



CITY ENGINEERING COLLEGE

Approved by AICTE New Delhi & Affiliated by VTU, Belagavi
Doddakallasandra, Off Kanakapura Main Road,
Next to Gokulam Apartment, Bangalore - 560 062.



Criteria 3- Research, Innovations and Extension

Key Indicator: 3.1- Resource Mobilization for Research

Metric Number: 3.1.1. Grants received from Government and non-governmental agencies for research projects / endowments in the institution.

ACADEMIC YEAR:2021-2022

Sl.no	Description	Amount (in Lakhs)
1.	Grants received from Government and non-governmental agencies for research projects / endowments in the institution	RS. 1.29 Lakhs



Karnataka State Council for Science and Technology

(An autonomous organisation under the Dept. of Science & Technology, Govt. of Karnataka)

Indian Institute of Science Campus, Bengaluru – 560 012

Telephone: 080-23341652, 23348848, 23348849, 23348840

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

Mr. H. Hemanth Kumar

Executive Secretary

11th May, 2022

Ref: 7.1.01/SPP/91

The Principal,
City Engineering College,
Doddakallasandra,
Kanakapura Main Road,
Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 45th Series: Year 2021-2022

Project Proposal Reference No. : 45S_BE_2308

Ref : Project Proposal entitled **SWIRL TECHNOLOGY & MULTITUDINAL FARMLAND MAINTENANCE WITH INTEGRATED AGRI-BOT**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 45th Series". The project details are as below:

Student(s)	Mr. ANKIT KUMAR	Department	ELECTRONICS AND COMMUNICATION ENGINEERING
	Mr. AMARJITH V S		
	Mr. SRIVATHSA G		
Guide(s)	Dr. SHALINI PRASAD	Sanctioned Amount (in Rs.)	8,000.00

Comments / Suggestions of the Experts

Demo should be shown as per the proposal

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/YMn9K7XETu96i8KbA>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department

- 4) Name of the students & Guide(s)
 - 5) Keywords
 - 6) Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - 7) Objectives (about 10 lines)
 - 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held in the Nodal Centre/Online Mode and the details of the same will be intimated shortly by email / Website announcement.
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/PciAaAVisn6bn8AM7>. The report should be prepared in the format prescribed by the university.

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

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The HoD
ELECTRONICS AND COMMUNICATION ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Dr. SHALINI PRASAD
ELECTRONICS AND COMMUNICATION ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



Karnataka State Council for Science and Technology

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Indian Institute of Science Campus, Bengaluru – 560 012

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Email: office.kscst@isc.ac.in, office@kscst.org.in • Website: www.kscst.iisc.ernet.in, www.kscst.org.in

Mr. H. Hemanth Kumar

Executive Secretary

11th May, 2022

Ref: 7.1.01/SPP/91

The Principal,
City Engineering College,
Doddakallasandra,
Kanakapura Main Road,
Vasanthapura,
Bengaluru – 560 062.

Dear Sir/Madam,

Sub : Sanction of Student Project - 45th Series: Year 2021-2022

Project Proposal Reference No. : 45S_BE_2433

Ref : Project Proposal entitled **AI-BASED CROP EXHORTATION IN THE CLOUD**

We are pleased to inform that your student project proposal referred above, has been approved by the Council under "Student Project Programme - 45th Series". The project details are as below:

Student(s)	Ms. RENUKA SURESH	Department	COMPUTER SCIENCE AND ENGINEERING
	Mr. PRASHANTH KUMAR N		
	Ms. SAHANA M R		
	Ms.AISHWARYA H S		
Guide(s)	Dr. N. RAJASHEKAR REDDY	Sanctioned Amount (in Rs.)	6,000.00
	Mrs. LAXMI M C		

Comments / Suggestions of the Experts

Verify the data with web data

Instructions:

- The project should be performed based on the objectives of the proposal submitted.
- Any changes in the project title, objectives or students team is liable for rejection of the project and your institution shall return the sanctioned funds to KSCST.
- Please quote your project reference number printed above in all your future correspondences.
- After completing the project, 2 to 3 page write-up (synopsis) needs to be uploaded on to the following Google Forms link <https://forms.gle/YMn9K7XETu96i8KbA>. The synopsis should include following:
 - Project Reference Number
 - Title of the project
 - Name of the College & Department

- 4) Name of the students & Guide(s)
 - 5) Keywords
 - 6) Introduction / background (with specific reference to the project, work done earlier, etc) - about 20 lines
 - 7) Objectives (about 10 lines)
 - 8) Methodology (about 20 lines on materials, methods, details of work carried out, including drawings, diagrams etc)
 - 9) Results and Conclusions (about 20 lines with specific reference to work carried out)
 - 10) Scope for future work (about 20 lines).
- e) In case of incompeted projects, the sanctioned amount shall be returned to KSCST.
 - f) The sanctioned amount will be transferred by NEFT to the bank account provided by the College/Institute.
 - g) The sponsored projects evaluation will be held in the Nodal Centre/Online Mode and the details of the same will be intimated shortly by email / Website announcement.
 - h) After completion of the project, soft copy of the project report duly signed by the Principal, the HoD, Guide(s) and student(s) shall be uploaded in the following Google Forms Link <https://forms.gle/PciAaAVisn6bn8AM7>. The report should be prepared in the format prescribed by the university.

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

Thanking you and with best regards,

Yours sincerely,



(H. Hemanth Kumar)

Copy to:

- 1) The HoD
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 2) Dr. N. RAJASHEKAR REDDY Mrs. LAXMI M C
COMPUTER SCIENCE AND ENGINEERING
CITY ENGINEERING COLLEGE, BENGALURU
- 3) THE ACCOUNTS OFFICER
KSCST, BENGALURU



CITY ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

FORM GFR 19-A

UTILIZATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 45th SERIES

Sl. No.	Letter No. and date	Amount (Rs.)	Certified that KSCST has provided partial financial support of Rs.14,000/- towards Student Project Programme - 45 th Series
1	No.7.1.01/SPP/100 Dated 17 th May 2022	14,000/- (6,000/- + 8,000/-)	A sum of Rs 14,000/- only has been utilized for the purpose of Student Project Programme for which it was sanctioned.

Certified that I have satisfied myself that the conditions on which the grants-in-aid was sanctioned have been duly / are being fulfilled and that I have exercised the following check to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of Checks exercised.

