



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Number of departments having Research projects funded by government and non-government agencies during the year. (INR in Lakhs).

Year	2022 - 2023
Number of departments having Research Projects	5
Amount received per Year (INR in Lakhs)	1.21

PRINCIPAL

**Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).**



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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

DEVIYAKURICHI - 636 112, Thalaivasal, Attur Tk, Salem Dt, Tamil Nadu.

Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999

Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in



To:

Date: 21.09.2022

Er.R.Kumaresan,
Managing Director,
Deepam infrastructure and builders,
No. 82, Thamarai nagar,
Thiruvannamalai.

Respected Sir / Madam,

Sub: Requisition to undertake consultancy work in your esteemed concern - Reg.

Our Institution established in the year 2008, being run by Sri Sakthi Educational Trust. Our institution offers 4 UG programmes (**B.E.**- CIVIL, CSE, ECE, EEE) and 2 PG (**M.E.**- CSE and Communication System) degree programmes.

Our Institution has expert faculty members. They undertake consultancy works in their field of interest to extend their knowledge to support your requirements. In addition, we will execute the consultation assignment on schedule and with cost-effective techniques. Our Institution undertakes the consultancy and project works in the following areas.

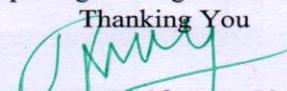
CONSULTANCY AND PROJECTS WORK:

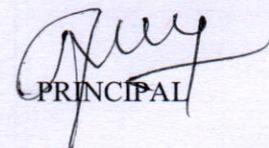
- Water quality analysis
- Concrete mix design
- Steel design checking
- Soil and foundation related investigation and report preparation.
- Paver blocks and solid block works.
- Provides expert advice on design, planning and managing of building.
- Estimation, costing and evaluation of building.
- Design and detailing of structures.
- Structural audit
- Third party audit.

In this regard, we kindly request your consideration in reviewing our Institution's consultancy work brochure. We kindly ask that you direct your inquiries to Prof.K.Kalaiselvan of EEE Department, Mobile No. 90033 44292, E-Mail: biewdvk@gmail.com, so that our expert faculty member will review your requirement and submit our proposal for consideration in order to conduct consulting work in your prestigious organization.

Thanking You

Encl: Consultancy work brochure


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112.
THALAIVASAL (TK), SALEM (DT).


PRINCIPAL



No. 108, Deepam Timbers Complex,
Thandrapattu Road, Tiruvannamalai.

+91 9486090176

kumareshravi92@gmail.com

Date:29.09.2022

To

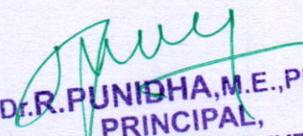
The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi,
636112.

Respected Sir/Madam,

We received your Institution consultancy work brochure. We require the compressive strength and other possible test report of Sensitile manufactured in your concern. We would like to know the quotation for the work demanded from our end.

Thank you


L. R. KUMARESAN, M.E., Ph.D.,
DEEPAM INFRASTRUCTURES & BUILDERS,
No. 82, I.I.G. THAMARAI NAGAR,
TIRUVANNAMALAI - 606 004
Tel: 9486090176


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
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BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999
Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in



To

Date: 11.10..2022

Er.R.Kumaresan,
Managing Director,
Deepam infrastructure and builders,
No. 82, Thamarai nagar,
Thiruvannamalai.

Respected Sir,

Sub: Submission of consultancy work quotation - Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

With reference to your letter dated 29.09.2022, our college expert faculty member Prof.R.Prema of Civil Engineering department has prepared and wishes to send the quotation to carry out the consultancy work of your esteemed organization. We would like to your kind notice that, the consultancy work "Manufacturing and Testing on Sensitile" may cost around as Rs.23000/-. The following table contains information of various testing conducted during the consultancy work and their price details for your kind consideration.

S.No	Types of test	Charges in Rupees	Unit	Sample size required	Minimum Time Required	Tested As Per Indian Standard
1.	Moisture Expansion	650.00	One Set (3 Tiles)	03 Nos of Block	02 Days	ASTM C370
2.	Water Absorption	300.00	One Set (3 Tiles)	03 Nos of Block	02 Days	ASTM C373
3.	Bond Strength	750.00	One Set (3 Tiles)	08 Nos of Block	01 Day	ASTM C482
4.	Thermal Shock Resistance	1550.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C484
5.	Warping, Facial & Thickness Dimensions, and Wedging	250.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C485, ASTM C499, ASTM C502
6.	Measurement of Light Reflectance Value & Small Color Differences	250.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C609
7.	Breaking Strength	750.00	One Set (3 Tiles)	08 Nos of Block	01 Day	ASTM C648
8.	Chemical Resistance	1850.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C650
9.	Modulus of Rupture	3500.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C674

[Signature]
B.R.PUNIBHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



Tiles) Block
BHARATHIYAR
INSTITUTE OF ENGINEERING FOR WOMEN

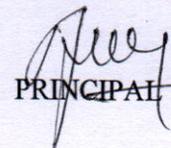
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DEVIYAKURICHI - 636 112, Thalaivasal, Attur Tk, Salem Dt, Tamil Nadu.
Ph: 04282-230199, TeleFax: 04282-230199
Website: www.biewar.ac.in, biewar@biewar.ac.in, bhathiyar@biew.ac.in

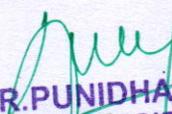


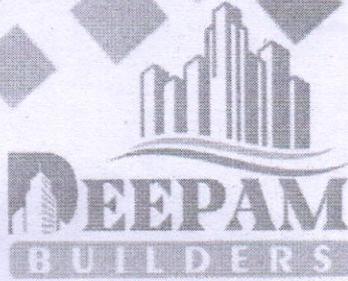
10	Freeze-Thaw (up to 300 cycles)	750.00	One Set (3 Tiles)	08 Nos of Block	01 Day	ASTM C1026
11	Surface Abrasion	1650.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C1027
12	Static Coefficient of Friction	230.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C1028
13	Density(g/cm)	750.00	One Set (3 Tiles)	08 Nos of Block	01 Day	ASTM C1243
14	Staining Resistance	2000.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ASTM C1378
15	Linear Thermal Expansion	1750.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ISO 10545-8
16	Thermal Shock Resistance	250.00	One Set (3 Tiles)	05 Nos of Block	01 Day	ISO 10545-9
Consultancy work for manufacturing of Senstile: Rs. 6,000/-						
Consultancy work for manufacturing and conducting various testing type: Rs. 14,000/-						
Report preparation and submission by the faculty : Rs.3,000/-						
Overall consultancy fees: Rs. 23,000/-						

The tentative days required to complete the proposed work is 30 days, we are looking forward your kind consideration about our consultancy work proposal and we request you to please do not hesitate to contact us for any queries about the consultancy work.

Thanking You


PRINCIPAL


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



No. 108, Deepam Timbers Complex,
Thandrapattu Road, Tiruvannamalai.

+91 9486090176

kumareshravi92@gmail.com

To

Date: 14.10.2022

The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi,
636112.

Dear Sir/Madam,

We received the quotation for the consultancy work from your institution. We sanctioned Rs.23000/- for the consultancy work to manufacturing and various testing on Senstile. As per the quotation the time duration required to complete and submit the consultancy work report may be followed. Feel free to contact us for any queries.

Thank you


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIAKURICHI - 636 112,
TIRUVANNAMALAI (TK), SALEM (DT).


Mr. R. KUMARESAN, M.E., Ph.D.
DEEPAM INFRASTRUCTURES & BUILDERS
No. 82, LIG. THAMARAI NAGAR
TIRUVANNAMALAI - 606 744
Tel: 9486090176



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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

DEVIYAKURICHI - 636 112, Thalaivasal, Attur Tk, Salem Dt, Tamil Nadu.

Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999

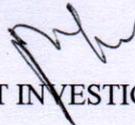
Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in

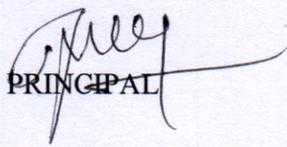


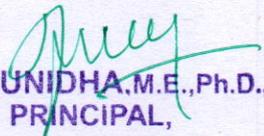
Date: 18.10.2022

UTILIZATION CERTIFICATE

Certified that amount of Rs.23,000 (Twenty three thousand rupees only) sanctioned during the year of 2022 in favour of Civil Engineering received from Deepam Infrastructure and Builders has been utilized for the consultancy work titled "Manufacturing and Testing of Sensile". The purpose of which it was sanctioned has been duly fulfilled and delivered the report as per conditions of grant were satisfied.


PROJECT INVESTIGATOR


PRINCIPAL


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



**BHARATHIYAR INSTITUTE OF ENGINEERING FOR
WOMEN
DEVIYAKURICHI – 636112**

**CONSULTANCY PROJECT WORK
REPORT**

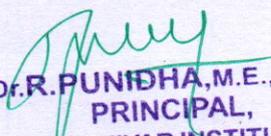
MANUFACTURING AND TESTING OF SENSTILE

SUBMITTED TO

Er.R.Kumaresan,
Managing Director,
Deepam infrastrcuture and builders,
No. 82, Thamarai nagar,
Thiruvannamalai.

DELIVERY DATE: 18.10.2022

About Bharathiyar Institute of Engineering for Women


**Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).**

Bharathiyar Institute of Engineering for Women is established by the Sri Sakthi Educational Trust under the visionary leadership of renowned educationalist, who is the Chairman of the Trust Mr.S.Elayappan and a well-known Philanthropist in this region.

The Bharathiyar Institute of Engineering for Women was founded in 2008 under the self-finance category and was created just for females in order to assure country building by utilizing the talent pool inside women. It is one of Anna University's Affiliated Colleges that has received AICTE approval. With an intake of 60 students each branch, the college provides bachelor's degrees in Civil engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics & Communication Engineering, Artificial Intelligence and Data science.

The devoted and motivated teachers at the Bharathiyar Institute of Engineering for Women use a variety of teaching and learning strategies as well as pedagogical methodologies to instill concepts from the fundamental to the advanced levels. Additionally, the campus has modern amenities including traditional classrooms and e-class rooms, library & reading room, computer lab, WiFi, laboratories as per curriculum, soft skills lab., playground and hostel. To give students a wider perspective on the most recent breakthroughs, innovations, and research, each department of the college holds workshops and conferences in the seminar hall, which has 200 seats, and famous speakers from other institutes give talks.

VISION

To achieve the dream of Tamil Poet **Mahakavi Bharathiyar "Kanavu Meipada Vendum"**, we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.

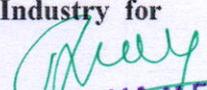
MISSION

To Prepare our Students By Imparting Knowledge with Focuses on **Academic Competence, Social Skills and Moral Values.**

To Empower our Students as Capable Engineers with **Inventiveness and Truthfulness to Meet the Technological Challenges** in their Career.

To Create our Students having **Strong Bond Between the Institute and Industry for Technology Updation.**

To Develop our Students as **Intellectual Leaders** to Emerge in their Profession.


D.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVİYAKURICHI - 636 112,
TAMILNADU (SALEM (DT)).

ABOUT CIVIL DEPARTMENT:

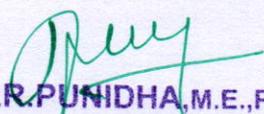
The Civil Engineering Department was started in the year 2009 with an intake of 60 students. In Civil Department, the faculty members are highly qualified, experienced and specialized in the field of Civil Engineering. The Department has spacious lecture halls and also have well equipped laboratories.

VISSION

To be a Centre of excellence for imparting Quality Education in Civil Engineering by encompassing Ethical, Environmental and Economical aspects of the technologies.

