

**Authentic Engineers Pvt.ltd**  
**Training**  
April 2010 - May 2010 (2 months)  
Chennai, Tamil Nadu

1. Leary about electronics components, soldering, PCB designs for Stabilizers
2. Hands on experience in PCB soldering for all kind of through hole & SMT PCB's

---

## Education

**PSG College of Technology**  
Bachelor of Engineering (B.Eng.), Biomedical/Medical  
Engineering · (2011 - 2014)

**P.A.Polytechnic College**  
Diploma, Diploma in Electronics and Communication  
Engineering · (2008 - 2011)

**Government High School, Devambadi Kalipalayam, Pollachi**  
· (1998 - 2008)



<b>Chemical Process Analysis and Optimization using DWSIM</b>	
<b>Total hours : 30 Hrs</b>	
<b>UNIT I : Process Simulation and DWSIM</b>	<b>5 Hrs</b>
Introduction to process simulation and DWSIM. Thermodynamic models and unit operations. Setting up data for model, compound selection, property package, selection of streams and understanding the properties of streams. Stream conditions, selection of unit operation, simulation and result analysis	
<b>Tutorials using DWSIM</b>	<b>25 Hrs</b>
<ol style="list-style-type: none"> <li>1. Creating a flow sheet</li> <li>2. Calculating Bubble point and Dew point</li> <li>3. Creating a binary phase envelope</li> <li>4. Creating a Distillation column</li> <li>5. Creating a Absorption column</li> <li>6. Creating chemsep Distillation column</li> <li>7. Creating a conversion reactor</li> <li>8. Creating plug flow reactor</li> <li>9. Styrene production</li> <li>10. Natural Gas plant Modeling</li> </ol>	
<b>Lecture: 5, Practical: 25 Total: 30</b>	
<b>Reference/ Manual/ Software:</b>	
1	Treybal R. E., "Mass Transfer Operations", 3rd Edition. McGraw Hill Book Co., New York, 1981.
2	Levenspiel O., —Chemical Reaction EngineeringI, 4th Edition, Wiley India Pvt. Ltd., New Delhi, 2009.
3	DWSIM open source software: <a href="https://dwsim.inforside.com.br/new/index.php/download/">https://dwsim.inforside.com.br/new/index.php/download/</a> Link: <a href="https://dwsim.inforside.com.br/new/index.php/download/">https://dwsim.inforside.com.br/new/index.php/download/</a> Runs on 32/64-bit Windows XP or newer, 64-bit Linux, macOS and Raspberry Pi 2 or newer.
<b>Course Outcomes:</b>	
After completing the course, the student will be able to:	
<ul style="list-style-type: none"> <li>• understand the open-source software DWSIM.</li> <li>• enables to manage the material streams and design a schematic representation of the entire mechanism with the help of object palette.</li> <li>• describe the concepts of simulations using simulators.</li> </ul>	





**NANDHA**  
**ENGINEERING COLLEGE, Erode - 52.**  
**(Autonomous)**



## DEPARTMENT OF CHEMICAL ENGINEERING

### ORGANISING COMMITTEE

#### Chief Patrons

**Thiru. V. Shanmugan**

Chairman, Sri Nandha Educational Trust

**Thiru. S. Nandhakumar Pradeep**

Secretary, Sri Nandha Educational Trust

**Thiru. S. Thirumoorthi**

Secretary, Sri Nandha Educational Institutions

#### Patrons

**Dr. N. Rengarajan, Principal**

Nandha Engineering College

**Dr. J. Senthil, Director**

Nandha Tech. Campus

#### Convener

**Dr. N. Subramanian**

Associate Professor & Head,  
Department of Chemical Engineering

#### Coordinator

**Ms. S. Keerthika M.Tech.**,  
Assistant Professor / Chemical Engineering

#### Department Association Office Bearers

##### Secretary

**Mr. Rajesh Kumar S** - IV - B.Tech. Chemical

##### Treasurer

**Mr. Krishna Prasat M** - IV - B.Tech. Chemical

##### Joint Secretary

**Ms. Subasini R** - III - B.Tech. Chemical

##### Joint Treasurer

**Mr. Kennedy Diwakar** - III - B.Tech. Chemical

#### Executive Committee Members

**Mr. Saravanan A** - IV - B.Tech. Chemical

**Ms. Kanimozhi C** - IV - B.Tech. Chemical

**Mr. Yuvaraj S** - IV - B.Tech. Chemical

**Mr. Arun Kumar T M** - IV - B.Tech. Chemical

**Mr. Prakadesh U** - III - B.Tech. Chemical

**Mr. Adrash S** - III - B.Tech. Chemical

**Ms. Bhavani M** - II - B.Tech. Chemical

**Mr. Ashok A** - II - B.Tech. Chemical

**Mr. Hakkiem S** - II - B.Tech. Chemical

**Mr. Balashanmugam K** - II - B.Tech. Chemical

## INVITATION

The Management, Principal, Faculty & Student members of  
Chemical Engineering Department

Nandha Engineering College

&

IICHE-NEC Student Chapter

Organizes

### VALUE ADDED COURSE

On

**Chemical Process Analysis and Optimisation**

**using DWSIM**

*Resource Person*

**Mr. K. Kamalahasan**

Director

Fermion Energy & Engineering Solutions Pvt.Ltd

Coimbatore



**Date : NOV 19,20,26,27 - 2022**

**Time: 9.00 am to 5:00 pm**

**Venue: Chemical Engineering Computer Center**

#### Co-Convenors

**Mr. K. Rajasekaran AP / Chemical**

**Mr. B. Vinoth Kumar AP / Chemical**

**Ms. S. Keerthika AP / Chemical**

#### Convener

**Dr. N. Subramanian**

**HoD / Chemical**

#### Director

**Dr. J. Senthil**

**Nandha tech Campus**

#### Principal

**Dr. N. Rengarajan**

**Nandha Engineering College**





NANDHA ENGINEERING COLLEGE, ERODE - 52.