01. Cash Book ✓
02. Vouchers ✓

Sl No	Project Proposal Ref. No.	Title of the Project	Department/ Guide	Amount Sanctioned by KSCST	Amount Utilized by the College	Balance if any to be refunded to KSCST
1.	45S_BE_2433	AI-BASED CROP EXHORTATION IN THE CLOUD	Computer Science & Engineering Dr. N. Rajashekar Reddy Mrs. Laxmi M C	6,000/-	6,000/-	Nil
2.	45S_BE_2308	SWIRL TECHNOLOGY & MULTITUDINAL FARMLAND MAINTENANCE WITH INTEGRATED AGRI-BOT	Dr. Shalini Prasad	8,000/-	8,000/-	Nil


Signature of the Principal
with Seal


Signature of the Finance / Accounts Officer
with Seal
CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road
Vasanthapura. BANGALORE 560 061

Date: 20th September 2022

Place: Bengaluru

PRINCIPAL
CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

Doddakallasandra, off Kanakapura Main Road, Bangalore 560 061.

Email: cityengineering123@gmail.com Website: www.cityengineeringcollege.ac.in

Ph: 080 - 22560313/314/315. Telefax: 080-2256 0314. Admissions Mob: 92428 92734 / 73490 32929



CITY

ENGINEERING COLLEGE

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UTILISATION CERTIFICATE

KSCST : STUDENT PROJECT PROGRAMME – 45th SERIES

Date: 20th September 2022

This is to certify that **CITY ENGINEERING COLLEGE** having its office / institution at near Doddakallasandra Metro Railway Station, Off. Kanakapura Main Road, Near Gokulam Apartment, Bengaluru-560061 Karnataka has been granted a sum of **Rs. 14,000/-** (Rupees Fourteen Thousand Only) has been credited vide NEFT: **P139220170115978** dated **19th May 2022** to Bank of India Account No. 896110210000004 from Karnataka State Council for Science and Technology (KSCST) vide their Grant sanction letter Ref. No. 7.1.01/SPP/100 dated 17th May 2022 towards 45th Series Student Project Programme (SPP) - 1) Project reference No. **45S_BE_2433** 2) Project reference No. **45S_BE_2308**.

The college has incurred the expenditure of **Rs.14,000/-** (Rupees Fourteen Thousand Only/-) towards the said project/s.

All the expenditure voucher / invoices are duly accounted by the college and is authenticated by the Principal and Accounts Officer / Finance Officer of our institution.

The above information is extracted from the books of accounts and documents produced before us and information and explanations provided to us. We further certify that, we have verified the relevant books of accounts and documents / bills / vouchers and found that the said amount has been utilized for the purposes as laid down by the Karnataka State Council for Science and Technology (KSCST). This certificate is provided by us at the specific request of Karnataka State Council for Science and Technology (KSCST) to evidence the utilization of grants in terms of above referred grant sanction letter dated **17th May 2022**.


Signature of the Principal
with Seal


Signature of the Finance / Accounts Officer
with Seal

Date: 20th September 2022

Place: Bengaluru

CITY ENGINEERING COLLEGE
Kanakapura Main Road, BANGALORE - 560 061

CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road,
Vasanthapura, BANGALORE - 560 061

CEC-22-23					
KARNATAKA STATE COUNCIL FOR SCIENCE & TECHNOLOGY					
Ledger Account					
1-Apr-2022 to 23-Sep-2022					
Date	Particulars	Vch Type	Vch No.	Debit	Credit
19-05-2022	Dr BOI - 896110210000004 - UNIV	Receipt			14000.00
	<i>NEFT RECED FROM KSCST NEFT - P139220170115978,PROJECT CSE-Dr. N RAJA REDDY GUIDE -RENUKA SURESH, PRASHANTH KUMAR N,SAHANA M R,AISHWARYA H S , PROJECT EC - Dr. SHALINI PRASAD GUIDE - ANKIT KUMAR, AMARJITH V S, SRIVASTHSA G (6000 + 8000=14000)</i>				
25-08-2022	Cr BOI - 896110210000004 - UNIV	Payment	785	6000.00	
	<i>BEING CHQ ISSUED IN FAVOUR OF RENUKA SURESH TOWARDS FINANCIAL ASSISTANCE FOR STUDENTS OF CSE DEPT FOR AI-BASED CROP EXHORTATION IN THE CLOUD UNDER THE GUIDANCE OF Dr. RAJASHEKAR REDDY & LAXMI M C</i>				
13-09-2022	Cr BOI - 896110210000004 - UNIV	Payment	837	8000.00	
	<i>BEING CHQ ISSUED IN FAVOUR OF ANKIT KUMAR TOWARDS FINANCIAL ASSISTANCE FOR STUDENTS OF EC DEPT FOR SWIRL TECHNOLOGY & MULTITUDINAL FARMLAD MAINTENANCE WITH INTEGRATED AGRIBOT UNDER THE GUIDANCE OF Dr. SHALINI PRASAD</i>				
	TOTAL		14000.00		14000.00

CITY ENGINEERING COLLEGE
Doddakallasandra, Kanakapura Road,
Vasanthapura, BANGALORE - 560 081



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಟಿ ಯು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

Visvesvaraya Technological University

(State University of Government of Karnataka Established as per the VTU Act, 1994)

"Jnana Sangama", Belagavi-590018, Karnataka, India

Prof. B.E. Rangaswamy Ph.D.

Phone:(0831)2405468

Registrar

Fax: (0831)2405467

Ref. No. VTU/Aca/2022-23/06/99

Date:

3 APR 2023

To

The Principal

City Engineering College, Bengaluru

Sir/Madam,

Sub: Sanction of Financial Assistance for 2021-2022 to the Innovative Project of UG Final Year Students of your Institution...reg.

- Ref: 1) No. VTU/BGM/Aca/A-12/VTU-FA/2021-22/1366 dated 7-6-2022
2) Vice-Chancellor's Order dated 14-2-2023

With reference to the above, please find enclosed herewith D.D. No. 473645154 dated 3/27/2023 (mm/dd/yyyy) for Rs.40000 /- towards the sanction of financial assistance to the selected Innovative projects of UG final year students of BE/B.Tech.

Further, you are hereby informed to distributed the amount to the concerned students and get an acknowledgement for the same.

Original copy of the acknowledgement should be submitted to the undersigned on or before April 10th 2023.

