



# PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

(Approved by AICTE & Affiliated to Anna University, Chennai)

Madurai - Sivagangai Highway, Arasanoor, Thirumansolai Post, Sivagangai Dt. - 630 561, Tamilnadu

Mobile : 9842102628, 7373002628

Email: info@psyec.edu.in

Website : www.psyec.edu.in

City Office : 10, Pandian Saraswathi St, Sivagami Nagar, Narayanapuram, Madurai - 625 014. Telefax- 0452 2682338, Mobile : 98423-02628

## 3.1 grants received from Government and non-government agencies for research projects/endowments in the institution during the academic year 2022-2023 (INR in Lakhs) are listed below

S.No	Name of the research project/ endowment	Name of the Principal Investigator/Co-investigator	Name of the Funding Agency	Amount Sanctioned
1.	Design of smart Agriculture Monitoring System Based on IOT using LoRaWAN Technology	Dr.S.Regina	TNSCST	7,500
2.	Charging station for E vehicle using IoT	Mr.D.Duraimurugan	TNSCST	7,500
3.	Cow dung pot making machine	Mr.R.Pandithirai	TNSCST	7,500
4.	Plastic Pavers and bricks using Waste Plastics	Mr.N.Naga Arjuna	EDII	1,12,000
5.	Design and development of Panel Key Controller	Dr.S.Manikandan	Embien Technologies	2,06,000
6.	Designing Charges for Electronic Components of video Conferencing Camera	Dr.S.Manikandan	A&T Video Networking	5,00,000
	Total amount received from Grants			8,40,500 (Eight lakhs Forty Thousand & Five Hundred only)



தமிழ்நாடு அறிவியல் தொழில்நுட்ப மானில மன்றம்  
**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**

(Established by Government of Tamilnadu)  
Directorate of Technical Education Campus, Chennai – 600 025.  
Ph : 044-22301428, [www.tanscst.nic.in](http://www.tanscst.nic.in)

Dr.R.SRINIVASAN, M.Sc., Ph.D.,F.I.C.S., M.A.C.S (USA).  
Member Secretary

Lr.No TNSCST/SPS/BS/2022-2023

03.03.2023

To  
The Principal  
Pandian Saraswathi Yadav Engineering College,  
Thirumansolai Post-630 561

Sir/Madam,

Sub: TNSCST – Student Project Scheme – 2022-2023 – approval intimation–grant  
release- reg.

With respect to the above scheme, the list of projects approved by the State Council is enclosed along with terms and conditions. You are requested to adhere to terms and conditions such as submission of UC and Seminar Paper on Time.

1.	Mr.R.Pandithurai Assistant Professor, Department of Mechanical Engineering, Pandian Saraswathi Yadav Engineering College, Thirumansolai Post-630 561	Cow dung pot making machine	R. Balaji, K. Ari krishnan,	EME-0566	The Principal	Rs 7500/-
2.	Mr. Duraimurugan D. Assistant Professor, Department of EEE, Pandian Saraswathi Yadav Engineering College, Thirumansolai Post-630 561	Charging station for E- vehicle using IoT	Pantheeswaran. M, Dinesh. K, Vallarasu. M,	EEE-1320	The Principal	Rs 7500/-
3.	Mrs. S Regina Assistant Professor, Department of Electronics and Communication Engineering, Pandian Saraswathi Yadav Engineering College, Arasanoor Thirumansolai Post-630 561	Design of Smart Agriculture Monitoring System Based on IoT using LoRaWAN Technology	S.Dharani, M.Priyadharshini, S.Varsha,	AS-521	The Principal	Rs 7500/-
Total						Rs 22500/-

Herewith enclosed the cheque for the approved grant and disburse the grant to the concerned students through the guides at the earliest

Kindly send the utilisation certificate (format enclosed) and seminar paper (Ref.T&C) on completion of the project.

Thanking you,

Yours faithfully,

  
31/3/23  
Member Secretary.

