SELF STUDY REPORT

FOR

3rd CYCLE OF ACCREDITATION

KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION

ANAND NAGAR, KRISHNANKOIL

626126

www.kalasalingam.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

April 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Kalasalingam Academy of Research and Education (KARE) formerly Arulmigu Kalasalingam College of Engineering was established in 1984 by Kalvivallal Thiru. T. Kalasalingam, Founder Chairman who was a freedom fighter and philanthiropist. KARE is located at the pristine foothills of scenic Western Ghats of Southern Tamil Nadu at Krishnankoil, Virudhunagar District, TamilNadu and it is situated near the Thirumangalam-Kollam highway (NH 744) at a distance of 65 km from Madurai and 12 km from Srivilliputtur. KARE has the total land area of 163 acres, campus area of 1258475 m2 and total building area of 243938 m2. The college obtained the Deemed to be University status in 2006. The Institution has been serving society for thirty-eight long years and it caters to the needs of students from all walks of society. KARE offers 35 UG programmes, 20 PG programmes and 17 Ph.D. programmes. It is the first Institution in India to introduce a special B.Tech. programme in engineering for the differently able (speech and hearing impaired) students. The Institution has been re-accredited (second cycle) by NAAC with 'A' grade with a CGPA of 3.11 in 2015. Six UG programmes have been accredited by NBA under Tier-1. KARE participates in NIRF every year and KARE has been ranked 35 in University, 39 in Engineering and 50 in Overall categories in the year 2022. KARE got ABET accreditation for 11 of the B.Tech. programmes in 2020. It is to be noted that in India, KARE is the institution having the highest number of ABET accredited programmes. Based on the inspections by the Ministry of Human Resources Development, Government of India, KARE was ranked 7th in Technical Institutions/Universities (Residential) category for Swachh Campus Ranking 2018. AICTE awarded 3rd Prize for application of Indian Knowledge System (IKS) in maintaining the campus Clean and Smart in 2020.

Significant Achievements of KARE

- Times Higher Education (THE) – World University Ranking 2023 - 601- 800th Rank.

- THE - Subject Rating 2023 - Computer Science - 301 - 400th Rank.

- THE - Subject Rating 2023 - Engineering - 401 - 500th Rank.

- THE - Subject Rating 2023 - Physical Sciences - 401- 500th Rank.

- THE - Young University Ranking 2022 - 251 - 300th Rank.

- UI Greenmetric World University Ranking 2022 - 305th Rank at International Level.

- QS Asia University Ranking 2022 - 601 - 650th Rank.

- QS.I.GAUGE - Diamond Rated Institution.

- QS - E LEAD certified.

- ARIIA Ranking - 2021 - 6th Rank under – Private/Self-Financed & Technical University.

Vision

To be a Center of Excellence of International Repute in Education and Research

Mission

To Produce Technically Competent, Socially Committed Technocrats and Administrators through Quality Education and Research

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Situated in the pristine foothills of scenic Western Ghats with the sprawling beautiful campus in 163 Acres - a conducive environment for education.

- Semester system with fully flexible choice based credit system.

- Networking with industries/institutions for curriculum revision/updation.

- Effective teaching learning pedagogy with usage of ICT.

- Qualified, experienced and committed faculty.

- Transparent evaluation system and publication of results within 7 days from the last date of exam.

- Strong research culture with good research outcome with h-index 89, average scopus publications more than 500 per year.

- Semester abroad system for students.

- State of the art infrastructure facilities.

- International Research Center (IRC) with sophisticated instruments.

- Peerless ecosystem for Innovation and Entrepreneurship through IEDC (Innovation & Entrepreneurship Development Center).

- Vibrant environment for budding startups through incubation centers.

- Digitized library with more than 1 lakhs of books and e-content.

- Excellent placement records.

- Capacity development and skill enhancement programmes for students.

- Implementation of e-governance in Administration, Finance and Accounts, Students Admission and Support and Examinations.

- National and International recognitions.

- Sewage Treatment Plant with a capacity of 800 kld.

- Solar Power Capacity of 900kW installed in the campus which meets the 40% of the total electric consumption.

Institutional Weakness

- Non-government funding.

- Network of alumni.

- Foreign faculty members.

Institutional Opportunity

- Greater opportunities for development of industrial prototypes.

- Development of surrounding rural community.

- Better opportunities for interdisciplinary research and collaborative research with the research facilities created on the campus.

- Providing expertise and support to the Government of India initiatives such as Swachh Bharat, Make in India etc.

- Developing entrepreneurial skills due to the Incubation centres available on the campus.

- Exposure to International Academia and International collaboration for research.

Institutional Challenge

- To cope up with continuous rapid changes in higher education.

- Perception of the institution amongst the stakeholders remains a challenge.

- Locational disadvantage continues to offer challenges in the growth of the institution proportional to the initiatives taken.