(Autonomous)

DEPARTMENT OF CHEMICAL ENGINEERING

BATCH 2019-2023 (Academic Year 2022-23)

Value Added Course - Students Name List

Chemical Process Analysis and Optimization using DWSIM

S.NO	REGISTER NUMBER	NAME OF THE STUDENT
1	19CH001	AKASH T
2	19CH003	CHIRANJEVI ANISH P
3	19CH004	DEVALINGAM M
4	19CH005	DINESH M
5	19CH006	GOPINATH N
6	19CH007	GOWTHAM C
7	19CH008	GOWTHAMAN V
8	19CH009	HARIHARAN A
9	19CH010	HARIHARAN B
10	19CH011	HARIHARAN P
11	19CH013	JEEVA J
12	19CH015	KARTHIK S
13	19CH017	KRISHNAN S
14	19CH021	NAVEEN KUMAR K M
15	19CH022	NISHWIN SAJEEV
16	19CH023	PRAVEEN T
17	19CH024	RAGHURAMAN B
18	19CH025	RAJESH KUMAR S
19	19CH026	RANJITHKUMAR M
20	19CH027	SABARIRAJA V
21	19CH029	SOORYA S
22	19CH030	SRIHARAN M
23	19CH031	SUBASH P
24	19CH034	VIJAYA RAGAVAN A
25	19CH035	VIJAYANAND A
26	19CH037	WASIM AKRAM M
27	19CH038	YOKESH V
28	19CHL01	AKILESHWARAN A
29	19CHL09	RAJARA AJESHWARAN K
30	19CHL10	SANAKKIYA M
31	19CHL11	SANJAY R
32	19CHL12	SELVAPRAVIN D
33	19CHL13	SIVAPRAKASH C
34	19CHL14	SIVASUDARMANI T



35	19CHL15	VINOTHKUMAR S
36	19CHL17	ABHIJITH A
37	19CHL19	ANDROOSE A
38	19CHL20	BASIL SAJU
39	19CHL21	SIBICHANDRU P

  
HOD /CHEMICAL





# Nandha Engineering College

(An Autonomous Institution Approved by AICTE, New Delhi and

Affiliated to Anna University, Chennai)

Accredited by NAAC with A+ Grade

Erode-638 052, Tamil Nadu. [www.nandhaengg.org](http://www.nandhaengg.org)

## Department of Chemical Engineering

Supported by



This is to certify that Dr./Prof./Mr./Ms./Mrs. \_\_\_\_\_

SOORYA S

of **Nandha Engineering College** completed an Value added Course on **Chemical Process Analysis and Optimization using DWSIM** organized by Department of Chemical Engineering & IlCHE-NEC Students Chapter, held on **19,20,26,27 November 2022** at the Department of Chemical Engineering, Nandha Engineering College, Erode.

Ms.S.Keerthika  
Coordinator

Dr.N.Subramanian  
Associate Professor & Head

Dr.N.Rengarajan  
Principal



**NANDHA ENGINEERING COLLEGE**

(Autonomous)

ERODE - 638 052. TAMIL NADU

**DEPT. OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE**

Ph : 04294 - 225585, 223711

Fax No : 04294 - 224787

e-mail : [info@nandhaengg.org](mailto:info@nandhaengg.org)

Website : <http://nandhaengg.org>

**Thiru V. SHANMUGAN**

Chairman

Sri Nandha Educational Trust

**Thiru S. NANDHAKUMAR PRADEEP**

Secretary

Sri Nandha Educational Trust

**Thiru S. THIRUMOORTHY**

Secretary

Nandha Educational Institutions

**PATRON**

Dr. N.RENGARAJAN

**PRINCIPAL**

**CEO**

Dr.S.ARUMUGAM

**DIRECTOR**

DR. J. SENTHIL, PHD  
NANDHA TECH CAMPUS

**CO-ORDINATORS**

MS.M. PARVATHI  
MS. SENTHAMARALM

**INVITATION**

In Association with

**Department of Artificial Intelligence and Data Science**

VALUE ADDED COURSE ON

***Tensorflow for Deep Learning***

by

**Mr. Karthick Narayanan, HTC  
Global Services, Chennai,  
Tamilnadu**

**Date:** 08, 09 & 10 APRIL 2023

**Time:** 9.30 PM to 04.30 PM

**Venue**

Block 3 CC2 LAB

17AII02_CVAC01 TENSORFLOW FOR DEEP LEARNING				
	L	T	P	C
	0	0	0	1
<b>OBJECTIVES:</b>				
<ul style="list-style-type: none"> <li>• Develop basic knowledge on data science</li> <li>• Know the types of data science</li> <li>• Create a tensorflow application for data science</li> </ul>				
<b>COURSE OUTCOMES:</b>				
At the end of this course, the students will be able to				
<ul style="list-style-type: none"> <li>• know basic knowledge on data science</li> <li>• create various types of data science methods</li> <li>• work a tensorflow application for data science</li> </ul>				
<b>UNIT I - Introduction to deep learning</b>				(9)
Map of computer science - Overview of AI - Conventional Programming and Machine Learning - Traditional ML and Deep Learning - Application/ Use Cases of deep learning - Human brain and Neural Network - Curse of Dimensionality - Perceptron - Components of Perceptron - Implementation of Perceptron. Tensorflow and Neural Network, Convolution Neural Network, Transfer Learning, Transfer Learning				
<b>TOTAL (L: 30) = 30 PERIODS</b>				
<b>TEXT BOOK:</b>				
GOOGLE DRIVE LINK: <a href="https://drive.google.com/file/d/1zqsSVoJ2QFIKqAH395jwkkmlPaEZR8R9/view?usp=drive_link">https://drive.google.com/file/d/1zqsSVoJ2QFIKqAH395jwkkmlPaEZR8R9/view?usp=drive link</a>				