MISSION

- To provide highly competent women Civil Engineers to the society and industry by using effective teaching and research experience.
- To carry out research that leads to new understanding of theories and imbibe ability to design, construct and manage engineering infrastructure by controlling material behavior and sustain natural and engineering systems in the society.
- To encourage students to pursue higher education, various career enhancing courses and succeed competitive examinations.
- To establish Centers of excellence in emerging areas of research in civil engineering.
- To have regular interaction with industry and offer solutions to their problems by doing consultancy activities.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

Consultancy Project Report

Objective:

As you walk across your kitchen floor to get something from the refrigerator, the floor twinkles with lighted path that guides your way through the dark room. At least it would, if you had Sensitiles. The concrete of the tiles is embedded with acrylic fiber optic channels that transfer light from one point to another. As shadows move across Terrazzo's surface, the light channels flicker with a randomized, twinkling effect. Their tiles are available for use as flooring in bathrooms and even ceilings, so you can have twinkling lights follow you all over the house.

SPECIMEN:

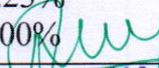
Changes in physical dimensions of tile due to exposure to water and water vapor are determined by this method. Such dimensional changes may influence the integrity and stability of an installation. Tile specimens are tested for elongation of size due to rehydration by autoclaving. Three (3) test pieces of size 1" × 4", cut from the center of whole tiles, are required for one test.

Total Cost: Rs. 23000/-

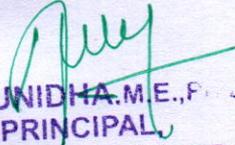
Duration of the Project: 30 days

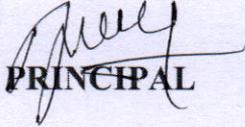
Testing result:

S.No	Description	Optimum value	Obtained value
1	Moisture Expansion	0.002mm/m max	No expansion
2	Water Absorption	> 10 % & < 20 %	10%
3	Bond Strength	>35 N/mm ²	40 N/mm ²
4	Thermal Shock Resistance	10 CYCLE Min	15 /145°C
5	Warpage, Facial & Thickness Dimensions, and Wedging	±0.50% ±0.5%	+0.04% -0.00% +0.23% -0.00%


Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
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DEVIYAKURICH! - 636 112,
THALAIVASAL'(TK), SALEM (DT).

6	Modulus of rupture	Min 35 N/mm ²	36.62 N/mm ²
7	Breaking Strength	Not less than 1300	1429.15N
8	Chemical Resistance	Minimum class GC	class GA
9	Surface Abrasion	< 175 mm ³	< 155 mm ³
10	Static Coefficient of Friction	> 0.42	0.48
11	Staining Resistance	Minimum class 2	class 3
12	Linear Thermal Expansion	9x10 ⁻⁶ Max	5.86x10 ⁻⁶
13	Density	> 2.00gm/cc	2.2458gm/cc


 Dr. R. PUNIDHA, M.E., P. U.,
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 DEVIYAKURICHI - 636 112,
 THALAIVASAL (TK), SALEM (DT).


 PRINCIPAL



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Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999
Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in



Date: 08.08.2022

To

Managing Director,
Vee Technologies Pvt Ltd,
Chennai-97.

Respected Sir / Madam,

Sub: Requisition to undertake consultancy work in your esteemed concern based on the MoU signed - Reg.

Our Institution established in the year 2008, being run by Sri Sakthi Educational Trust. Our Institution offers 5 UG programmes (B.E- CIVIL, CSE, ECE, EEE, B.TECH(AI&DS) and 2 PG (M.E- CSE and Communication System) degree programmes.

Our Institution has expert faculty members. They undertake consultancy works in their field of interest to extend their knowledge to support your requirements. In addition, we will execute the consultation assignment on schedule and with cost-effective techniques. Our institution undertakes the consultancy and project works in the following areas.

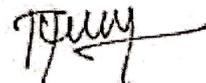
- Energy Auditing
- Soil Testing
- Trouble shooting in Machinery
- Product development
- Website Hosting
- Software development
- Water testing
- Networking
- VLSI/Chip design
- Image Processing
- Electronic design

In this regard, we kindly request your consideration in reviewing our Institution's consultancy work brochure. We kindly ask that you direct your inquiries to Prof. K. Kalaiselvan, Assistant Professor /EEE, Mobile No. 90033 44292, E-Mail: biewdvk@gmail.com, so that our expert faculty member will review your requirement and submit our proposal for consideration in order to conduct consulting work in your prestigious organization.

Thanking You

Encl: Consultancy work brochure


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).


PRINCIPAL





The only Global Services company
backed by its own university.
We specialize in:

- Healthcare
- Engineering
- Finance & Accounting
- Legal
- Logistics
- Media

Date: 17.08.2022

To
The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi-636112.

Dear Sir/Madam,

Greetings from VEE TECHNOLOGIES !!!

We are glad to know that your institution is working on the consultancy Project "*Digital Learning Management LMS*". We will be happy to be a part of such activity. Please send your estimation details about the consultancy project specified here.

Thanks!

Regards,

David,

Managing Director.

Bangalore: Sona Towers, 71, Miller Road, Bangalore - 560 052, Tel:+91 80 2226 6677
Bangalore RR Nagar: 5th Floor, No. 483, Seetha Complex, 16th Cross, 8th Main Road, R Nagar, Bangalore - 560 098, Tel: +91 96325 78003
Salem SEZ: Plot No:14, IT/ITES ELCOT SEZ (Salem Allotment), Salem to Bangalore NH-7 Road, Jagir Ammapalayam Village,
Suramangalam SRO, Salem Tel: +91 427 234029
Chennai: Tower-3 Special Module, Chennai One IT Park SEZ, Thoraipakkam - 600 097, Tel:+91 044 2433 1235
USA: New York: 489 Fifth Avenue, 19th Floor, New York, NY 10017, Tel: 646 837 0837

Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
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DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).





BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999
Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in



Date: 24.08.2022

To

Managing Director,
Vee Technologies Pvt Ltd,
Chennai-97.

Respected Sir / Madam,

Sub: Submission of project consultancy work quotation - Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

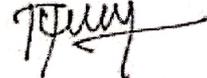
With reference to your letter dated 17.08.2022, Our college expert faculty member Prof.K.Saranya of CSE Department has prepared and wish to send the quotation to carry out the consultancy project work of your esteemed organization. We would like to bring to your kind notice that, the project "*Digital Learning Management LMS*" may cost around Rs.25000/- and their project design components with price details are available in the following table for your kind perusal.

S.NO	DESCRIPTION	COST IN RS
1.	Project Analysis Report	5000
2.	Implementation	10000
3.	Running	2000
4.	Product Testing	8000
5.	Customer Testing And Delivery	5000
	TOTAL	30000

We are looking forward your kind consideration about our consultancy project work proposal and we request you to please do not hesitate to contact us for any queries about the design and working of project.

Thanking You


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).


PRINCIPAL



- Healthcare
- Engineering
- Finance & Accounting
- Legal
- Logistics
- Media

Date: 01.09.2022

To
The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi-636112.

Dear Sir/Madam,

Greetings from VEE TECHNOLOGIES !!!

We are feeling happy to approve the project titled "Campus Cloud Connect" proposed by Prof. K.Saranya/Department of CSE, Bharathiyar Institute of Engineering for Women on 24.08.2022 .

We sanctioned the financial seed of Rs.25,000/- to complete and successful delivery of the project with the total duration of 3 months.

If you have any queries or doubts regarding the delivery of the project proposed, please feel free to contact us.

Thanks!

Regards,



David

Manager



Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

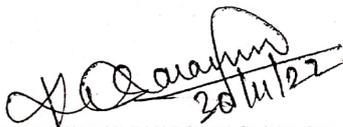
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)
DEVIYAKURICHI - 636 112, Thalaivasal, Attur Tk, Salem Dt, Tamil Nadu.
Ph: 04282-230199, TeleFax: 04282 - 230399, Mob: 96551 44999
Website: www.biew.ac.in, E-mail: bharathiyar@biew.ac.in



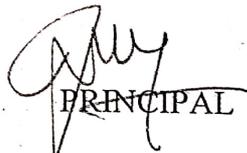
Date:30.11.2022

UTILIZATION CERTIFICATE

Certified that amount of Rs.25000 (TWENTY FIVE THOUSAND only) sanctioned during the year of 2022-2023 in favour of DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING - BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN received from VEE TECHNOLOGIES PVT LTD has been utilized for the project consultancy work titled DIGITAL LEARNING MANAGEMENT LMS. The purpose of which it was sanctioned has been duly fulfilled and delivered as per conditions of grant were satisfied.


PROJECT INVESTIGATOR


Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM,(DT).


PRINCIPAL
Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).





**BHARATHIYAR INSTITUTE OF ENGINEERING FOR
WOMEN**

DEVIYAKURICHI – 636112

CONSULTANCY PROJECT WORK

REPORT

Digital Learning Management LMS

SUBMITTED TO

Managing Director,
Vee Technologies Pvt Ltd,
Chennai-97.


DELIVERY DATE: 30.11.22

**Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).**



About Bharathiyar Institute of Engineering for Women

Bharathiyar Institute of Engineering for Women is established by the Sri Sakthi Educational Trust under the visionary leadership of renowned educationalist, who is the Chairman of the Trust Mr.S.Elayappan and a well-known Philanthropist in this region.

The Bharathiyar Institute of Engineering for Women was founded in 2008 under the self-finance category and was created just for females in order to assure country building by utilizing the talent pool inside women. It is one of Anna University's Affiliated Colleges that has received AICTE approval. With an intake of 60 students each branch, the college provides bachelor's degrees in Civil engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics & Communication Engineering, Artificial Intelligence and Data science.

The devoted and motivated teachers at the Bharathiyar Institute of Engineering for Women use a variety of teaching and learning strategies as well as pedagogical methodologies to instill concepts from the fundamental to the advanced levels. Additionally, the campus has modern amenities including traditional classrooms and e-class rooms, library & reading room, computer lab, WiFi, laboratories as per curriculum, soft skills lab., playground and hostel. To give students a wider perspective on the most recent breakthroughs, innovations, and research, each department of the college holds workshops and conferences in the seminar hall, which has 200 seats, and famous speakers from other institutes give talks.

VISION

To achieve the dream of Tamil Poet Mahakavi Bharathiyar "Kanavu Meipada Vendum", we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.

MISSION

- ❖ To Prepare our Students By Imparting Knowledge with Focuses on **Academic Competence, Social Skills and Moral Values.**
- ❖ To Empower our Students as Capable Engineers with **Inventiveness and Truthfulness to Meet the Technological Challenges** in their Career.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).



- ❖ To Create our Students having **Strong Bond Between the Institute and Industry for Technology Updation.**
- ❖ To Develop our Students as **Intellectual Leaders** to Emerge in their Professions

ABOUT CSE DEPARTMENT:

The Computer Science And Engineering (CSE) Department was established in 2008. The department offers a UG degree course with an intake of 60 students and in the year 2012, Department has initiated it PG-Computer Science with Sanctioned intake of 18. The Department has spacious lecture halls and also have well outfitted laboratories. Highly qualified, motivated and experienced faculty specialized in various areas.

Vision

To be a Centre of Excellence in Research, Education and Women Empowerment in the Field of Computer Science and Engineering to Uplift their Lives through Academic Excellence and Partnership in Rural Community Development.

Mission

- ❖ To Provide a **Standard Education** in the Computer Science Discipline with an Emphasis on **Software Development.**
- ❖ To Empower the Students with the **Required Skills to Solve the Technological Problems of Modern Society** and also Provide them with a **Framework** for and **Promoting Collaborative Multidisciplinary Activities.**
- ❖ To Pursue Research in the Field of Computer Science and Engineering to Serve the Needs of the **Industry, Scientific Community and Society.**
- ❖ To Inculcate **Leadership Skills and Professional Ethics** in Students Thereby Making a Prolific Career in Academics and Industry.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Consultancy Project Report

Objective:

The objective is plan, implement and assess a specific learning process. It's used for e-learning practices and, in its most common form, consists of two elements: a server that performs the base functionality and a user interface that is operated by instructors, students and administrators.