- Attraction of more diversified industries/companies for placements, in-plant trainings and International students.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

KARE curriculum and syllabus are synergistically designed to meet the expectations of the global and local needs adopting all the guidelines of regulatory authorities. The continuous process of curriculum interventions takes place based on feedback from stakeholders and the industry current scenario. Outcome-Based Education is intensely followed by all the programs at KARE, considering all the mandatory program-specific criteria suggested by the national and international accreditation bodies. The continuous improvement of teaching-learning, curriculum revision and support system improvement is effectively implemented at KARE as a result of OBE. All these reforms have been done ensuring the scope for the students in the aspects of placement, higher studies and entrepreneurship. KARE has implemented a full Choice Based Credit System, in both vertical and horizontal mobility with the only constraint of earning a total number of credits in a semester. The special courses such as community service project, one-credit courses, online courses (20% of total credit is allowed as per AICTE norms), soft skills, open-electives and other Non-CGPA courses nurture our student abilities towards multidisciplinary knowledge. Systematic applicability of biannual curriculum revision in KARE academic system enables students to focus towards current global needs. A significant amount of changes right from the syllabus content, introduction of new electives, scheme changes (T/TP/IC/PP) are done continuously for subsequent batch of students based on the feedback from the stakeholders.

T – Theory courses

TP – Theory with practical component

IC – Integrated course

PP – Practical with project component

Teaching-learning and Evaluation

KARE follows a well-laid admission policy that adheres to the reservation policy of the UGC. Student-centric methods such as Experiential Learning, Participative Learning, Problem-Based Learning, etc., are used to promote student learning. To assist the slow learners, bridge courses, remedial classes, peer learning, and summer-term courses are provided. Advanced learners are given with the provisions of one-credit courses, online courses, semester abroad program, training and guidance.

KARE ensures the usage of ICT by 100% of faculty members for effective teaching and learning and the Office of Faculty Affairs & Learning Technology (FA&LT) trains the faculty members systematically on the use of ICT tools including Digital Pedagogy to ensure a 24x7 learning environment. KARE adopts an effective mentor-

mentee system in which every 30 students are assigned with a mentor to provide personal and psycho-social guidance. The student-faculty ratio is maintained as prescribed by the regulatory bodies to facilitate student-centric learning environments. The academic calendar is prepared and made available online at the beginning of the academic year and strict adherence is also ensured.

KARE has a fully automated transparent examination and evaluation system which takes care of all the processes from generation of admit cards to the declaration of results and also preparation of degree certificates. All the students are given provision to view their examination answer scripts. Effective mechanisms and procedures are in place to assist all stakeholders to redress examination/evaluation-related grievances. All programs are with well-structured and documented Vision, Mission, PEO, Program and Program specific outcomes and Course outcomes which are published and disseminated properly. Course Outcomes and Programme Outcomes are assessed using direct and indirect methods; based on the identification of the operational gaps, action plans are being implemented to improve the attainments. Further, examination results and student feedback are used effectively to improve the teaching-learning processes.

Research, Innovations and Extension

KARE has shown significant growth in research, innovation, and extension activities during this current NAAC assessment period (2015 to 2019). Based on the suggestions offered by the NAAC peer team in the previous visit, the institute has created a conducive environment for performing quality scientific research following all ethical principles. Accordingly, KARE has introduced several reforms and new schemes in offering seed money, research promotion schemes, travel grants, and a postdoctoral fellowship with sabbatical leave to promote research. The establishment of strong infrastructures and state-of-the-art research facilities such as International Research Center, DST-funded TIFAC CORE in Network Engineering, and a National Centre in Advanced Research in Discrete Mathematics (n-CARDMATH) and other department-specific research facilities widen the scope for the research and development. The facility advancement motivates our faculty to undertaken national and international collaborative research, consultancy, and industry-funded major projects. Imbibing all the resources, the faculty members of KARE have produced significant quantitative and qualitative outcomes which are as follows:

Promotion of Research and Facilities:

- Rs 17.5 Crores - Seed Money Provided

- 230 – JRFs and SRFs enrolled

- 18 departments recognized by National/International agencies

Resource Mobilization for Research:

- Funding from Government agencies – Rs 20 Crore from 95 projects

- Non-Government agencies – Rs 19 Crore from 422 projects

Innovation Ecosystem:

- KARE has established the Kalasalingam Technology Business Incubator (KTBI) to put its technical and professional knowledge to the best of its use for practical applications.

- Atal Community Innovation Center-Kalasalingam Innovation Foundation (ACIC-KIF) a section-8, non-profit community innovation center established in April 2021 jointly by Kalasalingam Academy of Research and Education (KARE) and Atal Innovation Mission (AIM), NITI Aayog, Govt. of India.

- 334 -Workshops/Seminar and skill development programs organised

- 93 -Awards for research innovation

Research Publications and Awards:

- KARE has its own peer-reviewed Scopus indexed journal.