Yours faithfully,

Registrar




Encl: as above



	<p>Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225, 2405454</p>
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VTU Sponsored Student Project Proposal Format

01	Academic Year	2021-2022	
02	Semester	8 TH	
03	Name of the College	CITY ENGINEERING COLLEGE	
04	Branch:	ELECTRONICS AND COMMUNICATION ENGINEERING	
05	Project Title:	Smart on Wheels With Face Detection using Raspberry Pi and Health Monitoring System	
06	Project Discipline:	Health Monitoring System	
07	Principal	Name:	Dr. T N THIPPESWAMY
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	-
		Contact No:	-
		Email id:	-
11	Project Committee Coordinator (Identified by the college):	Name:	Dr. Shalini Prasad
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege. ac.in

12	Name of the project group Members		
1.Group leader and Member			
Name: Joyeeta Sarkar USN No: 1CE18EC006			
Contact: No:9741931070			
Email ID: sarkarjoyeeta2000@gmail.com			
2.Member			
Name: Akanksha G Kulkarni USN No: 1CE18EC002			
Contact No: 9742620145			
Email ID: akanksha.kul812@gmail.com			
3.Member			
Name: Shrinidhi B Cherekar USN No: 1CE18EC021			
Contact No: 8217641351			
Email ID: shrinidhi1932@gmail.com			
4.Member			
Name:			
USN No:			
Contact No:			
Email ID:			
13	Processing Fee details	Bank Name: Branch: DD number with date: OR Cheque no with date:	
14	Scope/Object of the project	<ul style="list-style-type: none"> • Smart wheelchair collects information by using sensors and/or cameras to provide feedback on the user's health condition and also safely navigate itself in its environment. • Data provided from user can be used in form of health monitoring and keeping the in charge updated. 	

15	Methodology of work: (Including diagram flow chart And design calculations)	<ul style="list-style-type: none">•The camera mounted on the wheelchair helps to detect obstacles, as well as to identify people known to the user.• The user can interact with the chair through AI voice• The pulse oximeter module is placed on the chair to monitor the user's health by keeping a track of the variation in their oxygen level and BPM.• The user can control the direction of the wheelchair with the help of voice using Bluetooth.
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16	Expected Outcome of the project:	<ul style="list-style-type: none"> • Voice controlled wheelchair movement • Health monitoring using pulse-oximeter • Joystick controlled manual movement • Anti-theft using face detection. • AI Voice interaction. • App controlled movement of the chair 																
17	Application of the Project:	To monitor the health of the user and keep the person in charge updated about their status, while making the user's life easier.																
18	Budget details with Materials required:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 20%; text-align: right;">Price</th> </tr> </thead> <tbody> <tr> <td>Materials</td> <td></td> </tr> <tr> <td>Components</td> <td style="text-align: right;">12000</td> </tr> <tr> <td>Power supply</td> <td style="text-align: right;">1000</td> </tr> <tr> <td>GPS and GSM</td> <td style="text-align: right;">1000</td> </tr> <tr> <td>Framework</td> <td style="text-align: right;">950</td> </tr> <tr> <td>Miscellaneous</td> <td style="text-align: right;">1500</td> </tr> <tr> <td>Total</td> <td style="text-align: right;">16450</td> </tr> </tbody> </table>		Price	Materials		Components	12000	Power supply	1000	GPS and GSM	1000	Framework	950	Miscellaneous	1500	Total	16450
	Price																	
Materials																		
Components	12000																	
Power supply	1000																	
GPS and GSM	1000																	
Framework	950																	
Miscellaneous	1500																	
Total	16450																	

19	Date of commencement of the project:	20-12-2021
20	Probable date of completion of the project:	20-05-2022
21	Duration of project work:	6
22	Per chart for completion of the project in said duration as per planned activities:	


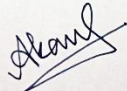

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our' knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately




We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the student	Signature with date
01	Joyeeta Sarkar	
02	Akanksha G Kulkarni	
03	Shrinidhi B Cherekar	

	<p>Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225, 2405454</p>
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VTU Sponsored Student Project Proposal Format

01	Academic Year	2021-2022	
02	Semester	8 TH	
03	Name of the College	CITY ENGINEERING COLLEGE	
04	Branch:	ELECTRONICS AND COMMUNICATION ENGINEERING	
05	Project Title:	Automatic Waste Segregation	
06	Project Discipline:	Industrial Waste	
07	Principal	Name:	Dr. T N THIPPESWAMY
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	G S Mallikarjuna
		Contact No:	9980133030
		Email id:	hodece@cityengineeringcollege.ac.in
09	Project Guide	Name:	Prof Vishva Kiran
		Contact No:	9972372314
		Email id:	vishvakiran@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	-
		Contact No:	-
		Email id:	-
11	Project Committee Coordinator (Identified by the college):	Name:	Dr. Shalini Prasad
		Contact No:	9449445388
		Email id:	shaliniprasad@cityengineeringcollege.ac.in

12	Name of the project group Members	
1.Group leader and Member		
Name: Mohammed Imranulla Khan USN No: 1CE18EC011		
Contact: No:9380644270		
Email ID: ziyaullakhan.m@gmail.com		
2.Member		
Name:		
USN No: 1CE18EC017		
Contact No: 6363357561		
Email ID: sagarsash9@gmail.com		
3.Member		
Name: Gangadhar P Upar		
USN No: 1CE18EC005		
Contact No: 9513154306		
Email ID: pgangadhar599@gmail.com		
4.Member		
Name:		
USN No:		
Contact No:		
Email ID:		
13	Processing Fee details	Bank Name: Branch: DD number with date: OR Cheque no with date:
14	Scope/Object of the project	Segregator and monitoring system” sorts wastes into three different categories i. metal, ii. dry(plastic, glass, paper) iii. the wet (organic) waste.

15	Methodology of work: (Including diagram flow chart And design calculations)	<ol style="list-style-type: none">1. Drop the waste into the pipe.2. IR sensor will sense the waste if (sensor =0) and it will rest on the bottom plate i., Object detected3. Now the sensor on the plate will sense the waste as in 3 categories Metallic or wet.4.If (Inductive sensor == 1) then the waste is metallic then the mechanism will bring the metal collecting bin below the pipe and the servo will let the waste fall into the bin.5. Similarly, If (The Rain drop sensor <700) then the waste is wet waste then the mechanism will bring the wet collecting bin below the pipe and the servo will let the waste fall into the bin.6. If ((Inductive sensor == 0) && (The Rain drop sensor >700)) the sensor does not activate then the waste will be detected as dry waste.
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16	Expected Outcome of the project:	The Outcome of the project is to segregate Industrial waste mainly, like metal which is found commonly in most of the industries and this can be done by the help of Inductive sensor which senses only metal. Other wastes are segregated as dry and wet waste with the help of IR sensor and Rain drop sensor.																						
17	Application of the Project:	To segregate the waste appropriately so that it can be processed accordingly instead of being dumped at the dumping yard.																						
18	Budget details with Materials required:	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="785 667 1482 701">Materials</th> </tr> <tr> <th data-bbox="785 701 1161 745"></th> <th data-bbox="1161 701 1482 745">Price</th> </tr> </thead> <tbody> <tr> <td data-bbox="785 745 1161 835">Components</td> <td data-bbox="1161 745 1482 835">6000</td> </tr> <tr> <td data-bbox="785 835 1161 1048">SMPS power supply (12v)</td> <td data-bbox="1161 835 1482 1048">1500</td> </tr> <tr> <td data-bbox="785 1048 1161 1104">IR sensor</td> <td data-bbox="1161 1048 1482 1104">500</td> </tr> <tr> <td data-bbox="785 1104 1161 1149">Rain Drop sensor</td> <td data-bbox="1161 1104 1482 1149">700</td> </tr> <tr> <td data-bbox="785 1149 1161 1193">Inductive sensor</td> <td data-bbox="1161 1149 1482 1193">1200</td> </tr> <tr> <td data-bbox="785 1193 1161 1238">Containers</td> <td data-bbox="1161 1193 1482 1238">500</td> </tr> <tr> <td data-bbox="785 1238 1161 1283">Stepper motor</td> <td data-bbox="1161 1238 1482 1283">1100</td> </tr> <tr> <td data-bbox="785 1283 1161 1373">Miscellaneous</td> <td data-bbox="1161 1283 1482 1373">3000</td> </tr> <tr> <td data-bbox="785 1373 1161 1417">Total</td> <td data-bbox="1161 1373 1482 1417">14500</td> </tr> </tbody> </table>	Materials			Price	Components	6000	SMPS power supply (12v)	1500	IR sensor	500	Rain Drop sensor	700	Inductive sensor	1200	Containers	500	Stepper motor	1100	Miscellaneous	3000	Total	14500
Materials																								
	Price																							
Components	6000																							
SMPS power supply (12v)	1500																							
IR sensor	500																							
Rain Drop sensor	700																							
Inductive sensor	1200																							
Containers	500																							
Stepper motor	1100																							
Miscellaneous	3000																							
Total	14500																							

