



Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects/ endowments in the institution during the last five years (INR in Lakhs)

Response: 1.925 Lakhs

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects/ endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
0.575	0.575	0.150	0.350	0.275
File Description		Document		
Upload supporting document		View Document		
Institutional data in the prescribed format		View Document		

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

The institution instils the spirit of innovation and unquenchable thirst for knowledge in the young minds through academic, research and extension activities. The main objective of the Eco-System for innovation is to promote creativity and novelty among students. Faculty members facilitate development of innovative systems, processes, products, technologies and services for the benefit of the society. The Indian Knowledge System (IKS) focuses on promoting innovation and creativity within India. It emphasizes raising awareness about Intellectual Property Rights (IPR), ensuring that creators understand how to protect their ideas and innovations.



Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are well organized. Intellectual property rights (IPR) initiation has been defined using ideas, inventions, and creative expressions based on which there is a public willingness to bestow the status of property. R&D Cell was established with a vision to transfer technology from the available resource to an innovative end point.

RESEARCH LABORATORIES:

Computer Science & Engineering:

The Research Lab is located at A-Block in first floor.

- Open source software like OpenCog, AForge.NET, OpenCV, TREX, ROS, YARP, C, C++, JAVA, Rational Rose, Visual Basic, Arduino Trainer Kit, Raspberry pi and Embedded IoT Applications are used for research projects.

Civil Engineering:

A compression Testing Machine (CTM) at Concrete Laboratory is used for testing the compressive strength of a material.

Electrical and Electronics Engineering:

The Research Lab is located at B-Block - First Floor in the Renewable Energy System laboratory.

- The laboratory can be used to evaluate the performance and efficiency of renewable energy systems.
- Students can test prototype renewable energy systems to assess their feasibility, reliability, and scalability before full-scale deployment.
- The laboratory can be used to study the integration of renewable energy systems with existing energy infrastructure.

Mechanical Engineering:

The Research Lab is located at C-Block, First Floor in the Mechatronics Laboratory.

- Setting up Lab Tech Multi Process Station equipment with advanced control system like pressure, temperature and flow sensor are used to measure.
- The temperature sensor and FHP pump for water circulation is attached with a storage tank of 5 liter capacity.
- The latest power driver is used to drive the pump & heater, electronic signal



conditioner and level flow indicator are provided.

Centre for Innovation and Entrepreneurship (CIE):

CIE Established in 2010, the Cell encourages students to work on innovative projects. Real time projects in various domains like software application development to core engineering solutions as Energy Audit, Solar still for distilled water production. Through CIE, KCET has entered into a MoU with TCS iON for conducting Online Examinations like GATE JIPMER, using the vast IT sector. CIE has organised various programmes for Govt. of India & Govt. of Tamil Nadu in a short span of time. Especially, 67 days of programme has been conducted for 75 beneficiaries from 7 districts. To develop a strong network of entrepreneurs, venture capitalists, senior professionals directly or indirectly associated with entrepreneurship.

3.2.2 Number of workshops / seminars / conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 77

3.2.2 Total number of workshops / seminars / conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
20	20	07	16	14
File Description			Document	
Upload supporting document			View Document	
Institutional data in the prescribed format			View Document	

3.3 Research Publications and Awards

3.3.1 Number of research papers published per teacher in the Journals as notified on UGC care list during the last five years

Response: 0.45



3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
03	11	12	08	09
File Description			Document	
Provide Links for any other relevant document to support the claim (if any)			View Document	
Link to the uploaded papers, the first page/full paper (with author and affiliation details) on the institutional website			View Document	
Link re-directing to journal source-cite website in case of digital journals			View Document	
Links to the paper published in journals listed in UGC CARE list			View Document	
Institutional data in the prescribed format			View Document	

3.3.2 Number of books and chapters in edited volumes / books published and papers published in national/ international conference proceedings per teacher during last five years

Response: 0.28

3.3.2.1 Total number of books and chapters in edited volumes /books published and papers in national/ international conference proceedings year wise during last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
05	06	03	11	02
File Description			Document	
Provide Links for any other relevant document to			-	



support the claim (if any)	
List of chapter/book along with the links redirecting to the source website.	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighbourhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

Krishnasamy College of Engineering and Technology (KCET) is an active participant in conducting various holistic extension activities through our students to the neighborhood community. KCET has the following active clubs such as NSS, NSO and YRC to nurture and create the social awareness and holistic development among the mankind

National Service Scheme (NSS):

National Service Scheme (NSS) was introduced at our institution in the year of 2005 with the primary objective of developing the personality and character of the students through voluntary community service. 'Education Through Service' is the purpose of NSS. The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi. Very appropriately the motto of NSS is "NOT ME, BUT YOU".