- 250- Patents published / awarded

- 2676–Scopus/ SCI indexed papers

- 1354 - Books/Book chapters published

- H- Index - 89

Consultancy and Extension activities:

- Rs 10.19 Cores - Consultancy services

- 583 -Extension and Outreach Programmes organised

- 93 - Awards and recognition received for extension activities

Collaborations:

- 414 - Collaborative activities recorded

- 225 - MoU signed

Infrastructure and Learning Resources

KARE has sprawling infrastructure spread over 163 acres with 26,25,435 sq ft built-up area encompassing 12 academic blocks with air-conditioned gallery type classrooms, 7 hostel blocks, an air-conditioned auditorium

for staging major cultural programmes, air-conditioned seminar halls to support co-curricular activities, outstanding sports facilities including the avenue for yoga, gymnasium, indoor stadium, faculty and non-teaching residences and support services such as cafeteria/canteens/shops and other facilities. The entire campus has 100% power backup.

A modern, digitized central library is set up in a two-storied building with a built-up area of more than one lakh square feet and fully air-conditioned with a seating capacity for 1000 users. The library stacks more than one lakh volumes of books and subscriptions to leading journals and magazines in engineering, management, advanced sciences, agriculture, architecture, arts and humanities. The library offers services including IP-based unrestricted online access including remote access to e-resources, alerts upon new book, journal arrivals, Online Public Access Catalogue and Institutional Digital Repository through the intranet.

KARE has state-of-the-art IT infrastructure to support academic, research and administration activities in the campus. The institute has more than 2000 computers with 2 Gbps secured internet connectivity on fiber. Many classrooms are equipped with Impartus, a cloud-based lecture-capturing system. The entire campus has a surveillance facility with CCTV cameras. The data centre hosts many servers which act as a backbone of IT operations inside the campus. In-house software development team developed automated software to offer academic and other administrative services.

The institute has well-established policies for budget allocation, purchase, utilization and maintenance of the infrastructure.

Student Support and Progression

KARE aims to equip students to succeed in their endeavors and engagements, and be influential instruments of positive transformations of an ever-changing world. KARE provides value–based education on the foundation of ethics and inculcates leadership qualities, research passion, and innovative skills.

An induction programme is organized for the freshman at the start of every year for a smooth start. Secure environment is ascertained through Student Grievances Cell, Anti-ragging Committee, etc. Yoga and meditation courses are mandatory for all students. Soft-skill courses, workshops, conferences, seminars, value-added programs, and company-specific training courses are conducted to hone their skills. KARE provides scholarships based on achieving excellence in academics and spots. Welfare student scholarships to first-graduates and needy economically weaker sections are also awarded. In the last five years, about 30,039 students were benefited from a sanctioned amount of about Rs. 43,92,49,850 crores.

A dedicated Office of Corporate Relations and the Centre for Competitive Examinations are instrumental in training and placement of students. An average of 98% students benefited from the programmes and initiatives of these departments.

KARE has a vibrant student council with well-defined roles for the office-bearers. The members of the council participate as student representatives in many administrative bodies. Several co-curricular and extra-curricular activities are regularly conducted through various clubs under the aegis of the student council.

The Alumni Association with about 18000 members contributes to the growth of the institution by participating in curricular enrichment, delivering lectures, providing scholarships, instituting endowments, and organizing the reunion programs. The financial contribution of the alumni is to the tune of about Rs. 2.21 crore over the

last five years.

Governance, Leadership and Management

KARE has a vision to achieve international repute in education and research. To achieve its vision KARE has taken various steps that are continuously reflecting in its academic and research goals. KARE has a strategic plan which provides a road map for growth across the spectrum of advancing and dissemination of knowledge through teaching, learning, research and innovation of the highest standard. Further, the institution has decentralized and introduced participative management in decision making. The organizational structure is effective and efficient as evident from various policies implemented in both academic and administrative aspects. Statutory bodies of KARE such as the Board of Management, Academic Council, Planning and Monitoring Board, Finance Committee have been meeting periodically and monitor academic and administrative activities. KARE has taken efforts to enhance professional competence of the faculty by organizing various workshops and conferences through the Centre for Learning Technology (CLT). Faculty empowerment strategies to support the faculty both in academic and administrative aspects have been implemented. Annual Reports and Newsletters provide a glimpse of activities undertaken during the academic year. IQAC plays vital role in quality enhancement, performance appraisal through an internal and an external audit, analysis of stakeholder feedback, and providing appropriate suggestions and corrective measures for overall enrichment of the teaching-learning atmosphere.

Institutional Values and Best Practices

Situated in a rural environment, KARE enjoys a locational advantage, an eco-friendly, pollution-free environment. Since its inception, the institution has been rendering a yeoman service in the aspirational district of Virudhunagar by offering affordable education and changing the lives of millions of people.

The institution inculcates moral values and ethics to the students by offering various courses. Our engineering programs emphasize on societal issues and the students address them through the Community Service Project. The students from rural areas, though lack in communication skills while they enroll in the programs, are transformed through various soft-skill programmes which is evident by close to 100% placement in industry.