- Encl: a) Terms & Conditions (T&C)  
b) Format of Utilisation Certificate (UC)  
c) Cheque for Rs.22500/- Cheque No:574937 dt.03.03.2023

Copy to: Individual Guides

**TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY**

**DOTE CAMPUS, CHENNAI - 600025**

**STUDENT PROJECT SCHEME 2022-2023**

**UTILIZATION CERTIFICATE**

**TWO COPIES**

1. Name of the guide and address : Ms.S.Regina  
Assistant Professor,  
Pandian Saraswathi Yadav Engineering College,  
Arasanoor-630561.
2. Name of the student(s) : 1.S.Dharani  
2.M.Priyadarshini  
3.S.Varsha
3. Title of the project :Design Of Smart Agriculture Monitoring System  
Based On Iot Using Lorawan Technology
4. Project Code : AS-521

It is certified that a sum of Rs.7500/- (Rupees Seven thousand Five Hundred) sanctioned by the council for carrying out the above student project has been utilized for the purpose for which it was sanctioned and sum of Rs.Zero remaining unutilized is refunded.

  
Signature of The Guide

  
Signature of HOD

  
Signature of the  
REGISTRAR/PRINCIPAL/DEAN

with seal



**Dr. R. RAJA ME, PhD.**  
**PRINCIPAL**  
PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE  
(Arasanoor, Thiruvananthapuram - 630561)  
Sreeganga Dist. Tamil Nadu

TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI - 600025

STUDENT PROJECT SCHEME 2022-2023  
UTILIZATION CERTIFICATE

TWO COPIES

1. Name of the guide and Address :Mr.Duraimurugan D.  
Assistant Professor  
Department of EEE  
Pandian Saraswathi Yadav Engineering  
College
2. Name of the Student(S)
  1. Pantheeswaran.M
  2. Dinesh.K
  3. Vallarasu.M
3. Title of the Project :CHARGING STATION FOR E VEHICLE  
USING IoT
4. Project Code :EEE - 1320

It is certifies that a sum of Rs.7500/- (Rupees Seven thousand Five Hundred)  
sanctioned by the council for carrying out the above student project has been utilized  
for the purpose for which it was sanctioned and sum of Rs.Zero remaining Unutilized  
is refunded.

Signature of The Guide

Signature of HOD

Signature of the  
RESISTRAR/PRINCIPAL/DEAN  
with seal

Dr. R. RAJA M.E., Ph.D.,  
PRINCIPAL

PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE

Arasanoor, Thirumanolai P.O-630 56,  
Sivagangai Dist, Tamil Nadu





TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY  
DOTE CAMPUS, CHENNAI - 600 025

STUDENT PROJECT SCHEME 2022-2023  
UTILISATION CERTIFICATE

(TWO COPIES)

1. Name of the guide and address : R. PANDI THURAL, AP Mech.  
Department of Mechanical Engineering,  
Pandian Saraswathi Yadav Engineering College,  
Madurai - Sivagangai Highway,  
Sivagangai - 630 561.
2. Name of the student(s) : R. BALAJI,  
K. ARI KRISHNAN.
3. Title of the project : COIL DUNG POT MAKING MACHINE.
4. Project code : EME - 0566

It is certified that a sum of Rs. 7,500. (Rupees SEVEN THOUSAND FIVE HUNDRED.  
sanctioned by the Council for carrying out above mentioned student project has been  
utilized for the purpose for which it was sanctioned and sum of Rs. 0. = .....  
remaining unutilized is refunded.

Signature of the Guide

Signature of the HOD

Signature of the  
REGISTRAR / PRINCIPAL / DEAN  
with seal

Dr. R. RAJA M.E., Ph.D.,  
PRINCIPAL

PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE  
Arasanoor, Thirumanur P.O.-630 561  
Sivagangai Dist. Tamil Nadu





# ENTREPRENEURSHIP DEVELOPMENT AND INNOVATION INSTITUTE

(An autonomous society of the Government of Tamil Nadu)  
Parthasarathy Koil Street, SIDCO Industrial Estate,  
Ekkaduthangal, Guindy, Chennai 600032, Tamil Nadu  
Tel : +91-44-2225-2081/82/83/84 Web : [www.editn.in](http://www.editn.in)



Roc.No.II-01/44/2022/EDII/2022

Date : 05.07.2022

Sir,

**Sub:** EDII - Innovation Voucher Programme (IVP) - Proposal submitted under IVP – Sanctioned Order Issued – Reg.

**Ref:** 1. IVP Proposal sent by **M/S Plasto Pavers**.  
2. Minutes of the Screening Committee meeting held on 28.06.2022.