19	Date of commencement of the project:	20-12-2021
20	Probable date of completion of the project:	20-05-2022
21	Duration of project work:	6
22	Per chart for completion of the project in said duration as per planned activities:	


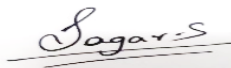
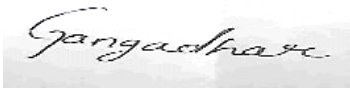
Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our' knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional center and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional center and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL. No	Name of the student	Signature with date
01	Mohammed Imranulla Khan	
02	Sagar S	
03	Gangadhar P UPAR	



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU -FA /2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 41 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under "Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2021-22.

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes
Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling
 - ✓ Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.
6. University will not accept the Project proposals of following categories.

Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

- i) Principal -Chairman
- ii) HoD of the respective Branch - Member
- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
- iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).

9. All the selected projects would be invited for State Level Project Exhibition at VTU.

10. Selected project team along with the guide shall participate in the exhibition.

11. During the state level project exhibition “**Best Project of the Year**” will be awarded.

The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR

JS *K.D.S.*

To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi




Copy FWCs to:

- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
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VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	City engineering college	
04	Branch:	Civil	
05	Project Title:	TRAFFIC CONGESTION AND POSSIBLE SOLUTIONS IN URBAN TRANSPORTATION SYSTEM	
06	Project Discipline:	Civil	
07	Principal	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
09	Project Guide	Name:	Jayanth K S
		Contact No:	9964458944
		Email id:	jayanthkatte@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

Name of project group Members				
1.Group leader and Member				
Name: Punith kumar s				
USN No. : 1CE16CV032				
Contact No: 7259281814				
Email id: punithreddy2345@gmail.com				
2.Member				
Name: Rashmi k				
USN No. : 1CE17CV026				
Contact No: 9945735269				
Email id: rashmigowda0994@gmail.com				
3.Member				
Name: George Genes Assey				
USN No. : 1CE18CV400				
Contact No: 7829142089				
Email id: mrgeges@gmail.com				
4.Member				
Name:	Passport size photo			
USN No. :				
Contact No:				
Email id:				
5.Member(If any)				
Name:	Passport size photo			
USN No. :				
Contact No:				
Email id:				
13	<table border="1"> <tr> <td rowspan="2">Processing Fee Details</td> <td>Bank name :</td> </tr> <tr> <td>Branch :</td> </tr> </table>	Processing Fee Details	Bank name :	Branch :
Processing Fee Details	Bank name :			
	Branch :			

		DD number with date : OR Cheque no with date :
14	Scope / Objectives of the project:	<ul style="list-style-type: none">• To evaluating road network, parking facilities and pedestrian facilities in relation to congestion (identifying the congestion and mobility problem)• To give solution that is capable of predicting traffic volumes in current and future infrastructure network.• To propose long term solution for traffic congestion.

15	Methodology of work: (Including diagram, flow chart and design calculations)	<ol style="list-style-type: none">1. This is generated on the basis of primary and secondary data. The first step selecting the indicator to highlight the congestion that is the flow diagram, and snapping the images.2. To carry out primary data the data will be collected through survey method-counting the vehicles movements from 9.30a.m to 10.30a.m comprising a total no of vehicles, standing on the different meeting points of study area to show volume of movements.3. Snapping the images at peak hour and also non-peak hour to show comparison of different situation on different time. To know the actual situation and get possible suggestions about the problem no of listed questions will be asked among 60 peoples randomly which are pedestrians, bus drivers, vehicle owners, and retailers since 4 days.4. The secondary data will be collected from journals available on internet, R.T.O Office, Bus Association Office about vehicles number, Bus number are running on city road for daily purpose. All the methods are carried out in systematic way first data collection, data processing, data analysis, and last presenting the data in a right way.
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		<pre> graph LR Methodology --> Primary_data[Primary data] Methodology --> Secondary_data[Secondary data] Primary_data --> Road_survey["Road survey (INVENTORY SURVEY)"] Secondary_data --> Journals[journals] Secondary_data --> RTO_office["RTO office BUS admin office"] </pre>
<p>16</p>	<p>Expected Outcome of the project:</p>	<ol style="list-style-type: none"> 1. Clear the footpath The enforced concentration of small shop along the foot path shorting the main road. So clearing the footpath will give a solution. Regular monitoring by administration will prevent such kind of occupancy. 2. Proper parking system Set up one or two multistory building and arrange a vacant place will give the solution of random parking and parking congestion. 3. Separate market area should be constructed ,so that the road is cleared from stopping of vehicles. 4. Selective transport mode At the office hour. Public Transport should be encouraged instead of Private Vehicles. 5. Minimum bus stoppage should be along the main bus route to avoid congestion. 6. Use of Metro should be encouraged. which helps in controlling the traffic and less pollution is caused. 7. The divider can be Extended as the vehicles , are restricted to take a U turn , thus congestion can be avoided.