KARE is committed to protect the environment by adopting various environmental friendly initiatives such as energy conservation, water harvesting and recycling, waste management and green practices. The institution has installed solar panels and street lamps to provide clean energy and, maintains a serene campus by providing a green cover through lawns and trees. As part of Unnat Bharath Abiyan, the institution adopted 5 villages and contributes to their improvement.

The institution promotes gender sensitivity and offers support and safety to women by organizing various gender sensitization programs and special counseling sessions for girls. An Internal Compliance Committee addresses the issues faced by the girl students and faculty.

KARE facilitates disable-friendly attitude by providing various facilities for the differently-abled; the offering of B.Tech. program to Speech and Hearing Impaired students and the skill-development program for the Visually Challenged stands testimony to this.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University	
Name	KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION
Address	Anand Nagar, Krishnankoil
City	Krishnankoil
State	Tamil Nadu
Pin	626126
Website	www.kalasalingam.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor	S. Narayanan	04563-289042	9328120826	04563-289042	kluvc@klu.ac.in
IQAC / CIQA coordinator	C.sivapragasam	04563-289322	9894028635	04563-289322	iqac@klu.ac.in

Nature of University	
Nature of University	Deemed University

Type of University	
Type of University	Unitary

Establishment Details	
Establishment Date of the University	20-10-2006
Status Prior to Establishment,If applicable	Affiliated College
Establishment Date	22-08-1984

Recognition Details			
Date of Recognition as a University by UGC or Any Other National Agency :			
Under Section	**Date**	**View Document**	
2f of UGC	09-05-2022	View Document	
12B of UGC	09-05-2022	View Document	

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location, Area and Activity of Campus							
Campus Type	**Address**	**Location***	**Campus Area in Acres**	**Built up Area in sq.mts.**	**Programmes Offered**	**Date of Establishment**	**Date of Recognition by UGC/MHRD**
Main campus	Anand Nagar, Krishnankoil	Rural	163	242980	Fifty six		

2.2 ACADEMIC INFORMATION

Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	0

Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA)	: Yes

SRA program	Document
AICTE	105720_9795_1_1669192990.PDF
RCI	105720_9795_19_1669193020.pdf
ICAR	105720_9795_3_1669193008.pdf
BCI	105720_9795_8_1669192953.pdf
DEB-UGC	105720_9795_21_1669192979.pdf
AICTE	105720_9795_1_1669192990.PDF
AICTE	105720_9795_1_1669192990.PDF
AICTE	105720_9795_1_1669192990.PDF
AICTE	105720_9795_1_1669192990.PDF

AICTE	[105720_9795_1_1669192990.PDF](#)
AICTE	[105720_9795_1_1669192990.PDF](#)
COA	[105720_9795_18_1678254248.pdf](#)
COA	[105720_9795_18_1678254248.pdf](#)
RCI	[105720_9795_19_1669193020.pdf](#)
RCI	[105720_9795_19_1669193020.pdf](#)
RCI	[105720_9795_19_1669193020.pdf](#)
RCI	[105720_9795_19_1669193020.pdf](#)
COA	[105720_9795_18_1678254248.pdf](#)
COA	[105720_9795_18_1678254248.pdf](#)
COA	[105720_9795_18_1678254248.pdf](#)
COA	[105720_9795_18_1678254248.pdf](#)

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty											
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned				75				140				336
Recruited	61	14	0	75	100	40	0	140	215	121	0	336
Yet to Recruit				0				0				0
On Contract	0	0	0	0	0	0	0	0	0	0	0	0

Non-Teaching Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				781
Recruited	468	313	0	781
Yet to Recruit				0
On Contract	0	0	0	0

Technical Staff				
	Male	**Female**	**Others**	**Total**
Sanctioned				10
Recruited	5	5	0	10
Yet to Recruit				0
On Contract	0	0	0	0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**			
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	58	13	0	92	38	0	60	29	0	290
M.Phil.	0	0	0	0	0	0	15	14	0	29
PG	3	1	0	8	2	0	136	82	0	232
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers									
Highest Qualification	**Professor**			**Associate Professor**			**Assistant Professor**		
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Distinguished Academicians Appointed As

	Male	**Female**	**Others**	**Total**
Emeritus Professor	0	0	0	0
Adjunct Professor	4	0	0	4
Visiting Professor	17	0	0	17

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Computer Science and Engineering	Krishnamurthy Chair	Hydro Modeling Inc
2	Physics	K S Krishnan Chair	Silamboli Charitable and Educational Trust
3	School of Liberal Arts and Education	Thiruvalluvar Chair	Bala Family Foundation
4	Aeronautical Engineering	A P J Abdul Kalam Chair	Suhail Enterprises Private Limited

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	487	1087	0	0	1574
	Female	257	306	0	0	563
	Others	0	0	0	0	0
PG	Male	147	7	0	2	156
	Female	79	8	0	0	87
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	53	21	0	0	74
	Female	45	15	0	0	60
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	No

Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	20-10-2006
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