Requirement:

Hardware:

- Processor: Minimum 1 GHz; Recommended 2GHz or more
- Ethernet connection (LAN) OR a wireless adapter (Wi-Fi)
- Hard Drive: Minimum 32 GB; Recommended 64 GB or more
- Memory (RAM): Minimum 1 GB; Recommended 4 GB or above

Software:

- Java
- Adobe Flash Player
- Adobe Reader

Total Cost:25,000

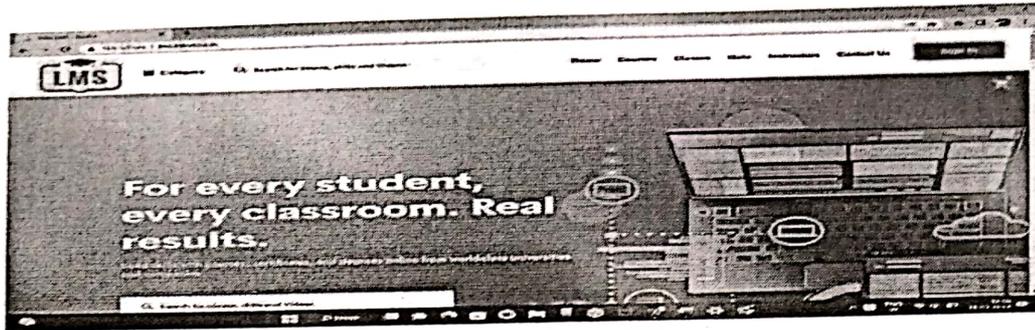
Duration of the Project: 90 days

Outcome of the Project:


Dr. R. PUNIDRA, M.E., Ph.D.,
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BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

Home page of LMS System:

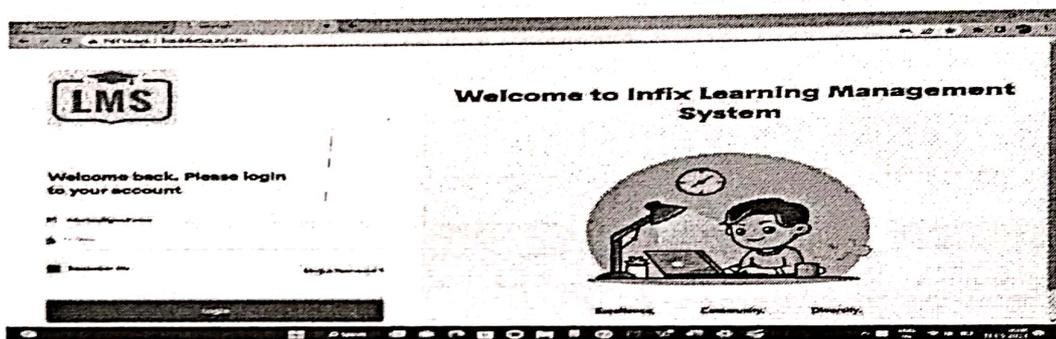
This is the home page for lms. To login the user email and password will be used.



Home page of LMS System.

Snapshots of admin panel:

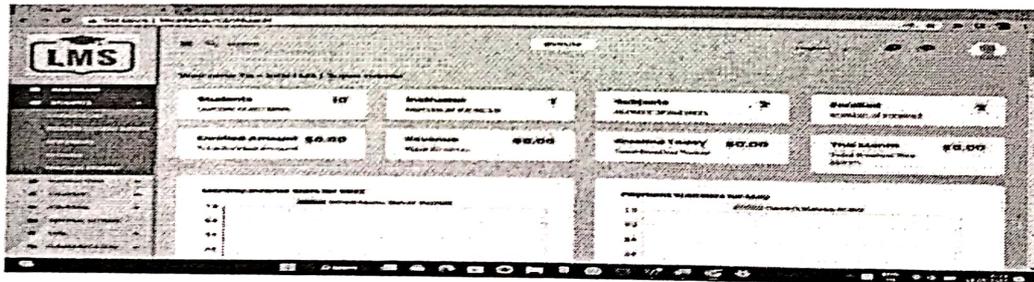
This is the login page for admin. To login the user email and password will be used.



Login page of Admin panel

Snapshots of admin panel dashboard:

This page is also for admin panel. Here admin can see the whole system of update data.



Dashboard of admin panel


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PRINCIPAL,
BHARATHIYAR INSTITUTE OF
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DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Create new user page of admin panel:

Here admin can add users to both new teachers and students.

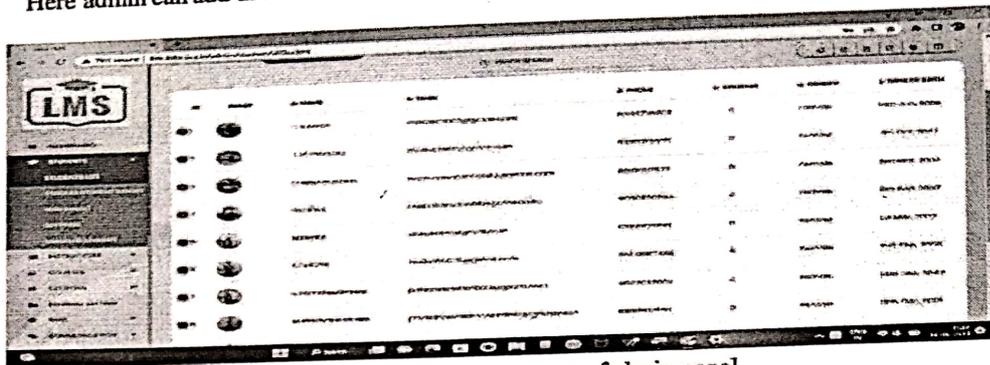
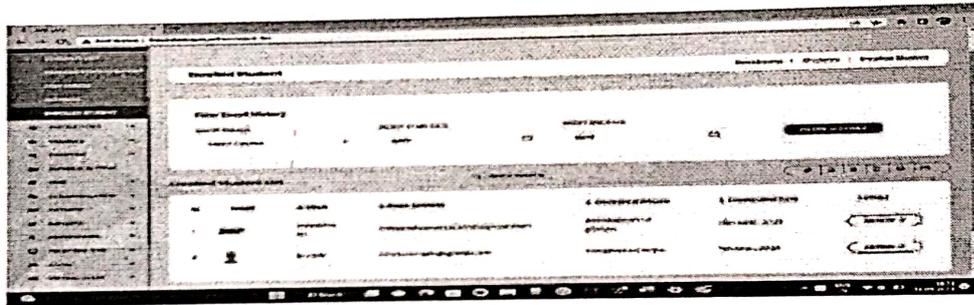


Figure 7.1.4: Create new user page of admin panel

All users list page of admin panel:

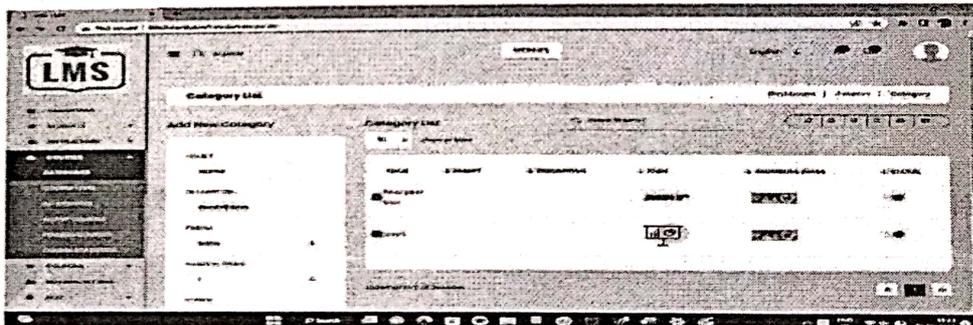
Here admin can see all of users list.



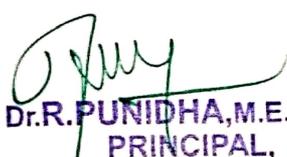
All users list page of admin panel

Course list page of admin panel:

Here admin can search and see all list of course.

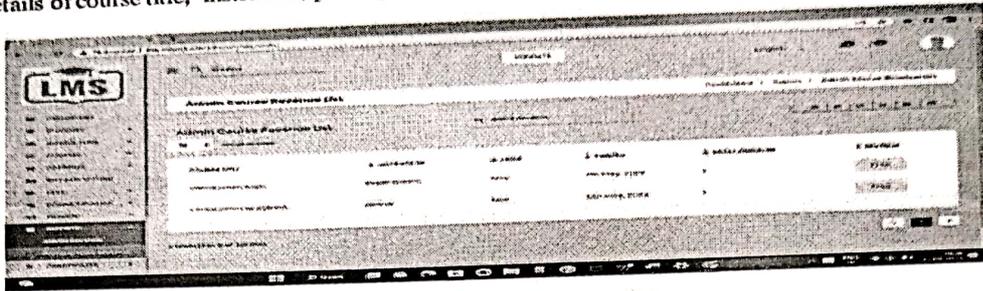


All Course list page of admin panel


Dr. R. PUNIDHA, M.E., Ph.D.,
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BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

Admin Course Revenue List

This is admin course revenue list. This can be controlled by admin which may contain a details of course title, instructor, price, publish, total enrolled and revenue.



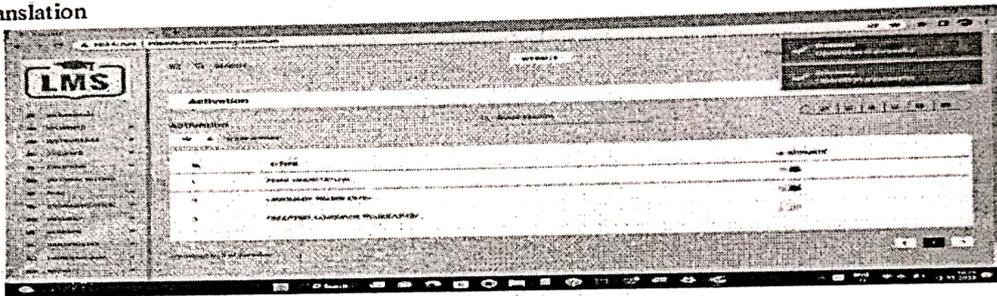
The screenshot shows the 'Admin Course Revenue List' interface. It features a table with columns for 'Course Title', 'Instructor', 'Price', 'Publish', 'Total Enrolled', and 'Revenue'. There are also buttons for 'Add' and 'Edit'.

Course Title	Instructor	Price	Publish	Total Enrolled	Revenue
...
...

Admin Course Revenue list

Activation list for courses

Activation list contains email verification list, language translation , frontend language translation



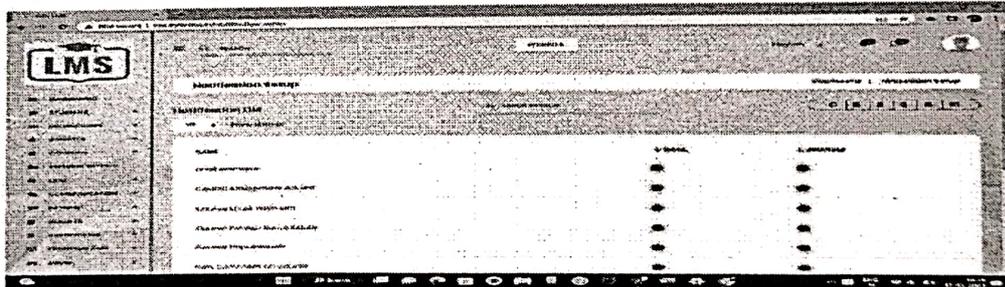
The screenshot shows the 'Activation' interface. It features a table with columns for 'No', 'Email', and 'Activation'. There are also buttons for 'Add' and 'Edit'.

No	Email	Activation
1
2
3

Activation level in course

Notification setup in admin panel

This is the notification list of admin panel which includes bank payment, course assignment added, course enrolled payment, course published successfully and new comment on course.