**NANDHA ENGINEERING COLLEGE (AUTONOMOUS),ERODE -52****Degree: B.Tech****Branch : Artificial Intelligence and Data Science****Semester: IV****Subject Code : 17AII02****Subject Title: Tensorflow for Deep Learning****C-VAC NAME LIST**

<b>S.No.</b>	<b>Reg.No</b>	<b>Name</b>	<b>Remarks</b>
1	21AI001	BALAKRISHNAN V	
2	21AI002	BOOPATHI R	
3	21AI003	CHAHANA R	
4	21AI004	CHINMAYA SIVASHANMUGAM	
5	21AI006	DEVADHARSHINI M	
6	21AI007	DHANUSH P	
7	21AI008	DHARANIDHARAN A	
8	21AI009	DINESH B	
9	21AI010	DINESHKUMAR P	
10	21AI011	GOKULNATH V	
11	21AI012	GOWTHAM RAJ B	
12	21AI013	HARINI S	
13	21AI014	HARISH BABU R	
14	21AI015	HARISH RAGAVENDRA S	
15	21AI016	JAGADEESWARAN V P	
16	21AI017	JASSIM USMAN M	
17	21AI018	KATHIR R	
18	21AI020	KIRUBA SHANKAR K R	
19	21AI021	KISHORE RAJAN K	
20	21AI022	KOWSALYA V	
21	21AI024	MEGASHYAM S S	
22	21AI025	MOHAMED ASSAM A	
23	21AI027	MOHAMED ISAAQ S	
24	21AI028	MUTHURAM S K	
25	21AI029	NAKULAN T	
26	21AI031	NITHARSHAN E	
27	21AI032	NIVEDHANA S	
28	21AI033	POORNAVALLI P R	
29	21AI034	PRABHAKARAN E	
30	21AI035	PRADEEPA S	

31	21AI036	PRAVEENKUMAR S	
32	21AI037	RAKESH S	
33	21AI038	RAMYA B D	
34	21AI039	RITHIK P	
35	21AI040	SAKTHI SARAVANAN T	
36	21AI041	SAKTHIVEL T	
37	21AI042	SANDEEP S D	
38	21AI043	SANDHIYA K	
39	21AI044	SANJAY A	
40	21AI045	SANJAY KANTH G	
41	21AI046	SANTHIYA R	
42	21AI047	SARAVANA KUMAR D	
43	21AI048	SASTHA LAXMANAN S	
44	21AI049	SHIVA SHRI SHABHARI S	
45	21AI050	SHREENITHIN P	
46	21AI051	SHRI KEERTHANA R	
47	21AI052	SHYAM T R	
48	21AI053	SRISANTHOSH K	
49	21AI055	SUDHAKAR D	
50	21AI057	VIKRAM U	
51	21AI058	YOGESH M V	
52	21AIL01	BHUVANESH K	
53	21AIL02	DEEPARAJAKUMARAN N	
54	21AIL04	KARTHIKEYAN K.A	
55	21AIL05	KUMARAVEL J	
56	21AIL07	RAHUL ASR	
57	21AIL08	SATHISHKUMAR.S	

**ONE CREDIT  
INCHARGE**

**Mr. Karthick Naranayanan.S**  
Machine Learning Engineer, HTC global Services,  
Chennai





# CERTIFICATE

- OF APPRECIATION -

This certificate is presented to

**Mrs.HARINI S**

This certificate is given for the completion of C-VAC in  
the field of **Tensorflow for Deep Learning** conducted on  
08.04.2023 to 10.04.2023.

**SENTHAMARAI.M**  
C-VAC INCHARGE

From

Mr.A.AMARNATH PRABHAKARAN,  
Assistant Professor/BME,  
Nandha Engineering College (Autonomous),  
Erode.

To

The Principal,  
Nandha Engineering College (Autonomous),  
Erode.

Respected Sir,

**Sub: Requesting permission to conduct Value added course-Reg**

As per the Autonomous regulations, the Department of Biomedical Engineering have planned to conduct Value added course for III year BME students. The Value added course will be handled by the Prashan Medical Technologies, Coimbatore on the title "17BMI03 – Labview for Biomedical Applications" on 26.11.2022 & 27.11.2022 at Block -3 Human Physiology Lab. The assessment for the same is tentatively planned on 27.11.2022 (AN). So I kindly request you to give permission to conduct the course.

(53 students) Thanking you,

To  
COFE  
2/11/2022

*(Signature)*  
8/10/22  
Yours Faithfully,  
(A. Amarnath Prabhakaran)

Place:NEC

Date: 08.10.2022

*(Signature)*  
10/10/22  
HOD/BME

## **“LABVIEW GUI PROGRAMMING WITH REALTIME APPLICATION”**

### **PURPOSE:**

To integrate & educate students on GUI programming with the language LabVIEW.

### **INSTRUCTIONAL OBJECTIVES:**

- ✦ To transmute Electronics/Electrical/Instrumentation & control Engineer to LabVIEW design Engineer (Fresher into Professional)
- ✦ To impart basic Logical thinking knowledge on LabVIEW for simulation & control
- ✦ To program, simulate & control for every product in R&D.

### **OVERVIEW & INTRODUCTION MODULE: (8 Hours)**

- ✦ **INTRODUCTION:** - Advantages of a Virtual Instrument - LabVIEW Software Overview - graphical user interfaces - data types - data flow programming, editing, debugging and running a virtual instrument - General functional description of a digital instrument - block diagram of a virtual instrument - physical quantities and analog interfaces - hardware and software - user interfaces - advantages of virtual instrumentation over conventional instruments - architecture of a virtual instrument and its relation to the operating system.
- ✦ **G PROGRAMMING :** Graphical programming palettes and tools - front panel objects - Functions and libraries - Controls, Indicators, Labels and Text - Shape - size and colour - owned and free labels - Data type, format, precision and representation - Software environment - palettes - data types and colour coding - editing, debugging and running a vi - data flow programming - modular programming - loops - local and global variables.
- ✦ **PROGRAMMING STRUCTURE :** For loop, While loop, Case structure, Flat Sequence-Arrays and clusters - sequence structures - plotting data - Chart, Graph, XY Graph - making decisions in a vi - strings and File I/O - TCP/IP - shared variables - data publishing - state machines.