Accreditation Details

Cycle Info	Accreditation	Grade	CGPA	Upload Peer Team Report
Cycle 1	Accreditation	B	2.81	I_Cycle_report.pdf
Cycle 2	Accreditation	A	3.11	II_Cycle_report.pdf

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Aeronautical Engineering	View Document
Agriculture	View Document
Agriculture Engineering	View Document
Allied Health Sciences	View Document
Architecture	View Document
Automobile Engineering	View Document
Biomedical Engineering	View Document
Biotechnology	View Document
Business Administration	View Document
Catering And Hotel Management	View Document
Chemical Engineering	View Document
Chemistry	View Document
Civil Engineering	View Document
Commerce	View Document

Computer Applications	[View Document](#)
Computer Science And Engineering	[View Document](#)
Computer Science And Information Technology	[View Document](#)
Electrical And Electronics Engineering	[View Document](#)
Electronics And Communication Engineering	[View Document](#)
English	[View Document](#)
Food Technology	[View Document](#)
Horticulture	[View Document](#)
Information Technology	[View Document](#)
Instrumentation And Control Engineering	[View Document](#)
Law	[View Document](#)
Mathematics	[View Document](#)
Mechanical Engineering	[View Document](#)
Physics	[View Document](#)
Social Work	[View Document](#)
Special Education	[View Document](#)
Visual Communication	[View Document](#)

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Kalasalingam Academy of Research and Education (Deemed to be University) formerly Arulmigu Kalasalingam College of Engineering was established in 1984 by Kalvivallal Thiru T. Kalasalingam, Founder Chairman who was a freedom fighter and Philanthropist. Kalasalingam is Located at the pristine foothills of scenic Western Ghats of southern Tamil Nadu. The college obtained the Deemed to be University status in 2006. Since then, the institution is offering a wide range of programs with specializations. The courses offered are multidisciplinary and interdisciplinary in nature. Apart from the program core courses, elective courses are offered in all the programs. The elective courses are categorized into two as program elective and university/open elective. Program elective

	courses are taken within the program of study, and it is represented as interdisciplinary whereas the latter is taken across the institution and is multidisciplinary in nature. During the academic year, 58 programs are offered, and all the programs are choice-based credit system. Through the multidisciplinary/interdisciplinary approach of study program, essential skills and employability are the added benefit for the student community. Mandatory courses are offered as per the guidelines issued by the AICTE. Programme electives shall cover the depth and breadth to further strengthen the programme specific knowledge and if chosen by a student in a particular subject area shall lead to specialisation in that area. University electives are the courses offered across the schools to enhance the breadth and professional competency of the students. The student is expected to take courses in engineering (offered by schools other than the program of study), liberal arts, sciences, and mathematics.
2. Academic bank of credits (ABC):	Academic bank of credit is based on the digital storage of credits earned by a learner across India at any recognized institution. In a proactive manner, we have adopted and started to use the same for the effective usage of lifelong learning. At present in the process of uploading the credit information for the students studied.
3. Skill development:	To enhance the employability and industry ready, the students are equipped with various skills like value-added courses, one-credit courses, etc. The courses offered at the institution are grouped as CGPA and NON-CGPA. NON-CGPA courses directly relate to skill development in all aspects like co-curricular, extracurricular, sports, technical communication. Experiential core courses shall provide project experiences to enhance technical competence and creativity through reflective problem-solving with multiple potential avenues of inquiry. Apart from Capstone Design course (conceive, design, build, and test prototypes), students shall have two other courses (three credits each) with project experiences from Design-Build and Design-Build-Operate during the program. Experiential elective courses shall provide the scope to transform learning into action to achieve the unique goals of the students. The courses may include competitions to drive solution-oriented and critical thinking, internships with dynamic

	companies, community-focused project/activity and research-oriented project. The BoS may design any other course with similar outcome and fix the credits appropriately. The Board of Studies approved list of competitions with credits (based on the level and competitiveness) shall be maintained and continuously updated in department. A two-week internship with industry be awarded one credit. The student can do multiple courses of same nature (e.g. Two different competitions, internship for 6 weeks, two community-focused projects). The courses offered under this category are to complement the knowledge, skill and attitude acquired through the regular curricular courses through co-curricular and extra-curricular activities. No credits shall be awarded for the courses under this category.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The mandatory courses prescribed by commission or council. The mandatory courses don't carry any credit, however, student shall successfully pass the end semester examination. The list of mandatory courses is. 1. Essence of Indian Tradition Knowledge 2. Environmental sciences, and 3. Indian Constitution The students are encouraged to do the courses from MOOC platforms such as NPTEL, Swayam, Coursera and edX to improve their self-learning ability and to enhance their breadth/depth. The students can choose the course from the list of courses approved by the respective Board of Studies, or they can also propose to respective Board of Studies to consider the course for including in the list before start of the semester. The courses from the MOOC platforms will be considered under Program Elective Courses and University Elective courses categories. The students can choose up-to 20% of total credits required for the program.
5. Focus on Outcome based education (OBE):	As a Deemed to be University, Kalasalingam Academy of Research & Education (KARE) is entrusted with the responsibility of designing and deploying the Curriculum in tune with the national goals, National Education Policy (NEP), SDGs, Vision, and Mission of the Institution. Based on the domain demands and stakeholders' aspirations, the curriculum/syllabi are periodically revised: ? In relevance to the guidelines of statutory, accreditation and regulatory bodies for all the programmes offered in various fields. ? Incorporating the feedback received from stakeholders: ? Through the attainment