17	Application of the project :	<ul style="list-style-type: none">• This system helps in improving the efficiency of congested highways. The roadways are configured with the help of movable barriers that help in changing the vehicle lanes based on traffic demand. This helps in a real-time increase of the road capacity which will help in reducing the road congestion.• Optimizing traffic flow on arterial and freeway networks. reducing congestion within and between cities. co-ordinating agency traffic/transit operations. managing incidents, reducing delays and adverse effects of incidents and congestion, weather, roadwork, special events, emergencies and disaster situations.
18	Budget details with Materials required:	Transportation and food charges, Labor charges for activities Total sum amount = 8000/-

19	Date of commencement of the Project :	04/04/2022
20	Probable date of completion of the project :	28/06/2022
21	Duration of project work :	3 months
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/Week	2 Month/Week	3 Month/Week
01	Literaturereview			
02	Planning/ Designing			
03	Assembly/ Fabricationwork			
04	Final Testing			
05	Result & Calculation/ Conclusion			
06	Preparation of Report & Submission			



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)

'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU -FA /2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 4.1 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

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- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
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10. Selected project team along with the guide shall participate in the exhibition.

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The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR

JS *10.9.20*

To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi

Copy FWCs to:





- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project



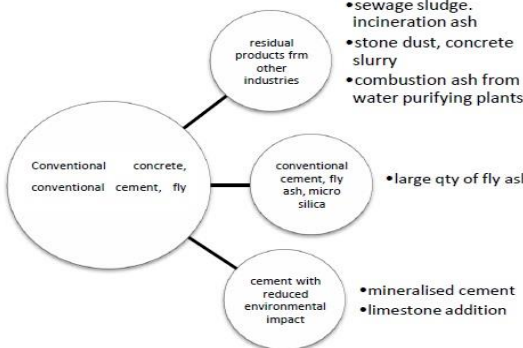
Visvesvaraya Technological University
“JnanaSangama”
Belagavi: 590018
Karnataka, India.
Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	City engineering college	
04	Branch:	Civil	
05	Project Title:	ECO FRIENDLY ALTERNATIVES TO TRADITIONAL CONCRETE.	
06	Project Discipline:	Civil	
07	Principal	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr. Thippeswamy HN
		Contact No:	9844349425
		Email id:	principal@cityengineeringcollege.ac.in
09	Project Guide	Name:	Manjunath KE
		Contact No:	7259897112
		Email id:	Manju1994@cityengineeringcollege.ac.in
11	Project Committee coordinator (Identified by the college):	Name:	Dr.Sowmya Naik P T
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in

12	Name of project group Members	
	1.Group leader and Member	
	Name: Jagadish v	
	USN No. :1ce18cv011	
	Contact No:8123440116	
	Email id: jagadeeshroayl47@gmail.com	
	2.Member	
	Name: Mahadev Prasad S A	
	USN No. :1ce18cv005	
	Contact No:7760379919	
	Email id: mahadevprasad0703@gmail.com	
	3.Member	
	Name: Sangamesh	
	USN No. :1ce17cv028	
	Contact No:9113002309	
	Email id: sangamesdevani39@gmail.com	
	4.Member	
Name: Owais Ahmad Khanday		
USN No. :1ce18cv006		
Contact No:7006641613		
Email id: owaisahmadkhanday@gmail.com		
13	Processing Fee Details	Bank name:
		Branch:

		DD number with date: OR Cheque no with date:
14	Scope / Objectives of the project:	<ul style="list-style-type: none"> • To reduce greenhouse gas emissions, i.e., carbon dioxide emissions from the cement industry. • To reduce the usage of pure resources such as limestone, clay, shale, natural river sand, natural rocks that are being used to making conventional concrete. • Also, reduce the wastage materials in the concrete leading to air, land and water pollution. • It has sufficient strength and durability in comparison with standard concrete. • Also has distinctive resistance to corrosion and also effectively prevents acid rain. • Buildings made of green concrete use less energy because they are more resistant to temperature changes, thus saving heating and cooling costs.

<p>15</p>	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	 <p>Fig. 1 A chart depicting the methods to develop green concrete</p> <p>The following methodology was framed to incorporate all the aspects of the proposed thesis work:</p> <ul style="list-style-type: none"> • To collect and prepare the Demolition materials & Residual materials • Binder materials as Fly ash & Portland pozzolana cement Sieve analysis and Grading of aggregates • Preparation of green concrete at different proportions • Preparation of cubes and Testing the compressive strength of cubes at 7 days and 28 days correspondingly.
<p>16</p>	<p>Expected Outcome of the project:</p>	<p>The conventional natural coarse aggregate used in concrete can be replaced with green concrete partially mixed with fly ash to attain the essential compressive strength.</p> <ul style="list-style-type: none"> • The outcome of compressive strength tests for two mixes (M7.5 and M15) subsequent to 7 days and 28 days, correspondingly, with different fly ash percentage of 15%, 20%, and 25% were taken and recorded. • The use of fly ash in place of PPC must be limited to some percentage as the green concrete has to keep with certain qualities. • The increased usage of green aggregate in place cement concrete will lead to reduced cement usage and less coarse aggregate utilization in the extended run. • The use of minimum coarse aggregate/grit may lead to minimum power consumption. • The extended usage of green concrete will help in decreasing the percentage greenhouse gases and carbon dioxide thus, it is having many environmental benefits,

17	Application of the project:	<ul style="list-style-type: none"> • It is used in the construction of bridges, dams, retaining walls, etc. • Green concrete is widely used in the building construction • It is used in the construction of column • Green concrete can be used in the road construction
18	Budget details with Materials required:	Cement: Fine aggregate: Coarse Aggregate: Glass powder Brick powder Fly ash Transportation Sum amount 8000

19	Date of commencement of the Project:	02/04/2022
20	Probable date of completion of the project:	01/07/2022
21	Duration of project work:	3 months
22	Pert chart for completion of the project in said duration as perplanned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week
01	Literature review			
02	Planning/ Designing			
03	Assembly/ Fabrication work			
04	Final Testing			
05	Result & Calculation/ Conclusion			
06	Preparation of Report & Submission			



Visvesvaraya Technological University
 “JnanaSangama”
 Belagavi: 590018
 Karnataka, India.
 Tele: 0831-2498225 ,2405454

VTU Sponsored Student Project Proposal Format

01	Academic Year :	2021-2022	
02	Semester :	8th	
03	Name of the College :	CITY ENGINEERING COLLEGE	
04	Branch:	COMPUTER SCIENCE AND ENGINEERING	
05	Project Title:	SMART FARMING AND COTTON LEAF DISEASE DETECTION USING AI.	
06	Project Discipline:	Computer Science	
07	Principal	Name:	Dr Thippeswamy HN
		Contact No:	9844344925
		Email id:	principal@cityengineeringcollege.ac.in
08	HOD	Name:	Dr Sowmya Naik PT
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in
09	Project Guide	Name:	Dr AN NANDAKUMAR
		Contact No:	9945833977
		Email id:	anandakumar53@cityengineeringcollege.ac.in
10	Project Co-Guide(If any)	Name:	NA
		Contact No:	NA
		Email id:	NA
11	Project Committee coordinator (Identified by the college) :	Name:	Dr Sowmya Naik PT
		Contact No:	9902889898
		Email id:	sowmyacec@cityengineeringcollege.ac.in