Youth Red Cross (YRC):

Youth represents a substantial part of the membership of Red Cross for its Humanitarian commitment. Young volunteers can make a significant contribution to meet the needs of the most vulnerable people within their local communities through Red Cross Youth programme. This has been designed to involve young people as much as possible in the



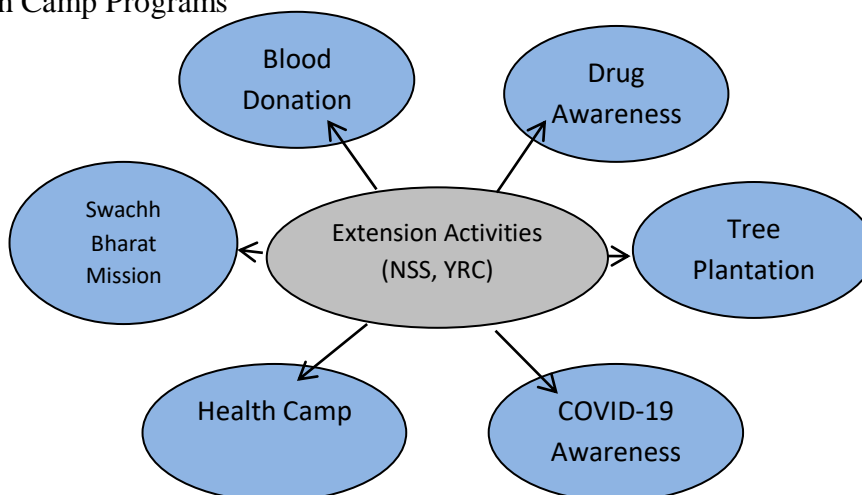
movement not only as workers and also as beneficiaries.

In KCET the YRC Committee is developed to satisfy the following principles:

- Protection of Health & Life
- Service to Sick and Suffering
- Promotion of National and International Friendship, to develop mental and moral capacities of the Youth

In KCET, the following programs are conducted to prove social responsibilities of youth by creating awareness of diseases among public.

- Drugs Awareness Program
- Collection of E-Waste
- Swachh Bharat Mission or Clean India Mission
- Eye Donation Awareness Campaign
- Tree Plantation
- Save Water Save people
- Cleaning Water Bodies
- CANCER Awareness Program
- Aids Awareness Program
- COVID-19 Awareness Program
- Blood Donation
- Health Camp Programs





File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

Response:

We at Krishnasamy college of Engineering and Technology have not only scored great accolades in academics alone, in the view to create the holistic environment, through extension activities our clubs are anticipating various social awareness programs in the name of extension activities. KCET had undertaken

the institution's ethical grounds with a view to promote community services through the setting-up wings of YRC and NSS with the active involvement of the students. KCET has also got proud moments when receiving recognition at the state level for its relentless effort for involving in servicing the neighborhood and outreach activities. The institution has never missed a chance of earning good will and recognition from the neighboring communities, villages and also from government for the extension and outreach activities that the institution has carried out through YRC and NSS. The goodwill and recognition that the institution earned for the extension and outreach programs are remarkable which has been accomplished by getting some work force of volunteering of the students and faculty members of the college. These outreach activities ensure that the students are sensitized about the social issues pertaining to the surroundings.

The outcome is that students become well rounded personalities apart from excelling in their own careers. By living with the villagers, the students tend to understand the dignity of labor, the difficulties faced by the village people and these in turn shape them into socially conscious citizens. Maximum percentage of the students has participated in the extension activities during the last five years.

Hence to groom students with such social responsibility and to work ethically, participation of students in extension and outreach activities are indispensable. KCET with its faculty



and student's support has contributed its maximum cooperation for the benefit of the neighboring regions via Institution's NSS unit through the activities like.

Benefits of Awards and Recognitions:

- ✓ Increase Motivation
- ✓ Show Appreciation
- ✓ Encourage Friendly Competition
- ✓ Create Positive Environment

As a result of this, our NSS Program officer Mr. V. Gunaseelan, Assistant Professor of Mathematics, received the Appreciation certificate for "SWATCH BHARAT 2.0" at Varakal pattu, Panchayath held on 28.10.2022. The former NSS Program officer of our Institution, Dr. E. Ramesh, Assistant Professor of English, received the Appreciation certificate for "Rendered valuable service on occasion of the Tamil Nadu Legislative Assembly Election-2021" held on 06.04.2021. An Appreciation to former NSS Program Mr. S. RAFI AHAMED Assistant Professor of Physics for his voluntary Blood Donation in service to suffering patient on 10.10.2018 by "Tamil Nadu State AIDS control Society and Tamil Nadu State Blood Transfusion Council".

File Description	Document
Upload Additional information	View document
Provide Link for Additional information	View document

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red Cross/YRC, etc..(Including the Program Such as Swachh Bharat, AIDS Awareness, Gender Issue, etc... And/or those organized in collaboration with industry, community and NGO) during the Last five year.

Response: 66

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years.



2022-2023	2021-2022	2020-2021	2019-2020	2018-2019
18	16	04	16	12
File Description			Document	
Provide Links for any other relevant document to support the claim (if any)			View Document	
Photographs and any other supporting document of relevance should have proper captions and dates.			View Document	
Institutional data in the prescribed format			View Document	
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency			View Document	

3.5 Collaboration

3.5.1 Number of functional MoUs / linkages with institutions / industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 88

File Description	Document
Summary of the functional MoUs / linkage / collaboration indicating start date, end date, nature of collaboration etc.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs / linkage / collaborations activity- wise and year-wise	View Document
Institutional data in the prescribed format	View Document