	process at course/program level through Programme Educational Outcomes (PEOs)/ Programme Specific Outcomes (PSOs) / Course Outcomes (COs) that are gradually attained at the end of the program. Eleven programs of the institution are accredited by ABET and all eligible programs are NBA accredited. Therefore, the curricula developed and implemented have relevance to the local, national, regional, and global developmental needs which are reflected in the Programme outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) of all the 58 Programmes offered by the University. Learning Outcomes (LO) indicates clearly what students can do or what they can demonstrate when they effectively participate in the course or successfully complete the program. LO are observable, measurable, and demonstrable that the student had gained from the course or program. The intended LO should inform both the learning experience and guide the assessment process. They should be written in a way that is readily understandable to students. LO can be broadly categorized in three namely: 1) Program Outcomes (POs), 2) Program Specific Outcomes (PSOs), 3) Course Outcomes (COs). The POs and COs framed must be in line with the Institution Vision and Mission and the same must be an effective reflection from the NBA POs, ABET SOs and any national / international accreditation boards/council for the respective course/program. POs can be statements of 10 to 12. COs of 03 to 06. When the POs and COs are mapped/correlated with the necessary measurable tools then the student can do or demonstrate their learnings/experiences. The mapping keywords to be correlated with the Bloom's Taxonomy. Learning outcomes provide only signposts to the main areas of learning that the programme team, or programme committee intend. They cannot, and should not, hope to cover all that a student may get out of a course. Students are likely to have many other outcomes from their learning experience (such as increased confidence, personal satisfaction, new insights, improved skills, better job prospects and so on) which may not necessarily be on the list of 'intended' learning outcomes.
6. Distance education/online education:	Kalasalingam Academy of Research and Education (KARE), has always adapted to the changing times

and has leveraged technology to enhance the learning effectiveness for its students. The teaching in the classroom has long moved from a teacher-centric, black-board focussed approach, to the use of multiple audio-visual tools and the teacher becoming more of a learning facilitator. Almost all our classrooms now have been enabled by tools from IMPARTUS, to capture and store live classroom lectures, that can be accessed by students anytime later too. At KARE, we started digitising our own library resources, as well as acquiring the access to globally well-known content. Some of such resources are listed below: 1) Membership of National Digital Library of India (NDLI), an all-digital library that stores information about different types of digital content. 2) All the online courses of NPTEL (National Programme on Technology Enhanced Learning) are available on a local server, for easy access through our Intranet. 3) All the e-books published by Springer and ProQuest are available to our students. 4) A setup is established as A-V room to enable upto 250 students to attend the lectures being broadcast through SWAYAM PRABHA (DTH channels) (https://www.swayamprabha.gov.in). 5) We are one of the scanning partners for the Universal Digital Library of Carnegie Mellon University (USA). 6) Subscription of a large number of online journals and magazines of National and International repute. Since May 2020, we have been effectively conducting online lectures, using Google Meet, to deal with the restrictions imposed in the wake of Covid pandemic. Internally, we conducted many training sessions to help our faculty members smoothly transition to the new mode of teaching. In parallel, we created our own MOOC (http://mooc.kalasalingam.ac.in/), which helps us in: 1) Storing and assigning all our learning resources (reading material, audio-video content); 2) Facilitating a discussion between the faculty and the students through a Discussion Forum; 3) Storing self-assessment questions (MCQs as well as those requiring descriptive answers); 4) Giving assignments and evaluating them. To help create the video content, we established a recording studio, with technicians to assist with the recording. Now, we plan to use all of the above resources to offer formal UG and PG Degree programs to working professionals, from the comfort of their homes. Some of these will be offered as Online learning programs,

	while some will be offered in the Open Distance Education mode, with the latter having some classroom sessions on the weekends. We have already received regulatory approval for the following programs: Online Learning: BBA, B.Com., B.C.A, M.C.A, MA (English), MCA, M.Sc. (Data Science) Distance Education: BBA, B.Com., BCA, BA (English), MA (English), MBA, MCA, MSW. Going forward, we would also explore the possibility of offering a select number of courses, in an online mode, to our regular students studying on our campus.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes there is a Electoral Literacy club in the institute since July 2018, which is very active with active club members across the students community from various departments and faculty members. Electoral Literacy club conducts regular events for creating the awareness and importance of Voter registration, electoral process , voter values etc. During the freshman induction programme all the freshers are given awareness about voter registration and club members takes active participation in it to enroll the students.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes as per the constitution of Electoral Literacy Club of the institute there is a representation from the students and faculty from all the disciplines – Faculty Chair and Students chair and club secretary are appointed with ten other members. And the club actively organise minimum three events per year.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	Yes. Institute conduct various innovative events and the proof of it is attached in the below link. https://ssrnaac2022.kalasalingam.ac.in/index.php/s/yXMpxnR97F5QonE

4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Institute is located in Virudhunagar district which is one of the aspirational district of Tamilnadu. Regular voter awareness programme to the nearby villages are arranged by the Electoral literacy club and NSS in the local language, which played a role in increased in the percentage of Voter turnout in 2021.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	All the eligible students are enrolled in the Electoral role and the institute is having a proper mechanism through ELC for giving awareness during the induction programme and making the citizen to full fill the minimum requirement.

