



Karnataka State Council for Science and Technology

Indian Institute of Science Campus, Bengaluru - 560 012

Telephone: 080-23341652, 23348848, 23348849 ♦ Telefax: 080-23348840

Email: office@kscst.iisc.ernet.in, office@kscst.org.in ♦ Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar
Executive Secretary

27th March 2019

Ref: 7.1.01/SPP/1333

The Principal,
Sapthagiri College of Engineering,
#14/5, Chickasandra,
Hesaraghatta Main Road,
Bengaluru - 560 057.

Dear Sir/Madam,

Sub : Sanction of Student Project - 42nd Series: Year 2018-2019

Your Project Proposal Reference No. : 42S_BE_0279


Ref : Your Project Proposal entitled " **AGROBOT**

I am happy to inform that your student project proposal referred above, has been approved by the Council for "Student Project Programme - 42nd Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Ms. Anusha B and others	Budget	Amount (Rs)
		Materials/Consumables	6,000.00
Guide/s	Mr. A.Dhamodaran	Labor	-
		Travel	500.00
Department	Electrical And Electronics Engineering	Miscellaneous	500.00
		Report	500.00
		TOTAL	7,500.00
SEVEN THOUSAND FIVE HUNDRED RUPEES ONLY			

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report in a CD (.pdf format) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your **project reference number printed above** in all your future correspondences.
- Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords


Principal
Sapthagiri College of Engineering
Chickasandra, Hesaraghatta Road,
Bengaluru-560 057

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6) Introduction / background

(with specific reference to the project, work done earlier, etc) - about 20 lines

6) Objectives (about 10 lines)

7) Methodology (about 20 lines)

(materials, methods, details of work carried out, including drawings, diagrams etc)

8) Results and Conclusions

(about 20 lines with specific reference to work carried out)

9) Scope for future work (about 20 lines).

(Note: The write-up (Synopsis) should be sent with the approval of project guide. The softcopy of the write-up, in MS Word format, should be sent by e-mail (spp@kscst.iisc.ernet.in). In your e-mail, please also include project proposal reference number and title of the project.)

e) Projects selected for Seminar / Exhibition will be awarded.

The sanctioned amount will be sent through NEFT by Accounts Department. Please furnish the bank account details as per the format enclosed with this letter.

The sponsored projects evaluation will be held in the Nodal Centre and the details of the nodal centre will be intimated shortly by e-mail / Website announcement.

Please visit our website for further announcements / information and for any clarifications please email to spp@kscst.iisc.ernet.in

Thanking you and with best regards,

Yours sincerely,

(H. Hemanth Kumar)

Copy to:

- 1) The Head of the Department of
Electrical And Electronics Engineering
Sapthagiri College Of Engineering,
#14/5, Chickasandra,
Hesaraghatta Main Road,
Bengaluru - 560 057.
- 2) Mr. A.Dhamodaran
Department of Electrical And Electronics Engineering
Sapthagiri College Of Engineering,
#14/5, Chickasandra,
Hesaraghatta Main Road,
Bengaluru - 560 057.
- 3) The Finance Officer, KSCST, Bangalore

Encl: As Above

Principal
Sapthagiri College of Engineering
Chickasandra, Hesaraghatta
Bangalore-560 057

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
BELAGAVI-590018, KARNATAKA**



A Project Report On

AGROBOT

submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF ENGINEERING IN ELECTRICAL AND ELECTRONICS

For the academic year 2018-2019

Submitted By

ANUSHA B (ISG15EE008)

C S MOHANA (ISG15EE017)

JEEVITHA A (ISG15EE038)

KEERTHANA R (ISG15EE041)

Under The Esteemed Guidance Of:

Mr. A DHAMODARAN, Asst. Professor



Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

Department of Electrical and Electronics Engineering

SAPTHAGIRI COLLEGE OF ENGINEERING

14/5 Chikkasandra, Hesaraghatta Main Road, Bangalore-560057



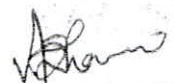
SAPTHAGIRI COLLEGE OF ENGINEERING

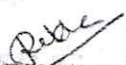
#14/5, Chikkasandra, Hessarghatta Main Road, Bangalore-560057


Department of Electrical and Electronics Engineering


CERTIFICATE

Certified that the project work entitled **AGROBOT** is carried out collectively by **ANUSHA B (ISG15EE008)**, **C S MOHANA (ISG15EE017)**, **JEEVITHA A (ISG15EE038)**, **KEERTHANA R (ISG15EE041)**, bonafide students of 8th semester EEE Dept. in partial fulfillment for the award of degree in **Bachelor of Engineering** at Sapthagiri College of Engineering affiliated to **Visvesvaraya Technological University, Belagavi** for the Academic year **2018-2019**. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the said degree.


Mr. A Dhamodaran
Assistant Prof.
Guide


Mrs. Rekha S N
Associate Prof.
Project Coordinator


Dr. K N Ravi
Prof & HOD
EEE Dept.


Dr. K L Shivabasappa
Principal


Principal
Sapthagiri College of Engineering
Chikkasandra, Hessarghatta Road
Bangalore-560 057

External Viva

Name of the examiners

- 1.
- 2.