- **HARDWARE OVERVIEW:** PC architecture: current trends - operating system requirement drivers - interface buses - myDAQ - ELVIS - Compact RIO Arduino Interface with LabVIEW - LIFA Interface

### REAL-TIME APPLICATION MODULE: (10 Hours)

- **DATA ACQUISITION:** Classification of signals - analog and digital interfacing - DAQ hardware and software - configuring the hardware - ADC, DAC, Digital I/O - basic system components of a signal conditioning system.
- **HARDWARE INTERFACE WITH LABVIEW:** myDAQ - Compact RIO - NI ELVIS - Arduino UNO - LM35 - Relay - Buzzer - Servo Motor - Data Acquisition - Data Control - Real-time Application - Temperature measurement & control.
- **APPLICATIONS:** Biomedical Application: Temperature measurement - Hand Dynamometer measurement - Spirometer & Heart Sound measurement - Gas pressure sensor measurement - Pulse plethysmograph measurement - Respiration monitoring - Heart sounds microphone - Ultrasonic sensor - use of analysis tools: Fourier transforms - power spectrum - correlation methods - windowing and filtering - image acquisition and processing - networking basics for office and industrial application - VISA and IVI.

### OUTCOME:

- Ability to understand the basic working principle of LabVIEW software.
- Ability to comprehend the knowledge on the different instruments I/O for the appropriate application.

### REFERENCE BOOKS:

1. Johnson G, Jennings R, "LabVIEW Graphical Programming", Tata McGraw Hill, New York, 2006.
2. Sanjay Gupta, Joseph John, "Virtual Instrumentation using LabVIEW", Tata McGraw Hill, New Delhi, 2010.
3. Kevin James, "PC Interfacing and Data Acquisition: Techniques for Measurement, Instrumentation and Control", Newnes, 2000.

# NANDHA ENGINEERING COLLEGE

NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

OFFICE OF CONTROLLER OF EXAMINATIONS

SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)

## Namelist

Degree: B.E

Branch/SEM : BIOMEDICAL V


Subject Type : VALUE ADDED COURSE

Subject Code : 17BMI03

Subject Title: LABVIEW FOR BIOMEDICAL APPLICATIONS

S. No.	Reg No.	Name
1	20BM001	AALIYA THASLIM.F
2	20BM002	AATHI SRI.S.S
3	20BM003	ABISHEK.M
4	20BM004	ABISHEK S
5	20BM005	BHARANI.M
6	20BM007	DHANUSH M
7	20BM009	GAYATHRI.N
8	20BM010	GIRIDHARAN.G
9	20BM011	HARIHARAN. R
10	20BM012	HARIHARASUDHAN.S
11	20BM013	20BM013
12	20BM015	JEEVANANTHAN. S
13	20BM016	KIRUTHIKA.S
14	20BM017	KOUSHIKA.V
15	20BM018	KUMARESAN S
16	20BM019	LOGESHWARAN.A
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18	20BM021	MITHRA K
19	20BM022	MOHAMMED ASWATH.L
20	20BM023	MOHANKUMAR.M
21	20BM024	MOHANPRASATH. B
22	20BM025	MONISH.S
23	20BM026	MOWLEESWARAN.V
24	20BM027	MOWNITHTHA TM
25	20BM030	NIRANJANA.V
26	20BM031	NIROSHKUMAR.S
27	20BM032	PAVITHRA R
28	20BM033	PAVITHRA.S
29	20BM034	PRADEEP. S
30	20BM035	PRASANTH.M
31	20BM036	PRAVEEN KUMAR.D
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33	20BM038	SAKTHIVEL K

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50	20BM056	SWETHA K
51	20BM057	VASANTH M
52	20BML01	THARANI G
53	20BML02	VILLIAM DAVID.R

  
(A. Arunathi Prabhakaran)

  
HOD



To

The Head of Department

Nandha Engineering College

Erode

Ref No: QT/PMT/018/22-23

Date : 10.10.2022

**Subject: Quotation towards Value added course**

Dear Sir,

Greetings from Prashan Medical Technologies!!!

Kindly find the below quotation

SR No	Product Description	HSN Code	Unit Price	No of unit	CGST @9%	SGST @9%	Price in INR
1	value added course on "LabVIEW for Biomedical Application"	999294	19,915.00	1	1,792.35	1,792.35	23,499.70
<b>GST-18%</b>					<b>1,792.35</b>	<b>1,792.35</b>	<b>3,585</b>
<b>Total (Rupees twenty-three thousand five hundred only)</b>							<b>23,500</b>

**TERMS & CONDITIONS:**

1. **Tax** : GST @18% Extra Included
2. **Validity**: This offer is valid for 1weeks from the date of contract.

We assure you our best services.




**Boopathi Sakthivel**  
**Founder, CEO & Biomedical Engineer**  
**Prashan Medical Technologies**  
**Mobile: +91 8883774112**





NANDHA ENGINEERING COLLEGE,(Autonomous)  
DEPARTMENT OF BME  
ACADEMIC YEAR(2022-2023) ODD SEM  
VALUE ADDED COURSE SCHEDULE

S.No	Year/Sem	Course code	Course Name	Course Conduct date	Registered count	Exam date	Company Name & Contact Person
1	II/5	17BME03	LABVIEW FOR BIOMEDICAL APPLICATIONS	26.11.2022 & 27.11.2022	53	27.11.2022	Prashan Medical Technologies, Coimbatore & Boopathi Sakthivel - Biomedical Engineer

  
(A. Arunachal Prabhakaran)

  
HOD/BME

  
PRINCIPAL

Request Letter

12/11/22.  
Erode.