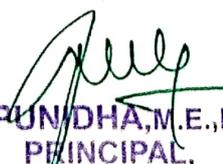


The screenshot shows the 'Notification Setup' interface. It features a table with columns for 'Subject', 'Email', and 'Language'. There are also buttons for 'Add' and 'Edit'.

Subject	Email	Language
Bank Payment
Course Assignment Added
Course Enrolled Payment
Course Published Successfully
New Comment on Course

Notification setup

As per terms and conditions we have successfully completed the project.


Dr. R. FUNDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).


PRINCIPAL



BHARATHIYAR

INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

Date : 20/07/2022

Dear Sir/Madam,

Sub : Requisition to undertake Project work in your concern – Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

Our Institution established in the year 2008 year being own by SRI SAKTHI EDUCATIONAL TRUST and offers UG(ECE,CSE,EEE,AI&DS) and PG(CS,CSE) Degree programmes. Our Institution is having expert faculty members and they are undertaking consultancy / Project Works in their discipline to extend their knowledge to support your Requirements within the stipulated time period and cost effective method.

Our Institution undertake the consultancy project work in the following areas like

- ENERGY AUDITING
- SOIL TESTING
- TROUBLESHOOTING IN MACHINARY
- PRODUCT DEVELOPMENT
- WEBSITE HOSTING
- NETWORKING
- SOFTWARE DEVELOPMENT
- WATER TESTING
- IMAGE PROCESSING
- ELECTRONIC DESIGN
- VLSI DESIGN/CHIP DESIGN

In this regard we wish to submit the consultancy/Project work brochure of our institution for your kind perusal we request you to address your requirements to Professor Mr. K. KALAISELVAN /EEE Department MOBILE.NO: 9003344292 EMAILID: gripjakalai@gmail.com for further processing to submit our proposal based on your requirements to carry out the consultancy /Project work in your concern.

Thanking You


PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112
THALAVASAL (TK), SALEM (DT).

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
Deviyakurichi, Salem(DT) - 636112.
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

Date: 20.07.2023

To

The Managing Director,
Sri Ranganathar Sago Factory,
Manjini main Road,
Manjin,Attur-tk,
Salem-Dt-636 102

Respected sir,

Sub: Energy audit-reg

On behalf of Bharathiyar Institute Of Engineering For Women, We thankful for selecting our college to Audit the Energy consumption in your industry on the date 02.08.2023 & 04.08.2023. We understand that your goal is to identify cost savings and energy efficiency strategies that can reduce your overall energy costs.

We will provide a comprehensive energy audit of your facility that will identify energy conservation opportunities and quantified energy savings. We are confident that our energy audit will provide the information you need to reduce energy costs and improve energy efficiency.

Please let us know if you have any questions or if there is anything else we can do to help. And also the financial details and our faculty details are mentioned below.

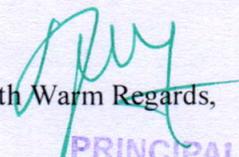
The auditing faculty members:

S.No	Faculty Name	Department
1.	Mr.K.Kalaiselvan	EEE
2.	Mrs K C Kavitha	EEE

Financial Details:

S.No	Description	Amount
1.	Travel Expenses	Rs.5000/-
2.	Faculty charges	Rs. 10000 /-
3.	Charges For energy audit Report	Rs.10000 /-
Total		Rs.25000 /-

With Warm Regards,


PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



SRI RANGANATHAR SAGO FACTORY

SRT.N

MANJINI - 636 141.

Attur (Tk), Salem (Dt), Tamilnadu.

Email : v.naaharaaj11@gmail.com

☎ 04282 275699

☎ 94437 66399
93456 66399

Prop. **V.NAAHARAAJ**

Date : 25/07/2023

TO

THE PRINCIPAL

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

DEVIYAKURICHI 636112

DEAR SIR/MADAM,

GREETINGS FROM SRI RANGANATHAR SAGO FACTORY,

We are pleased to inform you that, the dates for conducting the energy audit at our industry located at Manjini is scheduled on (02.08.2023) to (04.08.2023) for three days time .We sanction the amount of rupees (Rupees Twenty five thousand only) Rs 25,000/- for this consultancy work. Also we believe that the audit will be completed by the given time .So that our production will not be affected.

Thanking you

V. Naaharaaj
SRI RANGANATHAR SAGO FACTORY



**BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
DEVIYAKURICHI – 636112**

CONSULTANCY WORK

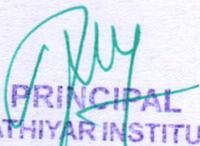
REPORT

ENERGY AUDIT

SUBMITTED TO

The Managing Director,
Sri Ranganathar Sago Factory,
Manjini,
Attur-tk,
Salem-Dt-636 102

REPORT DATE: 10.08.2023


PRINCIPAL
BHARATHIYAR INSTITUTE OF
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DEVIYAKURICHI - 636 112,
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About Bharathiyar Institute of Engineering for Women

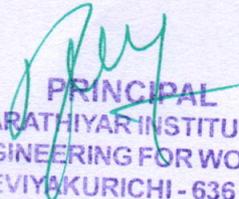
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VISION

To achieve the dream of Tamil Poet **Mahakavi Bharathiyar** "**Kanavu Meipada Vendum**", we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.


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MISSION

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- ❖ To Empower our Students as Capable Engineers with **Inventiveness and Truthfulness to Meet the Technological Challenges** in their Career.
- ❖ To Create our Students having **Strong Bond Between the Institute and Industry for Technology Updation.**
- ❖ To Develop our Students as **Intellectual Leaders** to Emerge in their Professions

ABOUT EEE DEPARTMENT:

Electrical and Electronics Engineering Department at our college is one of the most sought-after departments, with a wide range of courses available. The department focuses on providing a comprehensive education in the fields of electrical and electronics engineering. The courses are designed to provide students with a deep understanding of the fundamentals of electrical and electronic engineering, as well as the latest technologies and applications. The department also provides a wealth of research opportunities, enabling students to conduct experiments and develop projects in the field. The faculty members are highly qualified and experienced, and are passionate about teaching and research. The department is well-equipped with the latest technology and equipment, and is actively involved in the research and development of new technologies. The department is committed to providing the best education to its students, and offers a variety of internships and job opportunities to the students.

Vision

To be a leader in the field of electrical and electronics engineering by providing quality education, conducting cutting-edge research, and developing innovative solutions to technological problems. We strive to create an environment of learning and discovery that will enable our students to become ethical professionals and responsible citizens who are committed to improving society.

Mission

- ❖ To provide quality education in the field of Electrical and Electronics Engineering.
- ❖ To develop innovative technologies and products with the help of research and development activities..
- ❖ To produce graduates who are well-versed in the field of Electrical and Electronics Engineering and are equipped to tackle the challenges of the industry.
- ❖ To foster an environment of creativity and innovation.
- ❖ To nurture the next generation of leaders in the field of Electrical and Electronics Engineering.


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CONSULTANCY WORK REPORT

Objective:

All industries face a common challenge on how to improve productivity while reducing energy consumption. Energy Audit has always been thought of as merely a cost of doing business. However, with efficient solutions and services, a reduction of 10-20% annual consumption can be saved without affecting your productivity and targets.

Common problems like Energy eater machines in an overloaded, oversized, and inefficient state cause the bill to reach the sky. Even overheated motors & compressors can also raise the load but with proper energy reduction policies implementation, costly billing & machine failure can be prevented. Regular Housekeeping and maintenance of machine keeps them in just state and check on voltage imbalance.

However, by thoroughly reviewing how your business uses power, there are several key ways in which to improve efficiency and optimize significant savings.

Energy Audit

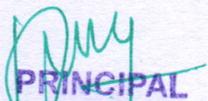
An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

Energy Audit is the first step in Energy Conservation and Energy Efficiency Projects for Industrial Plants. First and foremost advantage is cutting down on the production costs as Energy costs are ever-rising. Energy Conservation and Energy Efficiency Solution implementation is next. Major areas include Electrical Energy Conservation, Electrical Energy Efficiency, and Thermal Energy Conservation. Thermal Energy Efficiency, Fuel Optimization etc. •

Electrical Energy Audit

Electrical Energy Audit forms an integral part of an Industrial Energy Audit. It is one of the 2 main forms of energy that is being audited and accounted for during Energy Audit. For some of the Industries which do not have Thermal Utilities an Energy Audit will only consist of Electrical Energy Audit.

Electrical Energy Audit consists of Studying, Assessing, Measuring and Analyzing electrical utilities in any industry. In a typical Plant the electrical utilities consists of Substations


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and / or Transformers, Power Distribution System (PCC, MCC), Metering and Monitoring System, Motors, Blowers, ID / FD Fans, Compressors, Pumps, Lighting, gas plants Etc.

Additionally Electrical Energy Audit also consists of Power Quality Analysis. Study and Analysis of Harmonics forms the main constituent of Power Quality issues. Other Power Quality issues include Sag, Swell, and Voltage Fluctuations etc. During the audit sophisticated instruments such as Power Analyzer (Single phase and Three Phase), Harmonics Analyzer, and Megger etc. are used by the Energy Auditors to carry out measurements of various electrical utilities. Analysis of electrical consumption is done based on these measurements.

Benefits of Energy Audit

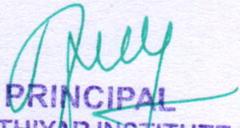
- Reduces Electricity Bills,
- Increase energy efficiency,
- Reduce energy usage,
- Improve indoor air quality,
- Produce consistent interior temperatures,
- Reduce interior drafts,
- Improve humidity control & ventilation etc.

Report work

This energy audit report is related to summary of an energy efficiency , and this audit performed on “**Sri Ranganathar Sago factory**” located at Manjini main Road.. The audit was conducted over a two-day period and we analyze the building’s existing systems, equipments , and motor operations was discussed on that day. Here we identified a number of areas for potential energy savings and also we provided recommendations for reducing energy consumption usage as well as cost. We as a team identified a number of existing deficiencies and opportunities for improvement, including the need for more efficient lighting, improved control of air conditioning systems, and the installation of additional insulation. Based on the audit results, the building’s energy costs can be reduced by our recommendations.

Issue:

Low Power factor, Illumination defects, less efficiency


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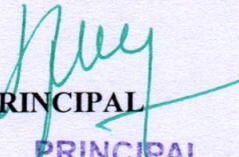
Our recommendations:

The identified issue can be rectified by installing capacitor bank connected across the motor terminals.

Providing proper distance between the lights and should be placed at the proper height so that glaring and load can be reduced .

Efficiency of the motors were reduced due to aging also we recommend not to over load the motor

“LETS GO GREEN”


PRINCIPAL

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Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

UTILIZATION CERTIFICATE

It is certified that the amount of Rupees 25000/- (Twenty five thousand) sanctioned for the audit work done at our premises on (02.08.2023) and (04.08.2023) in favour for the Department of EEE, Bharathiyar Institute of Engineering for Women, Deviyakurichi received from has been utilized for the consulting work titled Energy Audit. The purpose of which it was sanctioned was fully satisfied and delivered as per the conditions


11/8/23
PROJECT INVESTIGATOR


PRINCIPAL
PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK) SALEM (DT).



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

Date: 24/05/2023

Dear Sir/Madam,

Sub : Requisition to undertake Project work in your concern – Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

Our Institution established in the year 2008 year being own by SRI SAKTHI EDUCATIONAL TRUST and offers UG(ECE,CSE,EEE,AI&DS) and PG(CS,CSE) Degree programmes. Our Institution is having expert faculty members and they are undertaking consultancy / Project Works in their discipline to extend their knowledge to support your Requirements within the stipulated time period and cost effective method.