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
56	58	55	64	65

File Description	Document
Institutional data in prescribed format	View Document

1.2

Number of departments offering academic programmes

Response: 28

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7112	6466	6464	6621	6417

File Description	Document
Institutional data in prescribed format	View Document

2.2

Number of outgoing / final year students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1509	1678	1920	2116	1289

File Description	Document
Institutional data in prescribed format	View Document

2.3

Number of students appeared in the University examination year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
6436	6336	6373	6506	6374
File Description			Document	
Institutional data in prescribed format			[View Document](#)	

2.4

Number of revaluation applications year-wise during the last 5 years

2021-22	2020-21	2019-20	2018-19	2017-18
46	0	17	70	62

3 Teachers

3.1

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2639	2534	2223	2260	1661
File Description			Document	
Institutional data in prescribed format			[View Document](#)	

3.2

Number of full time teachers year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
551	517	452	477	533
File Description			Document	
Institutional data in prescribed format			[View Document](#)	

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
551	517	452	477	533

File Description	Document
Institutional data in prescribed format	[View Document](#)

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
75325	66765	61191	59546	57050

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1475	1313	1205	1175	1130

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.3

Total number of classrooms and seminar halls

Response: 222

4.4

Total number of computers in the campus for academic purpose

Response: 2674

4.5

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
15791.48	14062.50	14582.77	13816.02	12740.39

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Kalasalingam Academy of Research Education (KARE), Deemed to be a University offering UG, PG and PhD programs in Engineering and Technology, Arts, Science, Agriculture, and Management, is entrusted with the responsibility of designing and deploying the curriculum in tune with the National goals, SDGs, Vision and Mission of the Institution. Based on the domain demands and stakeholders' aspirations, the curricula/syllabi are periodically revised as per the curriculum design and development policy:

1. In relevance to the guidelines of statutory, accreditation, professional associations, and regulatory bodies for all the programmes

2. Incorporating the feedback received from stakeholders

3. Through the attainment process at the course/program level through Programme Educational Outcomes (PEOs)/ Program Outcomes (POs)/Programme Specific Outcomes (PSOs) / Course Outcomes (COs)

KARE has introduced some novel course categories across all programs, such as Experiential Core courses and Experiential Electives, to strengthen the students' Design-Build-Operate capabilities by engaging with the community or addressing the targets of SDGs. The Experiential and Service Learning (EXSEL) program of KARE is designed to provide either product development skills in engagement with NGOs, social immersion to identify and appreciate the issues of society, or rural work experience. The flexible curricular structures with course options (University electives) to choose from multiple disciplines to enhance the breadth in addition to rigorous specialisations, provide the students with holistic education as envisaged by NEP. Further, the students can pursue a Minor or Honor to strengthen their breadth or depth.

Outcomes-Based Education Framework at KARE:

Outcomes Based Education is effectively implemented across all programs by means of adopting the guidelines given by accreditation agencies in engineering and technology programs and the UGC Learning Outcomes-Based Curriculum Framework (LOCF) in all other programs. The Course Outcomes (COs), Program Outcomes (POs) and Program Specific Outcomes (PSOs) of all the programs are established through a consultative process with appropriate stakeholders and are publicised through the website, course materials and events organised, Department offices, curriculum and syllabus to reach all the stakeholders for the reception of their constructive feedback. The learning outcomes are continuously measured for their attainment using direct and indirect assessment tools by course coordinators/module coordinators and presented to the Program Advisory Board/Department Advisory Board for further deliberations and improvements in the process. The effective implementation of OBE is evident in 6 UG engineering programs getting NBA accreditation under the Tier-1 category, out of which 3 programs got 6 years, and 11 Engineering programs were accredited by ABET without any shortfalls at the first instance.

Institute -Industry Collaboration in Curriculum Design:

The feedback from the employers/industry is taken periodically as per policy on curriculum relevance, and industry professionals are involved in the deliberative process as BoS and Academic council members. In addition, highly reputed industries, such as Siemens Digital, IBM, WIPRO 3D, ARAI and DRDO, jointly develop the specialisations, course content, course delivery and course assessment strategies. As anticipated by NEP, the curricula of all the programs provide mandatory internships or apprenticeships.

File Description	Document
Upload Additional information	[View Document](#)

1.1.2

Percentage of Programmes where syllabus revision was carried out during the last five years.