From.

A. Anrajan Prabhakaran,  
AP/BME,  
One Credit Course Incharge,  
NEC.

To.

The Principal,  
Nardha Engineering College.

Respected Sir,

Sub: Requesting for Change of date - one credit course - req

As per Autonomous regulations, the department of Biomedical Engineering have planned one credit course for II - BME & III BME. Due to non-availability of the industry resource person the proposed dates are changed. The new dates for the course conduct one III - BME - LABVIEW FOR BIOMEDICAL APPLICATION will be on 12.11.2022 & 13.11.2022, and II - BME - MEDICAL EQUIPMENT & ITS CALIBRATION will be on 06.11.2022 & 07.11.2022. So I kindly request you to give permission to conduct the course in the above mentioned new dates.

Thanking you.

Yours  
COE  
[Signature]  
14/11/22  
Head BME

Yours faithfully  
[Signature]  
12/11/2022.




**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**  
**Namelist - Attendance Sheet**

**Degree:** B.E  
**Branch/SEM :** BIOMEDICAL/V  
**Subject Type :** VALUE ADDED COURSE  
**Subject Code :** 17BM103  
**Subject Title:** LABVIEW FOR BIOMEDICAL APPLICATIONS

**DATE:** 12.11.2022

S. No.	Reg No.	Name	FN	AN
1	20BM001	AALIYA THASLIM.F	<i>Aaliya</i>	<i>Aaliya</i>
2	20BM002	AATHI SRI.S.S	<i>A. S. Sathya</i>	<i>A. S. Sathya</i>
3	20BM003	ABISHEK.M	<i>Abhishek</i>	<i>Abhishek</i>
4	20BM004	ABISHEK S	<i>S. Abhishek</i>	<i>S. Abhishek</i>
5	20BM005	BHARANI.M	<i>M. Bharani</i>	<i>M. Bharani</i>
6	20BM007	DHANUSH M	<i>M. Dhanush</i>	<i>M. Dhanush</i>
7	20BM009	GAYATHRI.N	<i>N. Gayathri</i>	<i>N. Gayathri</i>
8	20BM010	GIRIDHARAN.G	<i>G. Giridharan</i>	<i>G. Giridharan</i>
9	20BM011	HARIHARAN. R	<i>(AB)</i>	<i>Hari</i>
10	20BM012	HARIHARASUDHAN.S	<i>S. Hariharasudhan</i>	<i>S. Hariharasudhan</i>
11	20BM013	HARIPRASANTH	<i>M. Hariprasanth</i>	<i>M. Hariprasanth</i>
12	20BM015	JEEVANANTHAN. S	<i>S. Jeevananthan</i>	<i>S. Jeevananthan</i>
13	20BM016	KIRUTHIKA.S	<i>S. Kiruthika</i>	<i>S. Kiruthika</i>
14	20BM017	KOUSHIKA.V	<i>Koushika.V.</i>	<i>Koushika.V.</i>
15	20BM018	KUMARESAN S	<i>S. Kumaresan</i>	<i>S. Kumaresan</i>
16	20BM019	LOGESHWARAN.A	<i>A. Logeshwaran</i>	<i>A. Logeshwaran</i>
17	20BM020	MANJU.R.E	<i>N. Manju. R.E.</i>	<i>N. Manju. R.E.</i>
18	20BM021	MITHRA K	<i>Mithra.K</i>	<i>Mithra.K</i>
19	20BM022	MOHAMMED ASWATH.L	<i>L. Mohammed Aswath</i>	<i>L. Mohammed Aswath</i>
20	20BM023	MOHANKUMAR.M	<i>Mohan.M</i>	<i>Mohan.M</i>
21	20BM024	MOHANPRASATH. B	<i>B. Mohan</i>	<i>B. Mohan</i>
22	20BM025	MONISH S	<i>S. Monish</i>	<i>S. Monish</i>
23	20BM026	MOWLEESWARAN.V	<i>V. Mowleeswaran</i>	<i>V. Mowleeswaran</i>

24	20BM027	MOWNITHA TM	Mownitha T.M.	Mownitha T.M.
25	20BM030	NIRANJANA V	Niranjana V	Niranjana V
26	20BM031	NIROSHKUMAR.S	S. Niroshkumar	S. Niroshkumar
27	20BM032	PAVITHRA R	R. Pavithra	R. Pavithra
28	20BM033	PAVITHRA.S	S. Pavithra	S. Pavithra
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30	20BM035	PRASANTH.M	M. Prasanth	M. Prasanth
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44	20BM050	SRINITHI.A	A. Srinithi	A. Srinithi
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46	20BM052	V SUGANYA.V	V. Suganya	V. Suganya
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52	20BML01	THARANI G	G. Tharani	G. Tharani
53	20BML02	VILLIAM DAVID.R	R. William David	R. William David

DATE: 12/11/22  
  
 12/11/22

  
 Industry Expert  
 12/11/22





NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52  
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SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)  
Namelist - Attendance Sheet

Degree: B.E

Branch/SEM: BIOMEDICAL/V

Subject Type: VALUE ADDED COURSE

Subject Code: 17BM103

Subject Title: LABVIEW FOR BIOMEDICAL APPLICATIONS

DATE: 13.11.2022

S No.	Reg No.	Name	FN	AN
1	20BM001	AALIYA THASLIM.F	A.A. Aliya	A.A. Aliya
2	20BM002	AATHI SRI S S	S.S. Aathi	S.S. Aathi
3	20BM003	ABISHEK.M	M. Abhishek	M. Abhishek
4	20BM004	ABISHEK S	S. Abhishek	S. Abhishek
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25	20BM030	NIRANJANA V	N. Anjan V	N. Anjan V
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52	20BML01	THARANI G	G. Tharani	G. Tharani
53	20BML02	VILLIAM DAVID.R	R. David	R. David