Our Institution undertake the consultancy project work in the following areas like

- ENERGY AUDITING
- SOIL TESTING
- TROUBLESHOOTING IN MACHINARY
- PRODUCT DEVELOPMENT
- WEBSITE HOSTING
- NETWORKING
- SOFTWARE DEVELOPMENT
- WATER TESTING
- IMAGE PROCESSING
- ELECTRONIC DESIGN
- VLSI DESIGN/CHIP DESIGN

In this regard we wish to submit the consultancy/Project work brochure of our institution for your kind perusal we request you to address your requirements to Professor Mr. K. KALAISELVAN /EEE Department MOBILE.NO: 9003344292 EMAILID: gripjakalai@gmail.com for further processing to submit our proposal based on your requirements to carry out the consultancy /Project work in your concern.

Thanking You
PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
Deviyakurichi, Salem(DT) - 636112.
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

Date: 24.08.2023

To

The Managing Director,
SriSampoornam Ginning Mill,
Manjini,
Attur,
Salem

Respected sir,

Sub: Energy audit-reg

On behalf of Bharathiyar Institute Of Engineering For Women, We thankful for selecting our college to Audit the Energy consumption in your industry on the date 12.09.2023 & 13.09.2023. We understand that your goal is to identify cost savings and energy efficiency strategies that can reduce your overall energy costs.

We will provide a comprehensive energy audit of your facility that will identify energy conservation opportunities and quantified energy savings. We are confident that our energy audit will provide the information you need to reduce energy costs and improve energy efficiency.

Please let us know if you have any questions or if there is anything else we can do to help. And also the financial details and our faculty details are mentioned below.

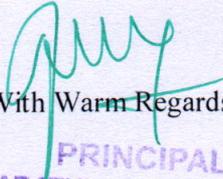
The auditing faculty members:

S.No	Faculty Name	Department
1.	Mr.K.Kalaiselvan	EEE
2.	Mr.A Sabariraja	EEE

Financial Details:

S.No	Description	Amount
1.	Travel Expenses	Rs .3000/-
2.	Faculty charges	Rs. 5000 /-
3.	Charges For energy audit Report	Rs.10000 /-
Total		Rs.18000 /-

With Warm Regards,


PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT)



SREE SAMPOORNA SEEDS

NO.4/177/1, AKR ILLAM, MANJINI - 636 141.
Attur Tk., Salem Dt.
Tamilnadu.

DATE : 05/09/2023

TO

THE PRINCIPAL

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

DEVIYAKURICHI 636112

DEAR SIR/MADAM,

GREETINGS FROM "*Sri Sampoornam Ginning Mill,*"

We are pleased to inform you that, the dates for conducting the energy audit at our industry *Sri Sampoornam Ginning Mill* located at Manjini is scheduled on(12.09.2023)to (13.09.2023) for two days time .We sanction the amount of rupees (Rupees Eighteen thousand only) Rs 18,000/- for this consultancy work. Also we believe that the audit will be completed by the given time .So that our production will not be affected.

Thanking you

R. Sampoornam



**BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
DEVIYAKURICHI – 636112**

CONSULTANCY WORK

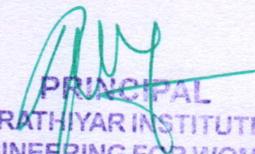
REPORT

ENERGY AUDIT

SUBMITTED TO

The Managing Director,
Sri Sampooranam Ginning Mill,
Manjini,
Attur,
Salem

REPORT DATE: 19.09.2023


PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

About Bharathiyar Institute of Engineering for Women

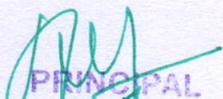
Bharathiyar Institute of Engineering for Women is established by the Sri Sakthi Educational Trust under the visionary leadership of renowned educationalist, who is the Chairman of the Trust Mr.S.Elayappan and a well-known Philanthropist in this region.

The Bharathiyar Institute of Engineering for Women was founded in 2008 under the self-finance category and was created just for females in order to assure country building by utilizing the talent pool inside women. It is one of Anna University's Affiliated Colleges that has received AICTE approval. With an intake of 60 students each branch, the college provides bachelor's degrees in Civil engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics & Communication Engineering, Artificial Intelligence and Data science.

The devoted and motivated teachers at the Bharathiyar Institute of Engineering for Women use a variety of teaching and learning strategies as well as pedagogical methodologies to instill concepts from the fundamental to the advanced levels. Additionally, the campus has modern amenities including traditional classrooms and e-class rooms, library & reading room, computer lab, WiFi, laboratories as per curriculum, soft skills lab., playground and hostel. To give students a wider perspective on the most recent breakthroughs, innovations, and research, each department of the college holds workshops and conferences in the seminar hall, which has 200 seats, and famous speakers from other institutes give talks.

VISION

To achieve the dream of Tamil Poet **Mahakavi Bharathiyar** "**Kanavu Meipada Vendum**", we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.


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THALAIVASAL (TK), SALEM (DT).

MISSION

- ❖ To Prepare our Students By Imparting Knowledge with Focuses on **Academic Competence, Social Skills and Moral Values.**
- ❖ To Empower our Students as Capable Engineers with **Inventiveness and Truthfulness to Meet the Technological Challenges** in their Career.
- ❖ To Create our Students having **Strong Bond Between the Institute and Industry for Technology Updation.**
- ❖ To Develop our Students as **Intellectual Leaders** to Emerge in their Professions

ABOUT EEE DEPARTMENT:

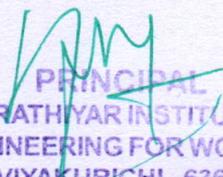
Electrical and Electronics Engineering Department at our college is one of the most sought-after departments, with a wide range of courses available. The department focuses on providing a comprehensive education in the fields of electrical and electronics engineering. The courses are designed to provide students with a deep understanding of the fundamentals of electrical and electronic engineering, as well as the latest technologies and applications. The department also provides a wealth of research opportunities, enabling students to conduct experiments and develop projects in the field. The faculty members are highly qualified and experienced, and are passionate about teaching and research. The department is well-equipped with the latest technology and equipment, and is actively involved in the research and development of new technologies. The department is committed to providing the best education to its students, and offers a variety of internships and job opportunities to the students.

Vision

To be a leader in the field of electrical and electronics engineering by providing quality education, conducting cutting-edge research, and developing innovative solutions to technological problems. We strive to create an environment of learning and discovery that will enable our students to become ethical professionals and responsible citizens who are committed to improving society.

Mission

- ❖ To provide quality education in the field of Electrical and Electronics Engineering.
- ❖ To develop innovative technologies and products with the help of research and development activities..
- ❖ To produce graduates who are well-versed in the field of Electrical and Electronics Engineering and are equipped to tackle the challenges of the industry.
- ❖ To foster an environment of creativity and innovation.
- ❖ To nurture the next generation of leaders in the field of Electrical and Electronics Engineering.


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DEVIYAKURICHI - 636 112,
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CONSULTANCY WORK REPORT

Objective:

All industries face a common challenge on how to improve productivity while reducing energy consumption. Energy Audit has always been thought of as merely a cost of doing business. However, with efficient solutions and services, a reduction of 10-20% annual consumption can be saved without affecting your productivity and targets.

Common problems like Energy eater machines in an overloaded, oversized, and inefficient state cause the bill to reach the sky. Even overheated motors & compressors can also raise the load but with proper energy reduction policies implementation, costly billing & machine failure can be prevented. Regular Housekeeping and maintenance of machine keeps them in just state and check on voltage imbalance.

However, by thoroughly reviewing how your business uses power, there are several key ways in which to improve efficiency and optimize significant savings.

Energy Audit

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

Energy Audit is the first step in Energy Conservation and Energy Efficiency Projects for Industrial Plants. First and foremost advantage is cutting down on the production costs as Energy costs are ever-rising. Energy Conservation and Energy Efficiency Solution implementation is next. Major areas include Electrical Energy Conservation, Electrical Energy Efficiency, and Thermal Energy Conservation. Thermal Energy Efficiency, Fuel Optimization etc.

Electrical Energy Audit

Electrical Energy Audit forms an integral part of an Industrial Energy Audit. It is one of the 2 main forms of energy that is being audited and accounted for during Energy Audit. For some of the Industries which do not have Thermal Utilities an Energy Audit will only consist of Electrical Energy Audit.

Electrical Energy Audit consists of Studying, Assessing, Measuring and Analyzing electrical utilities in any industry. In a typical Plant the electrical utilities consists of Substations


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THALAIVASAL (TK), SALEM (DT).

and / or Transformers, Power Distribution System (PCC, MCC), Metering and Monitoring System, Motors, Blowers, ID / FD Fans, Compressors, Pumps, Lighting, gas plants Etc.

Additionally Electrical Energy Audit also consists of Power Quality Analysis. Study and Analysis of Harmonics forms the main constituent of Power Quality issues. Other Power Quality issues include Sag, Swell, and Voltage Fluctuations etc. During the audit sophisticated instruments such as Power Analyzer (Single phase and Three Phase), Harmonics Analyzer, and Megger etc. are used by the Energy Auditors to carry out measurements of various electrical utilities. Analysis of electrical consumption is done based on these measurements.

Benefits of Energy Audit

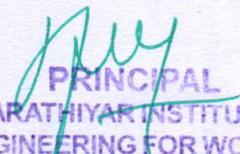
- Reduces Electricity Bills,
- Increase energy efficiency,
- Reduce energy usage,
- Improve indoor air quality,
- Produce consistent interior temperatures,
- Reduce interior drafts,
- Improve humidity control & ventilation etc.

Report work

This energy audit report is related to summary of an energy efficiency , and this audit performed on “**Sri Sampooram Ginning Mill**” located at Manjini .. The audit was conducted over a two-day period and we analyze the building’s existing systems, equipments , and motor operations was discussed on that day. Here we identified a number of areas for potential energy savings and also we provided recommendations for reducing energy consumption usage as well as cost. We as a team identified a number of existing deficiencies and opportunities for improvement, including the need for more efficient lighting, improved control of air conditioning systems, and the installation of additional insulation. Based on the audit results, the building’s energy costs can be reduced by our recommendations.

Issue:

Low Power factor, Illumination defects, less efficiency


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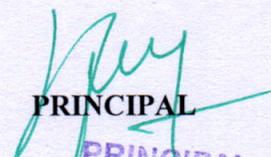
Our recommendations:

The identified issue can be rectified by installing capacitor bank connected across the motor terminals also advised them not to overload the machines.so that power factor and efficiency of the machines can be increased also electricity bill can also be reduced.

We also recommend the mill to avoid noise pollution by proper lubrication to the machines

Providing proper distance between the lights and should be placed at the proper height so that glaring and load can be reduced .

“LETS GO GREEN”


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BHARATHIYAR INSTITUTE OF
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THALAVASAL (TK), SALEM (DT).



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

UTILIZATION CERTIFICATE

It is certified that the amount of Rupees 18000/-(Eighteen thousand) sanctioned for the audit work done at our premises on (12.09.2023) and (13.09.2023) in favour for the Department of EEE, Bharathiyar Institute of Engineering for Women, Deviyakurichi received from has been utilized for the consulting work titled Energy Audit. The purpose of which it was sanctioned was fully satisfied and delivered as per the conditions

Kamitha
15/9/23
PROJECT INVESTIGATOR

[Signature]
PRINCIPAL
PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

AMRUTHA CHEMICALS AND POOJA SHOP

PandianKuppamRoad, Vijayapuram, Chinnasalem Taluk,

Kallakurichi District – 606201

Email Id: sangeta.r@gmail.com

Mobile: 9677782772

Date: 03.03.2023

To

The Principal,

Bharathiyar Institute of Engineering for Women,

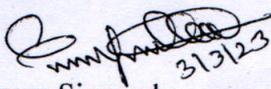
Deviyakurichi,

Salem-636112.

Respected Sir/Madam,

We received your Institution consultancy work brochure. We required the automatic weighting and packing machine for our efficient delivery of chemical products (Maximum weight of 10Kg). We would like to know the quotation for the work demanded from our end.