Signature with date

ABSTRACT

This project strives to develop a robot capable of performing operations like ploughing, fruit picking, testing of the atmospheric parameters like temperature, humidity, pH level and moisture content of the soil. The main component here is the Arduino Uno ATmega328P microcontroller that supervises the entire process. On the field the robot operates on automated mode, but outside the field is strictly operated in manual mode. For manual control the robot uses the Bluetooth pairing application as control device and helps in the navigation of the robot outside the field. The robot is incooperated is fitted with various sensors that continuously monitor the environment parameters. It checks these levels with the set point of the sensor and alerts the farmer. The alerting mechanism is Bluetooth module that sends a text message to the farmer informing him about the breach in set point. The concept of fruit picking is described under the process domain. Farmers today spend a lot of money on machines that help them decrease labor and increase yield of crops but the profit and efficiency are very less. Hence automation is the ideal solution to overcome all the shortcomings by creating machines that perform one operation and automating it to increase yield on a large scale.




Principal

Sapthagiri College of Engineering
Chikkasandra, Hesarghatta
Bangalore-560 037

ENDORSEMENT


(From College, endorsement to be taken in the institution / Department Letter head)

This is to certify that 1) Ms. ANUSHA B. 2) Ms. C S MOHANA 3) Ms. JEEVITHA A 4) Ms. KEERTHANA R, are bonafide students of Department of Electrical and Electronics Engineering, in the B.E. degree program of our institution. If the project proposal submitted by these students under the 42nd Series of Student Project Programme is selected by KSCST, we will provide the requisite laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps to see that the project team will exhibit / demonstrate their project in the nodal centre and in the State Level Seminar and Exhibition (if selected). If the student team fails to send the completed project report or fails to attend the evaluation in nodal centre or fails to attend the State Level Seminar and Exhibition, the supported project amount will be returned back to KSCST.


 (A. DHAMODARAN)
 (Name & Signature of
 Project Guide with Seal)


Email id:
 adhamodaran@sapthagiri.edu.in

Contact No.: 9620540352


 (Signature of HOD with
 Seal)

Email id:
 hodeee@sapthagiri.edu.in

Contact No.: 9449940873


 (Signature of the Principal
 with Seal)

Email id:
 principalsce@sapthagiri.edu.in

Contact No.: 9880703600

Principal

Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road
 Bangalore-560 057

Professor & HOD
 Department of Electrical &
 Electronics Engineering
 Sapthagiri College of Engineering
 BANGALORE - 560 057


 Principal
 Sapthagiri College of Engineering
 Chikkasandra, Hesaraghatta Road
 Bangalore-560 057

KSCST : Student Project Programme : 42nd Series : 2018 – 2019 – Stream C : Student Project Proposal

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KSCST PROJECTS

UTILIZATION CERTIFICATE

KSCST Student project program 42nd series- 2018-19

Sl No	Title of the project	Amount	<p>Certified that KSCST has provided partial financial support of RS42500/- towards Biofuel and SPP student project program 42nd series</p> <p>Sum of Rs42500/- only has been utilize for the purpose Biofuel and SPP student project program for which it was sanction</p>
1	AGROBOT	7500/-	
2	Development of Energy Management System (EMS) for Solar Photovoltaic Power Plants to Supply Power for Cottage Industries without using Battery Bank	8000/-	
3	Design and Fabrication of Articulated 3D Printer	8000/-	
4	Power generation by engine exhaust gas for air brake	7000/-	
5	Anti-Krait venom activity of folk medical plants.	6500/-	
6	Bio plastic Extraction from waste grease produce in industries using as Glycerol as a substrate.	5500/-	

Certified that I have satisfied myself that condition on which the grant in aid sanctioned has been duly/are be fulfilled and that I have excise the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of check exercised

1. Cash book
2. Vouchers

[Signature]
Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bangalore - 560 057

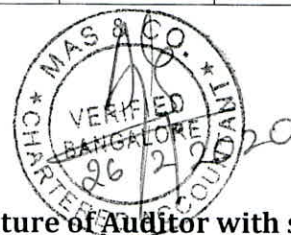
[Signature]
Principal
Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Road
Bangalore - 560 057

Sl. No	Project proposal ref no	Title of the project	Dept./Guide	Amount Sanction by KSCST	Amount utilized by the college	Balance if any to be refunded to KSCST
1	42S_BE_0279	AGROBOT	EEE/ Mr.Dhamodaran	7500/-	7500/-	0
2	42S_BE_1473	Development of Energy Management System (EMS) for Solar Photovoltaic Power Plants to Supply Power for Cottage Industries without using Battery Bank	EEE/ Mrs. Rekha S N	8000/-	8000/-	0
3	42S_BE_1589	Design and Fabrication of Articulated 3D Printer	ME/ Mr. Ullas CS	8000/-	8000/-	0
4	42S_BE_2339	Power generation by engine exhaust gas for air brake	ME/ Mr. Padmanabha	7000/-	7000/-	0
5	42S_BE_3333	Anti-Krait venom activity of flok medical plants.	BT/ Dr. Veena S More	6500/-	6500/-	0
6	42S_B_BE_003	Bio plastic Extraction from waste grease produce in industries using as Glycerol as a substrate.	BT /Mr.prashanth kumar HP/ Ms. Shobha G	5500/-	5500/-	0

Signature of the Principal with seal

Signature of Auditor with seal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560 057



Date:

Principal
Sapthagiri College of Engineering
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