\*\*\*\*\*

As per the above references, this is to inform that your proposal has been approved by the Screening Committee under “**Innovation Voucher Programme**”.

In this regard, the details of the recommendations and terms and conditions are as follows :

1. Name of the Company : Plasto Pavers
2. Project Title : Plastic pavers and bricks using waste plastics
3. Voucher Type : Voucher – A
4. Maximum Project Duration : 12 Months
5. Knowledge Partner : Pandian Saraswathi Yadav Engineering College
6. Total Project Cost : Rs.1,40,000/-

Break up of Project Cost (In Rs.) :				
EDII Contribution			Company's Contribution	Total
1 <sup>st</sup> Installment 50%	2 <sup>nd</sup> Installment 40%	3 <sup>rd</sup> Installment 10%		
56,000	35,000	21,000	28,000	1,40,000

## Terms and Conditions of the grant :

- I. 1<sup>st</sup> Installment: 50 percent of the eligible grant will be released on signing of the Tripartite agreement.
- II. 2<sup>nd</sup> Installment: 40 percent will be released on submission of the Progress report, Utilization Certificate, Photos & Videos, etc. and its acceptance by the EDII within the time frame stipulated in the agreement
- III. 3<sup>rd</sup> Installment: (Remaining 10 percent) will be released on completion of the project and presentation of the final report being made before the Screening committee and the completion report found acceptable.
- IV. Contribution of the company has to be paid in full to the knowledge partner before the release of 2<sup>nd</sup> Installment.




- V. Knowledge partner should release the fund to the company without any delay based on the achievement of milestones as envisaged in the project by the company.
- VI. The company should periodically furnish progress report and utilization certificate to EDII for releasing of 2<sup>nd</sup> and 3<sup>rd</sup> installment.
- VII. The company with attestation of the Knowledge Partner must submit monthly progress reports of the project to EDII regularly.
- VIII. Any deviation of the project has to be reported promptly to EDII.
- IX. The sanction project should be completed within the time stipulated in the agreement. For factors beyond the control of the Company given the assignment, suitable extension in time may, however, be granted at the request of the institution.
- X. The EDII shall not pay any extra amount for any escalation in the cost of the assignment beyond the time period stipulated in the agreement.
- XI. The total grant for the study as agreed with the organization will include service tax and other tax, if any, and the liability of payment of the tax will be of the Institution conducting the study.
- XII. TWO hard copies of the final report, FIVE hard copies of the executive summary and soft copy containing the final report shall be submitted before releasing the final installment of payment.
- XIII. During the period of the implementation of the project, EDII may modify the TOR and other terms and conditions of the project, if necessary, in order to strengthen/deepen its scope/coverage. As far as possible, such modifications will not be made more than once during the period of study and with the due concurrence of the Company concerned.
- XIV. In case of change of contact person during the period of study, the new contact person may be nominated by the Company with the prior approval of the EDII.
- XV. Any changes in the proposed work plan should be intimated to EDII and get prior approval from the Screening Committee.
- XVI. If the performance of the Company during the period of the study is not found to be satisfactory, the agreement will be terminated.
- XVII. The Knowledge partner should have empanelled with EDII.