DATE: 13/11/22

*[Signature]*  
13/11/22

*[Signature]*  
13/11/22  
Industry Expert



**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**

**Namelist - Exam Attendance Sheet**

Degree: **B.E**

Branch/SEM : **BIOMEDICAL/V**

Subject Type : **VALUE ADDED COURSE**

Subject Code : **17BM103**

Subject Title: **LABVIEW FOR BIOMEDICAL APPLICATIONS**

S. No.	Reg No.	Name	FN
1	20BM001	AALIYA THASLIM.F	<i>Aaliya</i>
2	20BM002	AATHI SRI.S.S	<i>S.S. Aathi</i>
3	20BM003	ABISHEK.M	<i>Abhishek</i>
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11	20BM013	HARIPRASANTH	<i>Hari Prasanth</i>
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17	20BM020	MANJU.R E	<i>R.E. Manju</i>
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19	20BM022	MOHAMMED ASWATH.L	<i>L. Mohammed Aswath</i>
20	20BM023	MOHANKUMAR.M	<i>M. Mohankumar</i>
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24	20BM027	MOWNITHA TM	Mownitha TM.
25	20BM030	NIRANJANA.V	Niranjanal
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28	20BM033	PAVITHRA.S	P. Pavithra
29	20BM034	PRADEEP. S	S. Pradeep
30	20BM035	PRASANTH.M	Prasanth M.
31	20BM036	PRAVEEN KUMAR.D	D. Praveen
32	20BM037	RUBA.P	P. Ruba
33	20BM038	SAKTHIVEL K	K. Sakthivel
34	20BM039	SAKTHIVEL P	P. Sakthivel
35	20BM040	SANJAY. S	S. Sanjay
36	20BM042	SARANYA S	S. Saranya
37	20BM043	SELVARAJ. R	R. Selvaraj
38	20BM044	SHANMUGAPRIYA.M	M. Shanmugapriya
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53	20BML02	VILLIAM DAVID.R	R. Villiam David

DATE: 13/11/22 - AN (Exam)

*[Signature]*  
13/11/22

*[Signature]*  
13/11/22  
Industry Expert

Com





Register No.: .....



**NANDHA ENGINEERING COLLEGE(AUTONOMOUS),**

**ERODE -52**

Dept.:

**BME**

Ac.Yr. : 2022 – 2023

Course Code & Title	: 17BMI03	<b>LABVIEW FOR BIOMEDICAL APPLICATIONS</b>	
Year	: III	Semester : 05	Date : 13.11.2022 - AN
Assessment	: I	Duration : 1 hour 30 minutes	Maximum Marks : 50

Q.No.

Section - A (10 x 1 = 10 Marks) Answer All Questions

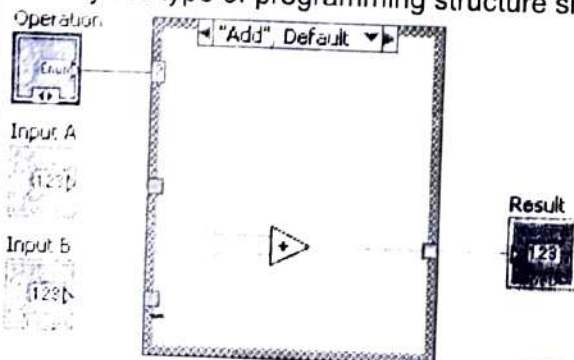
1. What is the full form of LabVIEW?  
(a) Laboratory Visual Instrumentation Engineering Workbench  
(b) Laboratory Video Instrumentation Engineering Workbench  
(c) Laboratory Virtual Instrumentation Engineering Work Platform  
(d) Laboratory Virtual Instrumentation Engineering Workbench

2. LabVIEW can be used for  
(a) Circuit Design and Simulation  
(b) Signal and Image processing  
(c) Embedded System  
(d) All the above

3. What kind of language, the LabVIEW is using?  
(a) C/C++  
(b) Python  
(c) G  
(d) None of the above

4. All mathematical features can be found in \_\_\_\_\_.  
(a) Front Panel  
(b) Example VI's  
(c) Block Diagram  
(d) Sub VI's

5. Identify the type of programming structure shown below.



*Handwritten signature and date: 13/11/22*



	<ul style="list-style-type: none"> <li>(a) FOR loop</li> <li>(b) WHILE loop</li> <li>(c) CASE STRUCTURE</li> <li>(d) None of the above</li> </ul>
6	<p>What kind of filter type can be applied in temperature measurement?</p> <ul style="list-style-type: none"> <li>(a) Low Pass Filter</li> <li>(b) High Pass Filter</li> <li>(c) Smoothing Filter</li> <li>(d) None of the above</li> </ul>
7	<p>How many analog inputs can be connected through Arduino to LabVIEW?</p> <ul style="list-style-type: none"> <li>(a) 5</li> <li>(b) 6</li> <li>(c) 7</li> <li>(d) 8</li> </ul>
8	<p>Which structure is frequently used for real time data acquisition?</p> <ul style="list-style-type: none"> <li>(a) Case structure</li> <li>(b) Timed structure</li> <li>(c) For loop</li> <li>(d) While loop</li> </ul>
9	<p>Output of LM35 temperature sensor will be in_____.</p> <ul style="list-style-type: none"> <li>(a) Analog</li> <li>(b) Digital</li> <li>(c) Discrete</li> <li>(d) Finite</li> </ul>
10	<p>The fluctuation or sudden variation in the output signal can be controlled by using_____.</p> <ul style="list-style-type: none"> <li>(a) Filtering</li> <li>(b) Mean</li> <li>(c) Standard Deviation</li> <li>(d) Amplification</li> </ul>

*Bmy*  
13/11/24



Q.No.	Section - B (5 x 2 = 10 Marks) Answer All Questions
11	What are the advantages of LabVIEW?
12	What is the difference between constant, control and indicator?
13	How to acquire real time data without using DAQ card?
14	What are the steps involved in configuring the hardware like myDAQ or arduino?
15	How to convert LM35 temperature data into celsius?