Name of project group Members

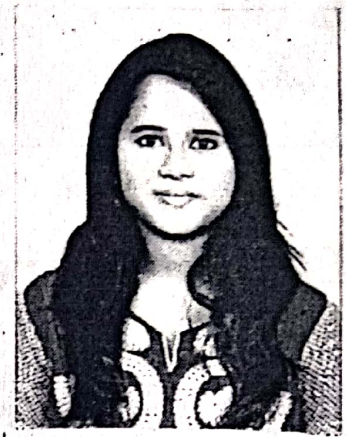
1. Group leader and Member

Name: NAMRATHA S

USN No. : ICE18CS046

Contact No: 8861887794

Email id: namrathas1207@gmail.com



2. Member

Name: USHA N

USN No. : ICE18CS092

Contact No: 9148187626

Email id: ushaprasadn2000@gmail.com



3. Member

Name: VINUTH S

USN No. : ICE18CS101

Contact No: 9743880882

Email id: vinuthgowda85@gmail.com



4. Member

Name:

USN No. :

Contact No:

Email id:

Passport size photo

5. Member (If any)

Name:

USN No. :

Contact No:

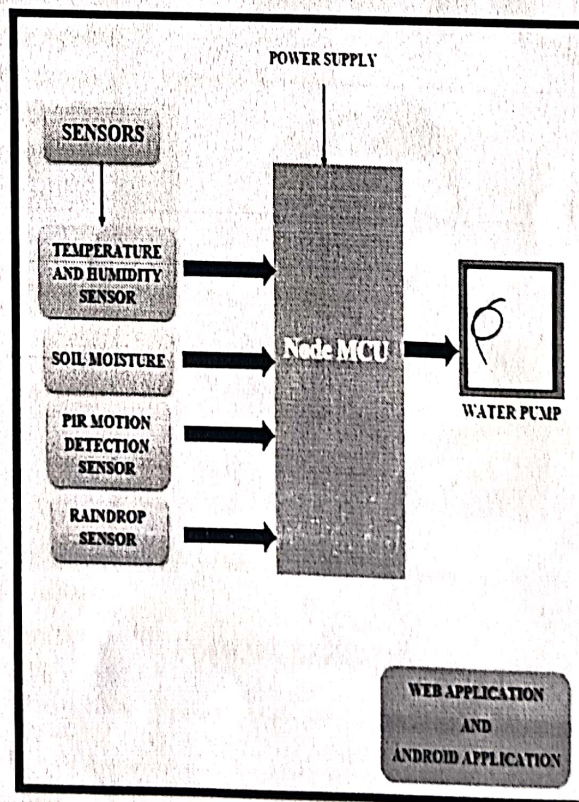
Email id:

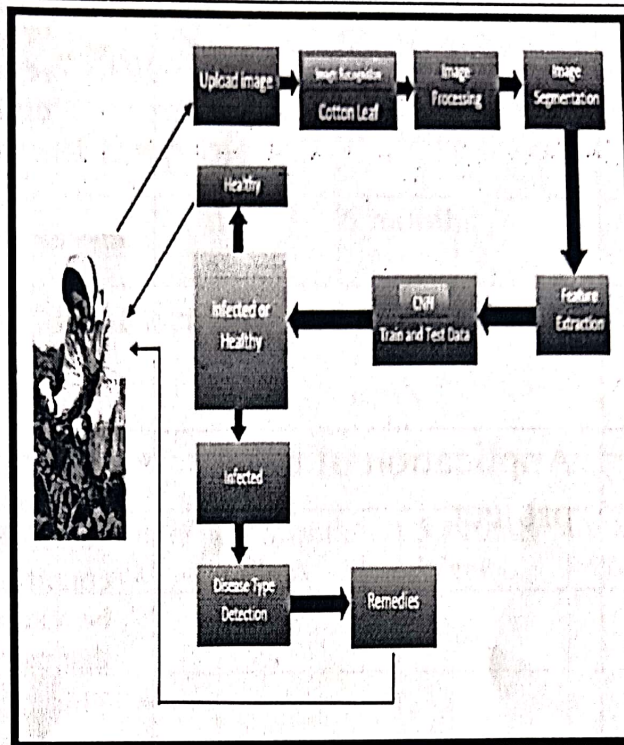
Passport size photo

13	Processing Fee Details	Bank name : Branch : DD number with date : OR Cheque no with date :
14	Scope / Objectives of the project:	To provide efficient decision support system using sensor network which handle different activities of farm and gives useful information related to farm like soil moisture, temperature, humidity content and animal intrusion. So, we have proposed an IOT-based farmland monitoring and control system which consists of sensors and android app with cloud technology. We have developed a smart farming application that focuses to solve the issues and suggests the farmers about the traditional farming methods based on soil moisture and control agriculture tools. Water level is managed by farmers manually using mobile application which is comfortable to farmers. This system also includes cotton leaf disease detection which is based on the infected images of cotton leaf. Images of the infected plants are processed using image segmentation techniques to detect infected parts of the leaf. This helps the farmers in improving the agriculture production.

15 Methodology of work:
(Including diagram, flow chart and design calculations)

- We have proposed a hardware system which integrates with software that consists of the sensors and an android application based on IoT. The working of our proposed system is interfaced with IoT and android application. It is classified into three divisions such as system sensors, data collection and analysis and android application which works together to solve the issues in the agriculture field through smart farming. System sensors are used to detect the characteristics of soil. The soil moisture, temperature, humidity, water level, rain detector and animal intrusion are monitored using sensors in the farmland. Android application remotely monitor and control irrigation system as farmer needs.
- This system used image processing technique for disease detection. The user needs to upload the cotton plant leaf image. The system can preprocess the uploaded image and then apply CNN technique. By using CNN technique system can test the image with trained dataset and extract the features.





The above diagrams are the flow diagram of smart farming and cotton leaf disease detection using AI.