**You are requested to furnish us the following documents immediately:**

- Tripartite Agreement (Model Enclosed)
- Advance Stamp receipt from the Knowledge Partner Institution for the 1<sup>st</sup> Installment.
- Bank Account details of the Knowledge Partner Institution to which the amount is to be released in Letterhead with signature of Knowledge Partner.
- Detailed milestones with signature of company and Knowledge Partner.
- Detailed Budget split-up with signature of company and Knowledge Partner.
- Consent letter from Knowledge Partner and service cost charged by the Knowledge Partner for various services
- UAM Registration/Startup India DPIIT Registration Certificate

To,  
1. M/s. Plasto Pavers  
2. Pandian Saraswathi Yadav Engineering College

  
**Additional Director (FAC)**

  
6/5/22



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City Office : 10, Pandian Saraswathi St, Sivagami Nagar, Narayanapuram, Madurai - 625 014. Telefax- 0452 2682338, Mobile : 98423-02628

Date:07.09.2022

To

EMBIEN TECHNOLOGIES (INDIA) PRIVATE LIMITED,

2<sup>ND</sup> FLOOR, 13/10 Alagar Kovil Main Road,

Surveyor Colony,

Madurai - 625 007.

Dear Sir,

**Sub:** Request for approval and support for funded Project-reg

We, the Electronics and Communication Department at Pandian Saraswathi Yadav Engineering College, have been functioning effectively since 2000. We are excited to collaborate with your organization on a funded project titled "Design and Development of Panel Key Controller." This project will be led by our faculty investigator, Dr. S. Manikandan, Associate Professor in the ECE Department. We believe this innovative project will have significant social relevance. We kindly request your approval for this collaboration.

Thanking you,



  
PRINCIPAL  
Dr. R. RAJA M.E., Ph.D.,  
PRINCIPAL  
PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE  
Arasanoor, Thirumansolai P.O-630 561,  
Sivagangai Dist, Tamil Nadu





TO

Dr.S. Manikandan,  
Associate Professor,  
Department of Electronics and Communication,  
Pandian Saraswathi Yadav Engineering College,  
Arasanoor-630561.

Dear Sir/Madam,

**Subject: Letter of Acceptance & Providing Support for Funded Project-Reg**

I am happy to inform that the proposal submitted by the Department of Electronics and Communication Engineering under the work titled "**Design and development of Panel Key Controller**" has selected and approved by our organization and sanctioned Rs. 2,06,000 (Two Lakh and six Thousand only) as the project seems to be innovative and would be highly social relevance.

In this regard, The Principal Investigator is registered to complete the work and submit the monthly report of the completion status along with the presentation file to the company address without fail.

Thanking you

For Embien Technologies India Pvt. Ltd.,  
This is electronically generated and does not require any signature



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### PROJECT PROPOSAL FOR POSSIBLE FUND

S.No	Items	Details
1.	Project Title	Design and development of Panel Key Controller
2.	Project Type	<p>It involves designing the physical components of the panel key controller.</p> <p>It focuses on designing the user interface of the panel key controller.</p> <p>It involves Prototyping and Testing its functionality and performance and documenting the design specifications.</p> <p>Providing support for the transition from prototype to mass production.</p>
3.	Objectives	<p>The objective is to design a controller that accurately controls targeted functions, provides an intuitive user interface, ensures reliability and durability, and integrates seamlessly with other systems.</p> <p>To design and develop Panel Key Controller aims to deliver a reliable, user-friendly, and cost-effective solution for controlling specific functions or systems in various applications.</p>
4.	Summary	From this proposal, the scope of the project encompasses various industries and applications where the Panel Key Controller can be utilized. Key features include robust hardware design, embedded systems development, user interface optimization, prototyping, testing, and compliance with safety standards.
5.	Methodology	To design the hardware components of the Panel Key Controller, that includes selecting appropriate components such as microcontrollers, switches, LEDs, and designing the circuitry layout and schematics.
6.	TotalCostRequired	Rs. 2,06,000/-

## PURCHASE ORDER





# PANDIAN SARASWATHI YADAV ENGINEERING COLLEGE

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City Office : 10, Pandian Saraswathi St, Sivagami Nagar, Narayanapuram, Madurai - 625 014. Telefax- 0452 2682338, Mobile : 98423-02628

Date: 04.10.2022

To

A&T VIDEO NETWORKS PVT. LTD,

8B, Abdul Gaffer khan Road,

Chinna Chokkikulam,

Madurai – 625 002.