Q.No.	Section - C (3 x 10 = 30 Marks) Answer All Questions
16	Elucidate the flow of temperature monitoring system.
17	Outline the steps involved to convert the program in LabVIEW VI's to application.exe.
18	Build the flowchart of acquisition and processing in real time interface using biosignal acquisition kit.

*BM*  
13/1/22








**NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE - 52**  
**OFFICE OF CONTROLLER OF EXAMINATIONS**  
**SUBJECT AND ELECTIVE SUBJECT STUDENT LIST (UG&PG) (ODD Semester 2022-23)**  
**Degree: BE/B.Tech/M.E/MCA/MBA**  
**Namelist - Mark Sheet**

DATE : 13/11/2022

Branch		BIOMEDICAL ENGINEERING		
Elective Subject Type		VALUE ADDED COURSE		
Elective Subject Code		17BM103		
Elective Subject Title		LABVIEW FOR BIOMEDICAL APPLICATIONS		
S.No	Reg. No	Student Name	MARKS (50)	MARKS IN WORDS
1	20BM001	AALIYA THASLIM.F	28	TWO EIGHT
2	20BM002	AATHI SRI.S.S	32	THREE TWO
3	20BM003	ABISHEK.M	34	THREE FOUR
4	20BM004	ABISHEK S	39	THREE NINE
5	20BM005	BHARANI.M	31	THREE ONE
6	20BM007	DHANUSH M	38	THREE EIGHT
-	20BM009	GAYATHRI.N	27	TWO SEVEN
8	20BM010	GIRIDHARAN.G	28	TWO EIGHT
9	20BM011	HARIHARAN. R	39	THREE NINE
10	20BM012	HARIHARASUDHAN.S	27	TWO SEVEN
11	20BM013	HARIPRASANTH	26	TWO SIX
12	20BM015	JEEVANANTHAN. S	37	THREE SEVEN
13	20BM016	KIRUTHIKA.S	30	THREE ZERO
14	20BM017	KOUSHIKA.V	44	FOUR FOUR
15	20BM018	KUMARESAN S	45	FOUR FIVE
16	20BM019	LOGESHWARAN.A	40	FOUR ZERO
17	20BM020	MANJU R E	42	FOUR TWO
18	20BM021	MITHRA K	40	FOUR ZERO
19	20BM022	MOHAMMED ASWATH.L	41	FOUR ONE
20	20BM023	MOHANKUMAR M	42	FOUR TWO
21	20BM024	MOHANPRASATH. B	40	FOUR ZERO
22	20BM025	MONISH.S	39	THREE NINE
23	20BM026	MOWLEESWARAN.V	29	TWO NINE
24	20BM027	MOWNITHTHA TM	30	THREE ZERO
25	20BM030	NIRANJANA.V	41	FOUR ONE
26	20BM031	NIROSHKUMAR.S	26	TWO SIX

28	20BM032	PAVITHRA R	43	FOUR THREE
29	20BM033	PAVITHRA.S	34	THREE FOUR
29	20BM034	PRADEEP. S	36	THREE SIX
30	20BM035	PRASANTH.M	45	FOUR FIVE
31	20BM036	PRAVEEN KUMAR.D	26	TWO SIX
32	20BM037	RUBA.P	28	TWO EIGHT
33	20BM038	SAKTHIVEL K	33	THREE THREE
34	20BM039	SAKTHIVEL P	38	THREE EIGHT
35	20BM040	SANJAY. S	34	THREE FOUR
36	20BM042	SARANYA S	41	FOUR ONE
37	20BM043	SELVARAJ. R	30	THREE ZERO
38	20BM044	SHANMUGAPRIYA.M	27	TWO SEVEN
39	20BM045	SHARMILA. K	34	THREE FOUR
40	20BM046	SHEIKCHAN. M	38	THREE EIGHT
41	20BM047	SHIYAMALA.S	45	FOUR FIVE
42	20BM048	SOWMIYA.P	28	TWO EIGHT
43	20BM049	SRIHARINI.B	29	TWO NINE
44	20BM050	SRINITHI.A	39	THREE NINE
45	20BM051	SUBASHREE.M	28	TWO EIGHT
46	20BM052	V.SUGANYA.V	40	FOUR ZERO
47	20BM053	SUJAN.K	36	THREE SIX
48	20BM054	SURESHKUMAR.V	44	FOUR FOUR
49	20BM055	SWATHI.K	40	FOUR ZERO
50	20BM056	SWETHA K	29	TWO NINE
51	20BM057	VASANTH M	37	THREE SEVEN
52	20BML01	THARANI G	32	THREE TWO
53	20BML02	VILLIAM DAVID.R	33	THREE THREE

  
 13/11/22  
 INDUSTRY CO-ORDINATOR





## Simulation and Optimization of Cross-Country Pipeline

Total hours : 30 Hrs

<b>UNIT I : Introduction to ASME and Line Sizing Criteria, Line Sizing Calculation and PSIM Software</b>	<b>5 Hrs</b>
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Introduction to ASME 31.3, 31.4 & 31.8, On & off plot line sizing criteria for different stream: Liquid and gas. Line sizing calculation (Python /Excel) based on Darcy equation & other correlations and steam line sizing. Introduction to PSIM software (open source), Case study.

<b>List of Experiments</b>	<b>25 Hrs</b>
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1. Simulation for gas phase pipe line
2. Simulation for liquid phase pipe line.
3. Simulation for Steam line pipe sizing
4. Simulation for two phase fluid flowing in carbon steel pipe line.