16 Expected Outcome of the project:

- IoT based smart farming system that is very helpful for farmers since over as well as less irrigation is not good for farming. Threshold values for climatic conditions like humidity, temperature, moisture can be viewed based on the environmental conditions of that particular region.
- A web-based system has been successfully implemented for crop disease detection for cotton leaves using Convolutional Neural Network. Two diseases which are Leaf sucking and Chewing pests and Bacterial Blight are successfully being detected by system with training accuracy 98% using training dataset of 1951 images for each disease. Healthy leaf image set of 324 images is also used for detecting healthy images. This System successfully takes image input from user and provides output in the form of disease detected, preventive measures, corrective measures, to suggest the farmer. System can be extended to any other crops having availability of enough large dataset for that crop. Number of other diseases can be included for detection. System also can implement hardware using IOT for Image capturing in fields. The Web interface can also

		<p>involve a forum for formers to have discussions regarding the current trends they are facing in different diseases.</p>
17	<p>Application of the project:</p>	<ul style="list-style-type: none"> • IoT based smart farming system that is very helpful for farmers since over as well as less irrigation is not good for farming. Threshold values for climatic conditions like humidity, temperature, moisture can be viewed based on the environmental conditions of that particular region. • This System successfully takes image input from user and provides output in the form of disease detected, preventive measures, corrective measures, to suggest the farmer. System can be extended to any other crops having availability of enough large dataset for that crop. Number of other diseases can be included for detection.
18	<p>Budget details with Materials required:</p>	<p>Sensors cost Transportation and Food charges Labor charges Total sum amount = 8000/-</p>

19	Date of commencement of the Project :	05/01/2022
20	Probable date of completion of the project :	28/06/2022
21	Duration of project work :	6 months
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						

Handwritten signature and date: 01/12/22

Handwritten signature and date: 01/12/22

Handwritten signature and date: 01/12/22

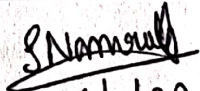
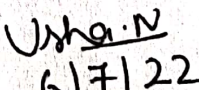

Handwritten signature and date: 01/12/22

DECLARATION BY THE STUDENTS

We, the project group members hereby declare that the details enclosed in the project proposal are true and correct to the best of our knowledge. We undertake to inform VTU, of any changes there in the project title, students name will be intimated immediately. In case, any of the above information is found to be false or untrue or misleading, we are aware that we may be held liable for it.

We are aware that the project group has to exhibit / demonstrate the project for evaluation in the VTU Regional centre and for exhibition at VTU, Belagavi. If the project group fails to attend the evaluation in Regional centre and for Exhibition in VTU Belagavi, the sponsored project amount will be returned back to VTU immediately

We also hereby, enclose the endorsement form to VTU, Belagavi.

SL.No	Name of the Student	Signature with date
01	Namuratha.S	 6/7/22
02	Usha.N	 6/7/22
03	Vinuth.S	 6/7/22
04		
05		

ENDORSEMENT

(Endorsement to be taken in the institution on Department Letter head)

This is to certify that 1] .Namyaama .S

2] .Usha .N..

3] .Vinuth .S.

4]

Are bonafide students of Department in COMPUTER SCIENCE AND ENGINEERING of our institution. If the project proposal submitted by these students under VTU Sponsored Student Project Proposal is selected by VTU, we will provide the required laboratory / Computer / infrastructure support in our college / Institution. Further we also take necessary steps that the project group will exhibit / demonstrate their project in the Regional centre and for exhibition at VTU, Belagavi. If the student group fails to attend the evaluation in Regional centre and exhibition at VTU Belagavi, the supported project amount will be returned back to VTU immediately.

Signature of Project Guide with date	Signature of HOD with Seal and date	Signature of the Principal with Seal and date
<i>A. N. Nanda Kumar</i> 5/7/22	.	
Name: A. N. NANDA KUMAR	Name:	Name:



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

("ವಿ ಬಿ ಯುಟು ಅಧಿನಿಯಮ ೧೯೯೪" ರ ಅಡಿಯಲ್ಲಿ ಕರ್ನಾಟಕ ಸರ್ಕಾರದಿಂದ ಸ್ಥಾಪಿತವಾದ ರಾಜ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ)
'ಜ್ಞಾನ ಸಂಗಮ', ಬೆಳಗಾವಿ - ೫೯೦ ೦೧೮ ಕರ್ನಾಟಕ ರಾಜ್ಯ

Visvesvaraya Technological University

(State University Government of Karnataka Established as per VTU Act 1994)

"Jnana Sangama", Belagavi - 590 018, Karnataka

Prof. A S. Deshpande B.E., M.Tech., Ph.D.

REGISTRAR

Phone : (0831) 2498100

Fax : (0831) 2405467

Ref: VTU/BGM/Aca/A-12/VTU -FA /2021-22/ 1366

Date : 17 JUN 2022

CIRCULAR

Sub: Financial Assistance for Innovative Projects for Final Year under Graduate students for the year 2021-22 – reg...

Ref: 1. Executive Resolution No. 4.1 of 27-11-2017

2. Hon'ble Vice-Chancellor's Approval dated : 19-5-22

This is with reference to the above. The project proposals are invited from the final year students studying in all the affiliated, autonomous, constituent engineering colleges of VTU for award of financial assistance under "Financial Assistance for the Final Year Student Innovative Projects Scheme of VTU" for the year 2021-22.

The following are the salient features of the proposed financial assistance:

1. The Financial Assistance shall be for the projects of Under Graduate final year students only.
2. Sum of Rs. 5,000 (Rupees Five thousand only) per project with a maximum of two projects per branch/program shall be sanctioned and given by the University.
3. The Financial Assistance shall be available for all branches at Under Graduate level offered by the College.
4. Best two innovative projects (in each branch) shall be chosen by the Selection Committee at respective College.
5. Committee may consider the projects proposal for selection the on following topics/themes
Energy conversion/Harvesting, Environment safety methods, Automobile/ Machineries/ Mechanics, Agriculture equipment/Advancement in Agriculture, Water resource management/ Purification/Recycle, Waste management/Disposal, User friendly devices for aged or physically challenged people, Low-cost modified transport system for village / rural / disabled community, Technologies relevant in the aftermath of Covid-19, Low-cost, eco-friendly potable water filtration, Domestic bio / non-bio waste treatment / recycling
✓ Selection Committee can consider any other good proposal beyond these areas, on the basis of merit.
6. University will not accept the Project proposals of following categories.

Computer simulation based/Programming Based, Literature surveys / Data collection based/ Case study projects, Compilation of Internet downloaded information, Repetition of previous VTU Projects, Without Physical modal, Non-scientific projects.

7. Each College shall constitute the Selection Committee and the composition shall be as follows.

- i) Principal -Chairman
- ii) HoD of the respective Branch - Member
- iii) Two subject experts / Senior Professors/ Industries as deemed for by the Institution in each branch -Members
- iv) VTU Nominee to supervise the entire process – Member

8. Selected projects report shall be submitted in the prescribed format (Annexure -1).

9. All the selected projects would be invited for State Level Project Exhibition at VTU.

10. Selected project team along with the guide shall participate in the exhibition.

11. During the state level project exhibition “Best Project of the Year” will be awarded.

The details of selected projects along with proceedings shall be submitted to the undersigned on or before 8-7-2022 in the following format.

***Documents to be attached along with Annexure -I**

a) Affiliation notification issued by VTU for the year 2021-2022

b) Proceedings of the Committee for selection of Projects.