Thank You,

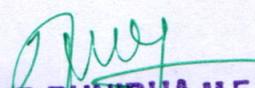

Yours Sincerely,

Mrs.M.Sangeetha,

Shop Owner,

Amrutha Chemicals and Pooja Shop,

Kallakurichi District – 606201.


Dr.R.PUNDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

Lr.No: BIEW/2022-2023/R&D/AWPM/01

06.03.2023

To

Mrs.M.Sangeetha,

Shop Owner,

Amrutha Chemicals And Pooja Shop,

Kallakurichi District – 606 201.

Respected Madam,

Sub: Submission of product development consultancy work quotation – Reg.

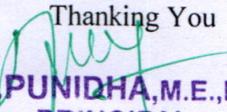
Greetings from Bharathiyar Institute of Engineering for Women !!!

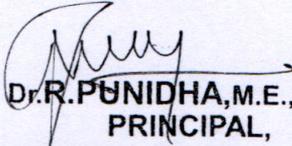
With reference to your letter dated 03.03.2023, Our college expert faculty member Prof.M.SOWMIYA of ECE Department has prepared and wish to send the quotation to carry out the product development consultancy work of your esteemed organization. we would like to bring to your kind notice that, the product “Automatic Weighting and Packing Machine” may cost around Rs.6,845/- and their product design components with price details are available in the following table for your kind perusal.

S.No	Description	Price in Rs.
1	Arduino Uno Board	830
2	Load Cell Sensors	400
3	Servo Motor	310
4	Stepper Motor	260
5	Relay Module	250
6	Switch	15
7	Motor Drivers	400
8	1 Wires	60
9	Paper Bag (Pack of 100)	200
10	MDF Sheet	100
11	Product Package	2500
12	Others	520
Sub Total		5845/-
Design Cost : Rs.1,000/-		
Overall Product cost of one Automatic Weighting and Packing Machine: Rs. 6845/-		

The tentative days required to complete the proposed work is 60 days. We are looking forward your kind consideration about our product consultancy work proposal and we request you to please do not hesitate to contact us for any queries about the design and working of product.

Thanking You


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112.
THALAIVASAL (TK), SALEM (DT).

AMRUTHA CHEMICALS AND POOJA SHOP

PandianKuppamRoad,Vijayapuram,ChinnasalemTaluk,

Kallakurichi District – 606201

Email Id:sangeta.r@gmail.com

Mobile: 9677782772

Ref.No: BIEW/2022-2023/R&D/AWPM/01

08.03.2023

To

The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi-636112.

Dear Sir/Madam,

We reviewed your Quotation dated on 06.03.2023. We assured your Budget per Product is Rs.6845/- for your Product Development Consultancy work proposed by professor M.SOWMIYA / ECE Department of Bharathiyar Institute of Engineering for Women.

Hence, we approve the total financial seed of Rs.6845/- for successful delivery of the product and it should be completed within the specified time span. For any inquiries related to the proposed consultancy work, kindly feel free to contact with us.

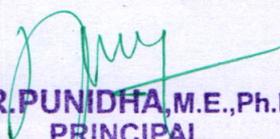
Thank you


Mrs.M.Sangeetha,

Shop Owner,

Amrutha Chemicals and Pooja Shop,

Kallakurichi District – 606201.


Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
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DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).



**BHARATHIYAR INSTITUTE OF ENGINEERING
FOR WOMEN**

DEVIYAKURICHI-636112

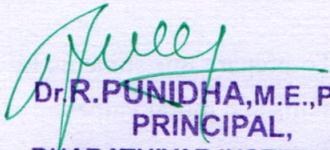
PRODUCT DEVELOPMENT CONSULTANCY WORK

REPORT

**AUTOMATIC WEIGTING AND PACKING
MACHINE**

SUBMITTED TO

AMRUTHA CHEMICALS AND POOJA SHOP,
KALLAKURICHI DISTRICT – 606 201.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

DELIVERED DATE: 04.05.2023

ABOUT BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

Bharathiyar Institute of Engineering for Women was founded in 2008 by Sri Sakthi Educational Trust. It is affiliated with Anna University and is an ISO 9001:2015 and 21001:2018 certified Institution. Bharathiyar Institute of Engineering for Women is a self-financing engineering college that has been approved by AICTE, New Delhi.

Bharathiyar Institute of Engineering for Women is maintained by the fascinated Chairman Mr. S. Elayappan, Secretary Dr. A. K. Ramasamy, Treasurer S.R.T. Selvamani, and other board members of Sri Sakthi Educational Trust.

The college offers Bachelor's degrees in Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Artificial Intelligence and Data Science. Also, courses for Master's degrees in Computer Science and Engineering and Communication Systems are offered.

The mission of the Institute is to promote the education of rural female students in the fields of science and technology, thereby enhancing their skills in cutting-edge technology. The Institute focuses on providing a student-friendly and tranquil environment. The campus is equipped with modern amenities such as traditional classrooms and e-classrooms, library and reading room, computer labs, Wi-Fi facility, curriculum-aligned laboratories, soft skills lab, playground, hostel, and transport facilities.

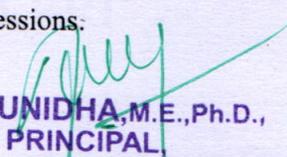
The Institute cares a lot about the development of soft skills in its students by organizing workshops, seminars, and conferences in each department with the resource persons at regular intervals.

VISION

To achieve the dream of Tamil Poet Mahakavi Bharathiyar "Kanavu Meipada Vendum", we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.

MISSION

- To prepare our students by imparting knowledge with focuses on academic competence, Social skills and moral values.
- To empower our students as capable Engineers with inventiveness and truthfulness to meet the Technological challenges in their career.
- To create our students having strong bond between the Institute and Industry for Technology Updation.
- To develop our students as Intellectual leaders to emerge in their Professions.


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112
THALAIVASAL (TK), SALEM T.

ABOUT ECE DEPARTMENT:

Department of Electronics and Communication Engineering was started in the year 2008 with a sanctioned intake of 60. Later in the year 2011, the Department had additional intake of 60. In the year 2012, Department has initiated its PG-Communication System with Sanctioned intake of 18. Department of ECE is shaped with well qualified senior professors and dynamic young staffs. A degree in Electronics and Communication Engineering gives an opportunity to work in diverse establishments like Telecom, Satellite and Space Research, Hardware and Software industry and also in the exciting field of Radio Astronomy.

The department has well established VLSI, DSP, Network, Optical and Microwave Labs in addition to other basic labs in Electronics and Communication Engineering. The latest version of MATLAB, Xilinx and ModelSim, Network Simulator and Keil software are available.

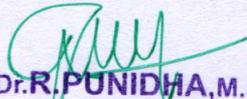
Department of ECE formed an Association in the name of "SMARTACE" to organize International and National level seminars, Workshops, Conference and various trainings for the students to develop their skills. This makes a wide platform for young talents to exhibit their skills.

VISION

To become Pacesetter in the field of electronics and Communication Engineering by imparting a core set of transferable skills and human values to create a wide range of **Proficient Engineers, Innovators, Researchers and Entrepreneurs.**

MISSION

- To enhance technical education in the field of Electronics and Communication Engineering and intellect the students for professional careers.
- To impart core skills and Human values through persistent teaching learning process.
- To keep abreast with latest technological innovations to enhance the research and development activities.
- To empower ethical communication engineers to meet the growing challenges of the industry and society.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (T).

PRODUCT DEVELOPMENT CONSULTANCY REPORT

Objective:

The main Objective is to develop such a machine which automatically weighs and packs the food with the help of microcontroller and sensors. The idea is to manually place the bag, then automatic weighing, filling and packaging is done. The purpose of doing this project is to reduce human efforts and time consumption. Decreasing machine cost is the major advantage of project. The machine design is based on simple mechanisms and it can be installed easily. The speed of packaging is increased thus resulting in more production and business. It will eradicate the traditional packing and sealing method. This process will reduce the number of paid workers.

The major objectives of the project are:

1. To design a machine which provides clean bag filling
2. To design a machine which is space saving
3. To design a machine which is easy to handle and which runs on simple mechanical operations.
4. To create a mechanism this would deliver the packed product
5. To create a machine which would be stable while operations

Total Cost: Rs.6845/-

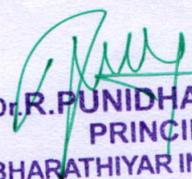
Duration of the Work: 60 Days

Outcome of the Product:

Low cost automatic weighing and packaging machine which can perform operations of weighing, bag filling and dispensing the bag with maximum efficiency is manufactured. The operating of this machine is simple and chances of error in weight calculation are almost negligible. The time consumption and efforts required for the manual weighing and packaging are minimized. The process is completed in 3 steps.

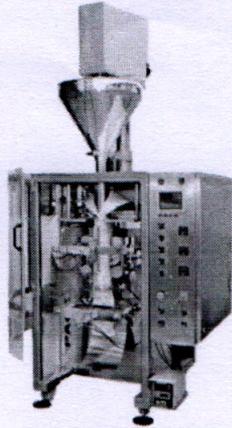
In first step, input value is given; the amount of material of the given input value is dispensed from the hopper to the funnel. In second step, a rotating disc will act as a door and it will get on/off as per the value of input. Weight calculation is done using load cell sensor.

Second step consist of a miniature vacuum pump which will broaden the opening of the bag, so that the filling operation will be eased.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICHI - 636 112,
THALAIYASAL (TK), SALEM (DT).

In third step, by using conveyor belt, the bag will be moved outside the machine. The only task which the operator has to perform is to give the input value and collect the bag after the process is done.

Product Setup:



S.No	Description	Price in Rs.
1	Arduino Uno Board	830
2	Load Cell Sensors	400
3	Servo Motor	310
4	Stepper Motor	260
5	Relay Module	250
6	Switch	15
7	Motor Drivers	400
8	1 Wires	60
9	Paper Bag (Pack of 100)	200
10	MDF Sheet	100
11	Product Package	2500
12	Others	520
Sub Total		5845/-
Design Cost : Rs.1,000/-		
Overall Product cost of one Automatic Weighting and Packing Machine: Rs. 6845/-		


Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL(TK), SALEM (DT).



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

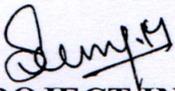
Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

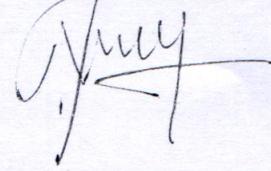
Date:08.05.2023

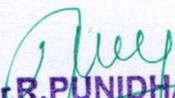
UTILIZATION CERTIFICATE

Certified that amount of Rs.6845/- (SIX THOUSAND EIGHT HUNDRED AND FORTY FIVE ONLY) sanctioned during the year of 2022-2023 in favor of Department of ELECTRONICS AND COMMUNICATION ENGINEERING – BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN received from AMRUTHA CHEMICALS AND POOJA SHOP, KALLAKURICHI DISTRICT – 606201. Has been utilized for the Product Development Consultancy work titled "AUTOMATIC WEIGTING AND PACKING MACHINE". The purpose of which it was sanctioned has been duly fulfilled and delivered as per conditions of grant were satisfied.


PROJECT INVESTIGATOR

Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL'(TK), SALEM (DT).
PRINCIPAL




Dr.R.PUNIDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL'(TK), SALEM (DT).

உழைப்போம்!

ஸ்ரீ அங்காளபரமேஸ்வரி அம்மன் துணை

உயர்வோம்!!



ஸ்ரீ செல்லியம்மன் டிரேடர்ஸ்
ஆயில் & பிளவர் மில்

செல்: 97862 08602, 89400 57020.



பவர் ஆபிஸ் அருகில், தாண்டவராயபுரம், ஆத்தூர்.

Date: 10.03.2023

To
The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi,
Salem - 636112.

Respected Sir/Madam,

We received your Institution consultancy work brochure. We required the automatic weighting and packing machine (2 No's) for our efficient delivery of oil products (Maximum weight of 10Kg). We would like to know the quotation for the work demanded from our end.