Dear Sir,

Sub : Request for approval and support for funded Project-reg

We, Electronics and Communication Department of Pandian Saraswathi Yadav Engineering College is functioning very effectively from 2000. We are ready to do funded project on “**Designing Charges for Electronic components of video conferencing camera**” in association with your concern. This project will go to work by our faculty investigator Dr.S.Manikandan, Associate Professor, ECE Department. It helps this is project to our faculty seems to be innovative and would be high social relevance. Kindly accept the same.

Thanking you,



  
PRINCIPAL

Dr. K. K. K.

PRINCIPAL

PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE

Arasanoor, Thirumansolai P.O-630 561,  
Sivagangai Dist, Tamil Nadu



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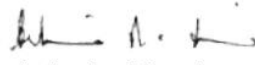

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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### PROJECT PROPOSAL FOR POSSIBLE FUND

S.No	Items	Details
1.	Project Title	Designing Charges for Electronic components of video conferencing camera
2.	Project Type	<p>It involves selecting electronic components such as image sensors, lenses, processors.,</p> <p>It involves circuit design, PCB Design, embedded system development, image processing algorithms, mechanical design, optical design followed by testing and validation.</p>
3.	Objectives	<p>The objective is to Design electronic components that facilitate high-resolution video capture, superior image processing, and smooth video streaming to ensure crisp, clear visuals during video conferences.</p> <p>To Develop electronic components that enable high-fidelity audio capture, noise cancellation, and echo suppression to ensure clear and natural sound reproduction, enhancing communication clarity.</p>
4.	Summary	From this proposal, The project focuses on designing electronic components for a cutting-edge video conferencing camera system tailored for seamless communication experiences. The objectives include enhancing video and audio quality, optimizing transmission latency, ensuring reliable connectivity, and providing an intuitive user interface.
5.	Methodology	The methodology includes component selection followed by circuit design, PCB layout, Embedded firmware Development and Integration and Testing.
6.	Total Cost Required	Rs. 5,00,000/-

WORK ORDER				
Order No: WO-1112			12-Nov-22	
<b>M/S.Pandiyan Saraswathi Yadav Engineering College</b> <b>Madurai Sivagangai Highway,</b> <b>Arasanoor - 630561</b>				
S.No	Description	Rate	UOM	Amount
1	<b>Designing Charges</b> <b>For Electronic Components of Video Conferencing</b> <b>Camera</b>	500,000.00	LS	500,000.00
<b>TOTAL</b>				<b>500,000.00</b>
<b>Amount In Words : Rupees Five Lakhs Only</b>				
Company's GSTIN No. : 33AAFCA1599Q1Z5 Company's PAN No. : AAFCA1599Q		For A&T Video Networks Pvt Limited  <b>Authorised Signatory</b>		
				

**A&T Video Networks Pvt. Ltd.**

8B, Abdul Gaffer khan Road, Chinna Chokkikulam, Madurai - 625002.





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Date: 26.05.2024

To

M/s A&T VIDEO NETWORKS PVT. LTD

Madurai, Tamilnadu

## UTILISATION CERTIFICATE

- 1.Name of the guide : Dr.S.Manikandan
2. Title of the project : Designing Charges for Electronic components of video conferencing camera
- 3.Sanctioned Date : 12.11.22

It is certified that a sum of Rs. 5,00,000/- ( Five Lakhs only) Sanctioned by the company for carrying out above mentioned student project has been utilized for the purpose for which it was sanctioned and sum of Rs.0 (Nil) remaining unutilized is refunded.

  
Signature of the Principal Investigator



  
Signature of the PRINCIPAL  
with seal

Dr.R.RAJA ME.,Phd.,  
PRINCIPAL  
PANDIAN SARASWATHI YADAV  
ENGINEERING COLLEGE  
(Arasanoor, Thirumansolai Post, Sivagangai Dt., Tamil Nadu)