12. The proposal received after the last date will not be considered.


REGISTRAR
JS / 10.9.20

To,

The Principals of all the affiliated/Autonomous/Constituent Colleges of VTU, Belagavi




Copy FWCs to:

- 1. The Secretary to VC, VTU Belagavi, for information.
- 2. The Registrar (Evaluation), VTU Belagavi, for information and needful
- 3. The Finance Officer, VTU, Belagavi
- 4. The In-charge Regional Directors (Bangalore, Belagavi Mysore & Kalaburgi) with a request to circulate the same to all colleges
- 5. The Concerned Case-worker of Academic Section, VTU, Belagavi
- 6. CNC to Upload on VTU website.
- 7. Office copy : File No. 2021-2022 Financial Assistance for Innovation UG Project

	Visvesvaraya Technological University “JnanaSangama” Belagavi: 590018 Karnataka, India. Tele: 0831-2498225 ,2405454
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VTU Sponsored Student Project Proposal Format

01	Academic Year :	2022	
02	Semester :	8 th Semester	
03	Name of the College :	City Engineering College	
04	Branch:	Computer Science	
05	Project Title:	A Smart Wearable Device using IOT and AI for Assisting Blind and Retarded People	
06	Project Discipline:		
07	Principal	Name:	Dr. THIPPESWAMY HN
		Contact No:	
		Email id:	
08	HOD	Name:	Dr. SOWMYA NAIK
		Contact No:	9902889898
		Email id:	
09	Project Guide	Name:	Dr. S.VAGDEVI
		Contact No:	8277343032
		Email id:	
10	Project Co-Guide(If any)	Name:	
		Contact No:	
		Email id:	
11	Project Committee coordinator (Identified by the college) :	Name:	
		Contact No:	
		Email id:	

12	Name of project group Members	
	1.Group leader and Member	
	Name: DK BHOOMIKA	
	USN No. : 1CE16CS029	
	Contact No: 8660244214	
	Email id: dkb.5398@gmail.com	
	2.Member	
	Name: NANDIKA MJ	Passport size photo
	USN No. : 1CE17CS072	
	Contact No: 8494934847	
	Email id: mjnandika@gmail.com	
	3.Member	
	Name: POKALA SESA SAI POOJA	
	USN No. : 1CE17CS082	
	Contact No: 8217897716	
	Email id: pokalapooja@gmail.com	
	4.Member	
Name: BELLARY NITIN PRASAD		
USN No. : 1CE17CS019		
Contact No: 9945031209		
Email id: nitinprasad88@gmail.com		
5.Member(If any)		
Name: --	Passport size photo	
USN No. : --		
Contact No: --		
Email id: --		
13	Processing Fee Details	Bank name :
		Branch :
		DD number with date :
		OR
		Cheque no with date :

14	Scope / Objectives of the project:	<ul style="list-style-type: none">• We designed stick to detect obstacles and is able to recognize and buzz loud accordingly, depending it is stair, hole, puddle or fire.• An ultrasonic sensor and lidar is used to transmit information to the blind. A buzzer is attached with the Stick which acts as a warning tone in order to make it user friendly.
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<p>15</p>	<p>Methodology of work: (Including diagram, flow chart and design calculations)</p>	
<p>16</p>	<p>Expected Outcome of the project:</p>	<p>It Gives a suitable respect message through audio empowering blind to move twice his normal speed and it helps the visually impaired to guide the user to respective destination and avoiding to collide with obstacles</p>
<p>17</p>	<p>Application of the project :</p>	<p>The main objective is to provide an application for blind people to detect obstacles in various directions, detecting movable or non-movable objects on the road to make free to walk</p>

18	Budget details with Materials required:	Total cost of project is Rs 25,220/-	
		Raspberry pi 4 – 4gb ram	Rs 7000/-
		Memory Card 32GB	Rs 1200/-
		5V Power Cord	Rs 200/-
		Mini HDMI 2vga Cabel	Rs 400/-
		Lidar	Rs 4500
		Ultrasonic Sensor (x3)	Rs 450/-
		Water Sensor	Rs 400/-
		Vibration Sensor	Rs 120/-
		GPS	Rs 800/-
		Gyro Sensor	Rs 350/-
		Dht11	Rs 80/-
		Stick and Hat	Rs 650/-
		Web Cam	Rs 3000/-
		Pi Camera	Rs 1800/-
		Arduino UNO	Rs 450/-
		Wires	Rs 100/-
Soldering Kit	Rs 100/-		
Earphones	Rs 200/-		

19	Date of commencement of the Project :	01/11/2021
20	Probable date of completion of the project :	
21	Duration of project work :	
22	Pert chart for completion of the project in said duration as per planned activities:	

Sl.No	Activities Planned	1 Month/ Week	2 Month/ Week	3 Month/ Week	4 Month/ Week	5 Month/ Week	6 Month/ Week
01	Literature review						
02	Planning/ Designing						
03	Assembly/ Fabrication work						
04	Final Testing						
05	Result & Calculation/ Conclusion						
06	Preparation of Report & Submission						



CITY

ENGINEERING COLLEGE

Affiliated to Visvesvaraya Technological University, Belagavi.
Recognised by Govt. of Karnataka, Approved by UGC, AICTE, New Delhi.



NAAC ACCREDITED

Tax Invoice

LISP NAME : City Engineering College

ADDRESS :

Off Kanakpura Main Road, Near Gokulam Apartments
.Doddakalasangra, Bengaluru, Karnataka, India, 560062

EMAIL : drsbalaji@gmail.com / balaji@cityengineeringcollege.ac.in

Place of Supply: Maharashtra

San Prints Private Limited

167, Raja Industrial Estate, P. K. Road,
Mulund West, Mumbai - 400 080.

Invoice No : 7/21-22

Invoice Date : 07th JULY 2021

Assessment Name : NBE EXAM

Assessment Date: 18th,19th,20th,21st,22nd MAR
2021

Description	HSN/SAC Code	TOTAL (INR)
Expenses towards conducting NBE EXAM on 18th,19th,20th,21st,22nd MAR 2021	998599	63700
Total		63700
IGST@18%		11466
Total		75166

PAN: AAATJ1100G

Beneficiary Name: CITY ENGINEERING COLLEGE UNIVERSITY FEES A/C

Account No: 896110210000004

IFSC: BKID0008961

GST No: 29AAATJ1100G1Z7

Sanprints PAN #: AAICS0770L

Sanprints GST #: 27AAICS0770L1Z0

Signature of Center Head

Signature of ROM

[Handwritten Signature]
7/21-21

Doddakalasangra, off Kanakapura Main Road, Bangalore 560 061.

Email: cityengineering123@gmail.com Website: www.cityengineeringcollege.ac.in

Ph: 080 - 22560212/214/215. Telefax: 080 2256 0214. Admissions Mob: 02428 02724 / 73400 33000