Thank You,

Yours Sincerely,

Mr.K.Janarthanan,

Shop owner,

SS Traders,

Near Power Office, Thandavarayapuram,

Attur,Salem-636108

Dr.R.PUNDHA,M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL'(TK), SALEM (DT).



BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

Lr.No: BIEW/2022-2023/R&D/AWPM/02

13.03.2023

To

Mr.K.Janarthanan,

Shop Owner,

SS Traders,

Near Power Office, Thandavarayapuram,

Attur, Salem-636108

Respected Madam,

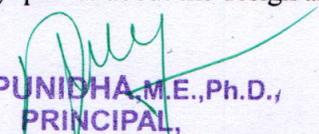
Sub: Submission of product development consultancy work quotation – Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

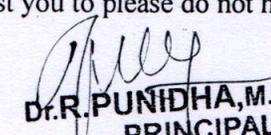
With reference to your letter dated 10.03.2023, Our college expert faculty member Prof.M.SOWMIYA of ECE Department has prepared and wish to send the quotation to carry out the product development consultancy work of your esteemed organization.we would like to bring to your kind notice that, the product "Automatic Weighting and Packing Machine" may cost around Rs.6,775/- and their product design components with price details are available in the following table for your kind perusal.

S.No	Description	Price in Rs.
1	Arduino Uno Board	830
2	Load Cell Sensors	400
3	Servo Motor	310
4	Stepper Motor	260
5	Relay Module	250
6	Switch	15
7	Motor Drivers	400
8	1 Wires	60
9	Paper Bag (Pack of 100)	200
10	MDF Sheet	100
11	Product Package	2500
12	Others	450
Sub Total		5775/-
Design Cost : Rs.1,000/-		
Overall Product cost of one Automatic Weighting and Packing Machine: Rs. 6775/-		

The tentative days required to complete the proposed work is 90 days. We are looking forward your kind consideration about our product consultancy work proposal and we request you to please do not hesitate to contact us for any queries about the design and working of product.


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT):

Thanking You


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

உழைப்போம்!

ஸ்ரீ அங்காளபரமேஸ்வரி அம்மன் துணை

உயர்வோம்!!



ஸ்ரீ செல்லியம்மன் டிரேடர்ஸ்
ஆயில் & பிளவர் மில்
செல்: 97862 08602, 89400 57020.



பவர் ஆபிஸ் அருகில், தாண்டவராயபுரம், ஆத்தூர்.

Ref.No: BIEW/2022-2023/R&D/AWPM/02

15.03.2023

To

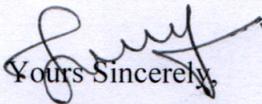
The Principal,
Bharathiyar Institute of Engineering for Women,
Deviyakurichi-636112.

Dear Sir/Madam,

We reviewed your Quotation dated on 13.03.2023. We assured your Budget per Product is Rs.6775/- for your Product Development Consultancy work proposed by professor M.SOWMIYA / ECE Department of Bharathiyar Institute of Engineering for Women.

Hence, we approve the total financial seed of Rs.13,550/- for successful delivery of the product and it should be completed within the specified time span. For any inquiries related to the proposed consultancy work, kindly feel free to contact with us.

Thank you


Yours Sincerely,

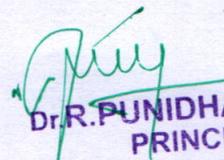
Mr.K.Janarthanan,

Shop owner,

SS Traders,

Near Power Office, Thandavarayapuram,

Attur,Salem-636108


Dr.R.PUNIDHA.M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).



**BHARATHIYAR INSTITUTE OF ENGINEERING
FOR WOMEN**

DEVIYAKURICHI-636112

PRODUCT DEVELOPMENT CONSULTANCY WORK

REPORT

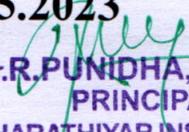
**AUTOMATIC WEIGTING AND PACKING
MACHINE**

SUBMITTED TO

SS TRADERS,

ATTUR, SALEM-636108.

DELIVERED DATE: 11.05.2023


Dr. R. PUNDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

ABOUT BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

Bharathiyar Institute of Engineering for Women was founded in 2008 by Sri Sakthi Educational Trust. It is affiliated with Anna University and is an ISO 9001:2015 and 21001:2018 certified Institution. Bharathiyar Institute of Engineering for Women is a self-financing engineering college that has been approved by AICTE, New Delhi.

Bharathiyar Institute of Engineering for Women is maintained by the fascinated Chairman Mr. S. Elayappan, Secretary Dr. A. K. Ramasamy, Treasurer S.R.T. Selvamani, and other board members of Sri Sakthi Educational Trust.

The college offers Bachelor's degrees in Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Artificial Intelligence and Data Science. Also, courses for Master's degrees in Computer Science and Engineering and Communication Systems are offered.

The mission of the Institute is to promote the education of rural female students in the fields of science and technology, thereby enhancing their skills in cutting-edge technology. The Institute focuses on providing a student-friendly and tranquil environment. The campus is equipped with modern amenities such as traditional classrooms and e-classrooms, library and reading room, computer labs, Wi-Fi facility, curriculum-aligned laboratories, soft skills lab, playground, hostel, and transport facilities.

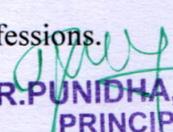
The Institute cares a lot about the development of soft skills in its students by organizing workshops, seminars, and conferences in each department with the resource persons at regular intervals.

VISION

To achieve the dream of Tamil Poet Mahakavi Bharathiyar "Kanavu Meipada Vendum", we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.

MISSION

- To prepare our students by imparting knowledge with focuses on academic competence, Social skills and moral values.
- To empower our students as capable Engineers with inventiveness and truthfulness to meet the Technological challenges in their career.
- To create our students having strong bond between the Institute and Industry for Technology Updation.
- To develop our students as Intellectual leaders to emerge in their Professions.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

ABOUT ECE DEPARTMENT:

Department of Electronics and Communication Engineering was started in the year 2008 with a sanctioned intake of 60. Later in the year 2011, the Department had additional intake of 60. In the year 2012, Department has initiated its PG-Communication System with Sanctioned intake of 18. Department of ECE is shaped with well qualified senior professors and dynamic young staffs. A degree in Electronics and Communication Engineering gives an opportunity to work in diverse establishments like Telecom, Satellite and Space Research, Hardware and Software industry and also in the exciting field of Radio Astronomy.

The department has well established VLSI, DSP, Network, Optical and Microwave Labs in addition to other basic labs in Electronics and Communication Engineering. The latest version of MATLAB, Xilinx and ModelSim, Network Simulator and Keil software are available.

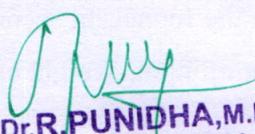
Department of ECE formed an Association in the name of "SMARTACE" to organize International and National level seminars, Workshops, Conference and various trainings for the students to develop their skills. This makes a wide platform for young talents to exhibit their skills.

VISION

To become Pacesetter in the field of electronics and Communication Engineering by imparting a core set of transferable skills and human values to create a wide range of **Proficient Engineers, Innovators, Researchers and Entrepreneurs.**

MISSION

- To enhance technical education in the field of Electronics and Communication Engineering and intellect the students for professional careers.
- To impart core skills and Human values through persistent teaching learning process.
- To keep abreast with latest technological innovations to enhance the research and development activities.
- To empower ethical communication engineers to meet the growing challenges of the industry and society.


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIIVASAL (TK), SALEM (DT).

PRODUCT DEVELOPMENT CONSULTANCY REPORT

Objective:

The main Objective is to develop such a machine which automatically weighs and packs the food with the help of microcontroller and sensors. The idea is to manually place the bag, then automatic weighing, filling and packaging is done. The purpose of doing this project is to reduce human efforts and time consumption. Decreasing machine cost is the major advantage of project. The machine design is based on simple mechanisms and it can be installed easily. The speed of packaging is increased thus resulting in more production and business. It will eradicate the traditional packing and sealing method. This process will reduce the number of paid workers.

The major objectives of the project are:

1. To design a machine which provides clean bag filling
2. To design a machine which is space saving
3. To design a machine which is easy to handle and which runs on simple mechanical operations.
4. To create a mechanism this would deliver the packed product
5. To create a machine which would be stable while operations

Total Cost: Rs.6775/-

Total No. of Products: 2

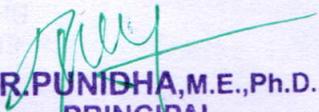
Duration of the Work: 90 Days

Outcome of the Product:

Low cost automatic weighing and packaging machine which can perform operations of weighing, bag filling and dispensing the bag with maximum efficiency is manufactured. The operating of this machine is simple and chances of error in weight calculation are almost negligible. The time consumption and efforts required for the manual weighing and packaging are minimized. The process is completed in 3 steps.

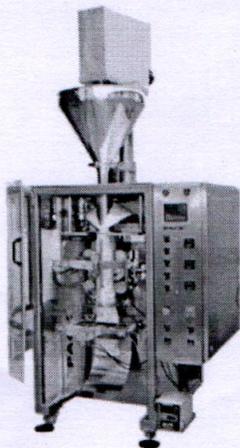
In first step, input value is given; the amount of material of the given input value is dispensed from the hopper to the funnel. In second step, a rotating disc will act as a door and it will get on/off as per the value of input. Weight calculation is done using load cell sensor.

Second step consist of a miniature vacuum pump which will broaden the opening of the bag, so that the filling operation will be eased.

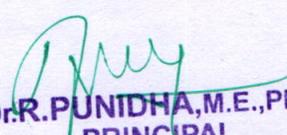

Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

In third step, by using conveyor belt, the bag will be moved outside the machine. The only task which the operator has to perform is to give the input value and collect the bag after the process is done.

Product Setup:



S.No	Description	Price in Rs.
1	Arduino Uno Board	830
2	Load Cell Sensors	400
3	Servo Motor	310
4	Stepper Motor	260
5	Relay Module	250
6	Switch	15
7	Motor Drivers	400
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Sub Total		5775/-
Design Cost : Rs.1,000/-		
Overall Product cost of one Automatic Weighing and Packing Machine: Rs. 6775/-		


Dr.R.PUNIDHA, M.E., Ph.D.,
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DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



BHARATHIYAR

INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

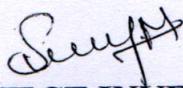
Mobile: 96551 44999, Office : 94427 00899

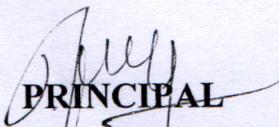
Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

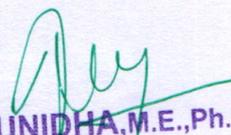
Date: 15.05.2023

UTILIZATION CERTIFICATE

Certified that amount of Rs.13,550/- (SIX THOUSAND EIGHT HUNDRED AND FORTY FIVE ONLY) sanctioned during the year of 2022-2023 in favor of Department of ELECTRONICS AND COMMUNICATION ENGINEERING – BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN received from SS TRADERS, NEAR POWER OFFICE, THANDAVARAYAPURAM ATTUR, SALEM – 636108. Has been utilized for the Product Development Consultancy work titled "AUTOMATIC WEIGTING AND PACKING MACHINE". The purpose of which it was sanctioned has been duly fulfilled and delivered as per conditions of grant were satisfied.


PROJECT INVESTIGATOR


PRINCIPAL
Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).


Dr.R.PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).



BHARATHIYAR

INSTITUTE OF ENGINEERING FOR WOMEN



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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

Dear Sir/Madam,

Sub : Requisition to undertake Project work in your concern – Reg.

Greetings from Bharathiyar Institute of Engineering for Women !!!

Our Institution established in the year 2008 year being own by SRI SAKTHI EDUCATIONAL TRUST and offers UG(ECE,CSE,EEE,AI&DS) and PG(CS,CSE) Degree programmes. Our Institution is having expert faculty members and they are undertaking consultancy / Project Works in their discipline to extend their knowledge to support your Requirements within the stipulated time period and cost effective method.