**Lecture: 5, Practical: 25 Total: 30**

### Reference/ Manual/ Software:

- |   |   |
|---|---|
| 1 | Coulson, J.M.; Richardson, J.F.; Backhurst, J.R.; Harker, J.H. "Coulson and Richardson's Chemical Engineering-Fluid Flow, Heat Transfer and Mass Transfer" Volume-1, 6 <sup>th</sup> edition, Publisher: Elsevier Science, ISBN: 9788181473868.   |
| 2 | Peter Harriott, McCabe and smith "Unit Operations of Chemical Engineering" 7th edition, McGraw Hill Education; 2017, ISBN: 9339213238.  |
| 3 | PSIM Open-source software, <a href="https://fluidflowinfo.com">https://fluidflowinfo.com</a><br><b>PSIM System Requirements</b> PSIM runs in Microsoft Windows 7, 8, or 10 either on a stand-alone PC or on a network PC, and is available as 32-bit or 64-bit software. A minimum of 500MB RAM memory is required. The program will occupy around 560MB hard disk space after installed. |

### Course Outcomes:

After completing the course, the student will be able to:

- understand the open-source software PSIM
- calculate the line sizing for different stream
- Optimize the line sizing for different stream





**NANDHA**  
**ENGINEERING COLLEGE, Erode - 52.**  
**(Autonomous)**



## DEPARTMENT OF CHEMICAL ENGINEERING

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**Ms. S. Keerthika M.Tech,**

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**Mr. Balashanmugan K** II – B.Tech. Chemical

## INVITATION

The Management, Principal, Faculty & Student members of

Chemical Engineering Department

Nandha Engineering College

&

IICHE-NEC Student Chapter

Organizes

**VALUE ADDED COURSE**

On

**Simulation and Optimization of Cross -Country**

**Pipe Line Using Fluid Flow Software**

*Resource Person*

**Mr. K. Kamalahasan**

Director

Fermion Energy & Engineering Solutions Pvt.Ltd

Coimbatore



**FluidFlow**

**Date : NOV 05,06,12,13-2022**

**Time: 9:00 am to 5:00 pm**

**Venue: Chemical Engineering Computer Center**

#### Co-Convenors

**Mr. K. Rajasekaran AP / Chemical**

**Mr. B. Vinoth Kumar AP / Chemical**

**Ms. S. Keerthika AP / Chemical**

#### Convener

**Dr. N. Subramanian**

**HoD / Chemical**

#### Director

**Dr. J. Senthil**

**Nandha tech Campus**

#### Principal

**Dr. N. Rengarajan**

**Nandha Engineering College**



**NANDHA ENGINEERING COLLEGE, ERODE - 52.****(Autonomous)****DEPARTMENT OF CHEMICAL ENGINEERING****BATCH 2019-2023 (Academic Year 2022-23)****Value Added Course - Students Name List****Simulation and Optimisation of Cross-Country Pipeline**

<b>S.NO</b>	<b>REGISTER NUMBER</b>	<b>NAME OF THE STUDENT</b>
1	19CH001	AKASH T
2	19CH003	CHIRANJEVI ANISH P
3	19CH004	DEVALINGAM M
4	19CH005	DINESH M
5	19CH006	GOPINATH N
6	19CH007	GOWTHAM C
7	19CH008	GOWTHAMAN V
8	19CH009	HARIHARAN A
9	19CH010	HARIHARAN B
10	19CH011	HARIHARAN P
11	19CH012	HARIHARAN R
12	19CH013	JEEVA J
13	19CH015	KARTHIK S
14	19CH016	KRISHNA PRASAT M
15	19CH017	KRISHNAN S
16	19CH018	MADHAVAN M
17	19CH020	NANDHAKUMAR S
18	19CH021	NAVEEN KUMAR K M
19	19CH022	NISHWIN SAJEEV
20	19CH023	PRAVEEN T
21	19CH024	RAGHURAMAN B
22	19CH025	RAJESH KUMAR S
23	19CH026	RANJITHKUMAR M
24	19CH027	SABARIRAJA V
25	19CH028	SARAVANAN A
26	19CH029	SOORYA S
27	19CH030	SRIHARAN M
28	19CH031	SUBASH P
29	19CH034	VIJAYA RAGAVAN A
30	19CH035	VIJAYANAND A
31	19CH037	WASIM AKRAM M
32	19CH038	YOKESH V



33	19CHL01	AKILESHWARAN A
34	19CHL06	JEEVITH G K
35	19CHL09	RAJARAAJESHWARAN K
36	19CHL10	SANAKKIYA M
37	19CHL11	SANJAY R
38	19CHL12	SELVAPRAVIN D
39	19CHL13	SIVAPRAKASH C
40	19CHL14	SIVASUDARMANI T
41	19CHL15	VINOTHKUMAR S
42	19CHL16	YUVARAJ V C
43	19CHL17	ABHIJITH A
44	19CHL19	ANDROOSE A
45	19CHL20	BASIL SAJU



Faculty Incharge.



HOD CHEMICAL





# Nandha Engineering College

(An Autonomous Institution Approved by AICTE, New Delhi)

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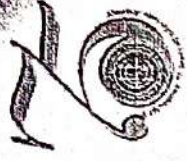
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## Department of Chemical Engineering

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SUBASH P

**Nandha Engineering College** completed an Value added Course on **Simulation and Optimization of Cross-Country Pipe Line Using FluidFlow Software** organized by Department of Chemical Engineering & IChE-NEC Students Chapter, held on **05, 06, 12, and 13 November 2022** at the Department of Chemical Engineering, Nandha Engineering College, Erode.

Ms.S.Keerthika  
Coordinator

Dr.N.Subramanian  
Associate Professor & Head

Dr.N.Rengarajan  
Principal