Our Institution undertake the consultancy project work in the following areas like

- ENERGY AUDITING
- SOIL TESTING
- TROUBLESHOOTING IN MACHINARY
- PRODUCT DEVELOPMENT
- WEBSITE HOSTING
- NETWORKING
- SOFTWARE DEVELOPMENT
- WATER TESTING
- IMAGE PROCESSING
- ELECTRONIC DESIGN
- VLSI DESIGN/CHIP DESIGN

In this regard we wish to submit the consultancy/Project work brochure of our institution for your kind perusal we request you to address your requirements to Professor Mr. K. KALAISELVAN /EEE Department MOBILE.NO: 9003344292 EMAILID: gripjakalai@gmail.com for further processing to submit our proposal based on your requirements to carry out the consultancy /Project work in your concern.

Thanking You
PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
Deviyakurichi, Salem(DT) - 636112.
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

Date: 24.08.2023

To
The Managing Director,
SriSampoornam Ginning Mill,
Manjini,
Attur,
Salem

Respected sir,
Sub: Energy audit-reg

On behalf of Bharathiyar Institute Of Engineering For Women, We thankful for selecting our college to Audit the Energy consumption in your industry on the date 12.09.2023 & 13.09.2023. We understand that your goal is to identify cost savings and energy efficiency strategies that can reduce your overall energy costs.

We will provide a comprehensive energy audit of your facility that will identify energy conservation opportunities and quantified energy savings. We are confident that our energy audit will provide the information you need to reduce energy costs and improve energy efficiency.

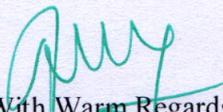
Please let us know if you have any questions or if there is anything else we can do to help. And also the financial details and our faculty details are mentioned below.

The auditing faculty members:

S.No	Faculty Name	Department
1.	Mr.K.Kalaiselvan	EEE
2.	Mr.A Sabariraja	EEE

Financial Details:

S.No	Description	Amount
1.	Travel Expenses	Rs .3000/-
2.	Faculty charges	Rs. 5000 /-
3.	Charges For energy audit Report	Rs.10000 /-
Total		Rs.18000 /-


With Warm Regards,

PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT)

TIN : 3333 3262699
CST : 1041257/10.4.2012

2
Sri Puthu Marriamman Thunai

Off : 04282275166
Cell : 94432 69999
99442 69999



SREE SAMPOORNA SEEDS

NO.4/177/1, AKR ILLAM, MANJINI - 636 141.

Attur Tk., Salem Dt.

Tamilnadu.

DATE : 05/09/2023

TO

THE PRINCIPAL

BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

DEVIYAKURICHI 636112

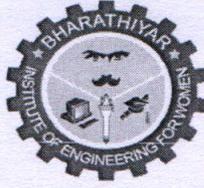
DEAR SIR/MADAM,

GREETINGS FROM "*Sri Sampoornam Ginning Mill,*"

We are pleased to inform you that, the dates for conducting the energy audit at our industry *Sri Sampoornam Ginning Mill* located at Manjini is scheduled on(12.09.2023)to (13.09.2023) for two days time .We sanction the amount of rupees (Rupees Eighteen thousand only) Rs 18,000/- for this consultancy work. Also we believe that the audit will be completed by the given time .So that our production will not be affected.

Thanking you

R. Sampoornam



**BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
DEVIYAKURICHI – 636112**

CONSULTANCY WORK

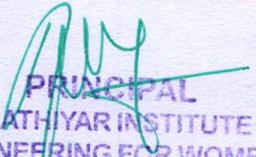
REPORT

ENERGY AUDIT

SUBMITTED TO

The Managing Director,
Sri Sampooranam Ginning Mill,
Manjini,
Attur,
Salem

REPORT DATE: 19.09.2023


PRINCIPAL
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

About Bharathiyar Institute of Engineering for Women

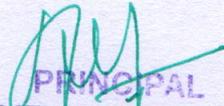
Bharathiyar Institute of Engineering for Women is established by the Sri Sakthi Educational Trust under the visionary leadership of renowned educationalist, who is the Chairman of the Trust Mr.S.Elayappan and a well-known Philanthropist in this region.

The Bharathiyar Institute of Engineering for Women was founded in 2008 under the self-finance category and was created just for females in order to assure country building by utilizing the talent pool inside women. It is one of Anna University's Affiliated Colleges that has received AICTE approval. With an intake of 60 students each branch, the college provides bachelor's degrees in Civil engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics & Communication Engineering, Artificial Intelligence and Data science.

The devoted and motivated teachers at the Bharathiyar Institute of Engineering for Women use a variety of teaching and learning strategies as well as pedagogical methodologies to instill concepts from the fundamental to the advanced levels. Additionally, the campus has modern amenities including traditional classrooms and e-class rooms, library & reading room, computer lab, WiFi, laboratories as per curriculum, soft skills lab., playground and hostel. To give students a wider perspective on the most recent breakthroughs, innovations, and research, each department of the college holds workshops and conferences in the seminar hall, which has 200 seats, and famous speakers from other institutes give talks.

VISION

To achieve the dream of Tamil Poet **Mahakavi Bharathiyar "Kanavu Meipada Vendum"**, we committed to serve the State and the Nation by grooming Professionally Educated, broadly talented Women Engineering Graduates, developing innovative technologies through high quality Research and empowering Women Students to meet the challenges in the Society.


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MISSION

- ❖ To Prepare our Students By Imparting Knowledge with Focuses on **Academic Competence, Social Skills and Moral Values.**
- ❖ To Empower our Students as Capable Engineers with **Inventiveness and Truthfulness to Meet the Technological Challenges** in their Career.
- ❖ To Create our Students having **Strong Bond Between the Institute and Industry for Technology Updation.**
- ❖ To Develop our Students as **Intellectual Leaders** to Emerge in their Professions

ABOUT EEE DEPARTMENT:

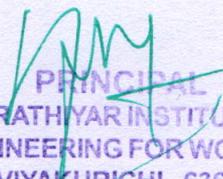
Electrical and Electronics Engineering Department at our college is one of the most sought-after departments, with a wide range of courses available. The department focuses on providing a comprehensive education in the fields of electrical and electronics engineering. The courses are designed to provide students with a deep understanding of the fundamentals of electrical and electronic engineering, as well as the latest technologies and applications. The department also provides a wealth of research opportunities, enabling students to conduct experiments and develop projects in the field. The faculty members are highly qualified and experienced, and are passionate about teaching and research. The department is well-equipped with the latest technology and equipment, and is actively involved in the research and development of new technologies. The department is committed to providing the best education to its students, and offers a variety of internships and job opportunities to the students.

Vision

To be a leader in the field of electrical and electronics engineering by providing quality education, conducting cutting-edge research, and developing innovative solutions to technological problems. We strive to create an environment of learning and discovery that will enable our students to become ethical professionals and responsible citizens who are committed to improving society.

Mission

- ❖ To provide quality education in the field of Electrical and Electronics Engineering.
- ❖ To develop innovative technologies and products with the help of research and development activities..
- ❖ To produce graduates who are well-versed in the field of Electrical and Electronics Engineering and are equipped to tackle the challenges of the industry.
- ❖ To foster an environment of creativity and innovation.
- ❖ To nurture the next generation of leaders in the field of Electrical and Electronics Engineering.


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CONSULTANCY WORK REPORT

Objective:

All industries face a common challenge on how to improve productivity while reducing energy consumption. Energy Audit has always been thought of as merely a cost of doing business. However, with efficient solutions and services, a reduction of 10-20% annual consumption can be saved without affecting your productivity and targets.

Common problems like Energy eater machines in an overloaded, oversized, and inefficient state cause the bill to reach the sky. Even overheated motors & compressors can also raise the load but with proper energy reduction policies implementation, costly billing & machine failure can be prevented. Regular Housekeeping and maintenance of machine keeps them in just state and check on voltage imbalance.

However, by thoroughly reviewing how your business uses power, there are several key ways in which to improve efficiency and optimize significant savings.

Energy Audit

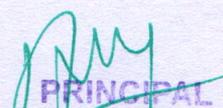
An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

Energy Audit is the first step in Energy Conservation and Energy Efficiency Projects for Industrial Plants. First and foremost advantage is cutting down on the production costs as Energy costs are ever-rising. Energy Conservation and Energy Efficiency Solution implementation is next. Major areas include Electrical Energy Conservation, Electrical Energy Efficiency, and Thermal Energy Conservation. Thermal Energy Efficiency, Fuel Optimization etc.

Electrical Energy Audit

Electrical Energy Audit forms an integral part of an Industrial Energy Audit. It is one of the 2 main forms of energy that is being audited and accounted for during Energy Audit. For some of the Industries which do not have Thermal Utilities an Energy Audit will only consist of Electrical Energy Audit.

Electrical Energy Audit consists of Studying, Assessing, Measuring and Analyzing electrical utilities in any industry. In a typical Plant the electrical utilities consists of Substations


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and / or Transformers, Power Distribution System (PCC, MCC), Metering and Monitoring System, Motors, Blowers, ID / FD Fans, Compressors, Pumps, Lighting, gas plants Etc.

Additionally Electrical Energy Audit also consists of Power Quality Analysis. Study and Analysis of Harmonics forms the main constituent of Power Quality issues. Other Power Quality issues include Sag, Swell, and Voltage Fluctuations etc. During the audit sophisticated instruments such as Power Analyzer (Single phase and Three Phase), Harmonics Analyzer, and Megger etc. are used by the Energy Auditors to carry out measurements of various electrical utilities. Analysis of electrical consumption is done based on these measurements.

Benefits of Energy Audit

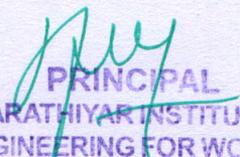
- Reduces Electricity Bills,
- Increase energy efficiency,
- Reduce energy usage,
- Improve indoor air quality,
- Produce consistent interior temperatures,
- Reduce interior drafts,
- Improve humidity control & ventilation etc.

Report work

This energy audit report is related to summary of an energy efficiency , and this audit performed on “**Sri Sampooranam Ginning Mill**” located at Manjini .. The audit was conducted over a two-day period and we analyze the building’s existing systems, equipments , and motor operations was discussed on that day. Here we identified a number of areas for potential energy savings and also we provided recommendations for reducing energy consumption usage as well as cost. We as a team identified a number of existing deficiencies and opportunities for improvement, including the need for more efficient lighting, improved control of air conditioning systems, and the installation of additional insulation. Based on the audit results, the building’s energy costs can be reduced by our recommendations.

Issue:

Low Power factor, Illumination defects, less efficiency


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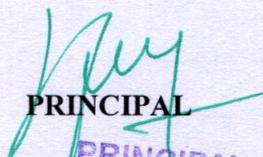
Our recommendations:

The identified issue can be rectified by installing capacitor bank connected across the motor terminals also advised them not to overload the machines.so that power factor and efficiency of the machines can be increased also electricity bill can also be reduced.

We also recommend the mill to avoid noise pollution by proper lubrication to the machines

Providing proper distance between the lights and should be placed at the proper height so that glaring and load can be reduced .

“LETS GO GREEN”


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BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN

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

Deviyakurichi - 636 112, Thalaivasal Tk, Salem Dt, Tamil Nadu.

Mobile: 96551 44999, Office : 94427 00899

Website: www.biew.ac.in, E-mail : bharathiyar@biew.ac.in

UTILIZATION CERTIFICATE

It is certified that the amount of Rupees 18000/- (Eighteen thousand) sanctioned for the audit work done at our premises on (12.09.2023) and (13.09.2023) in favour for the Department of EEE, Bharathiyar Institute of Engineering for Women, Deviyakurichi received from has been utilized for the consulting work titled Energy Audit. The purpose of which it was sanctioned was fully satisfied and delivered as per the conditions

Sanil Kumar
15/9/23
PROJECT INVESTIGATOR

[Signature]
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