Response:

1.1.2.1 **How many Programmes were revised out of total number of Programmes offered during the last five years**

Response: 72

1.1.2.2 **Number of all Programmes offered by the institution during the last five years.**

Response: 72

File Description	Document
Minutes of relevant Academic Council/BOS meeting	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Details of Programme syllabus revision in last 5 years	[View Document](#)
Any additional information	[View Document](#)

1.1.3

Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response:

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
2397	2313	2021	2058	1425

File Description	Document
Programme/ Curriculum/ Syllabus of the courses	[View Document](#)
MoU's with relevant organizations for these courses, if any	[View Document](#)
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response:

1.2.1.1 How many new courses were introduced within the last five years.

Response: 2335

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 3461

File Description	Document
Minutes of relevant Academic Council/BOS meeting	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

1.2.2

Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response:

1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 56

File Description	Document
Minutes of relevant Academic Council/BOS meetings	[View Document](#)
Institutional data in prescribed format	[View Document](#)

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

Response:

The flexible curricular structure of the programs offered at KARE is designed to impart holistic education by providing the scope for cross-cutting issues such as gender equality, human values, recognition of work and professional ethics, with the addendum of growing environmental issues and the possible ways of incorporating sustenance. The credit courses offered as part of humanities and social

sciences core in each program, the university electives offered by the schools offering liberal arts programs, and the mandatory courses such as Indian Traditional Knowledge, Indian Constitution and Environmental Studies as the mandatory courses recommended by statutory bodies, ensure that all the students have gained adequate knowledge in cross-cutting issues.

In addition to the exclusive credit courses, academic regulations governing the programs mandates that the students acquire complimentary skills by participating in various extra-curricular and co-curricular activities conducted through various clubs/cells such as Women Empowerment Cell (WEC), Green Army Club, National Service Scheme (NSS), Fine Arts Club and Nature Club. External participation of the students in such activities is also greatly encouraged. The institute runs various campaigns and sensitization programs as per the guidelines set forth by the Ministry of Education and UGC time-to-time to provide the right knowledge regarding cross-cutting issues to the students and faculty, and other staff-members of the institute wherever needed.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	[View Document](#)
Any additional information	[View Document](#)

1.3.2

Number of value-added courses for imparting transferable and life skills offered during last five years.

Response:

1.3.2.1 **How many new value-added courses are added within the last five years.**

Response: 838

File Description	Document
Institutional data in prescribed format	[View Document](#)
Brochure or any other document relating to value added courses	[View Document](#)
Any additional information	[View Document](#)

1.3.3

Average Percentage of students enrolled in the courses under 1.3.2 above.

Response:

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
6271	5074	5787	5657	5573

1.3.4

Percentage of students undertaking field projects / research projects / internships (Data for the latest completed academic year).

Response:

1.3.4.1 **Number of students undertaking field projects or research projects or internships.**

Response: 5768

File Description	Document
List of Programmes and number of students undertaking field projects research projects/ / internships (Data Template)	[View Document](#)
Any additional information	[View Document](#)

1.4 Feedback System

1.4.1

Structured feedback for design and review of syllabus – semester-wise / year-wise is received from

1) Students, 2) Teachers, 3) Employers,

4) Alumni

Response:

File Description	Document
URL for stakeholder feedback report	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Action taken report of the University on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	[View Document](#)

1.4.2

Feedback processes of the institution may be classified as follows:

Response:

File Description	Document
URL for feedback report	[View Document](#)
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Demand Ratio (Average of last five years)

Response:

2.1.1.1 **Number of seats available year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
2980	2652	2436	2374	2282

File Description	Document
Demand Ratio (Average of Last five years) based on Data Template upload the document	[View Document](#)
• Any additional information	[View Document](#)

2.1.2

Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the last five years

(Excluding Supernumerary Seats)

Response:

2.1.2.1 **Number of actual students admitted from the reserved categories year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1475	1313	1206	1175	1130

File Description	Document
Average percentage of seats filled against seats reserved (Data Template)	[View Document](#)
Any additional information	[View Document](#)

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

 YES.

Students are catered to in a variety of ways like regional and cultural factors along with learning rate and ability to comprehend. The institution has a well-established mentor-mentee system, which matches students with faculty members for counseling. Students are classified as slow or advanced learners based on their 12th grade in the first year and their CGPA in subsequent semesters. As the institution practices Outcome-Based Education (OBE), the outcome is monitored to assess student's learning levels based on classroom observations, interactions with course instructors & department heads, and periodic evaluations. Various strategies are used to help the students to deal with the new environment.

The primary goal of identifying slow and advanced learners is

1. To improve their academic performance by analyzing and bridging the skill and knowledge gap.
2. To lay the foundation for a great career later in life.

A. Strategies for Advanced Learners

- Advanced learners are offered with **one-credit courses,** which are outside the conventional curricular syllabus. The course content is tailored to the demands of the industrial sector, and the lectures are provided by industry experts.
- Training and Placement Office provides students with soft skill and technical skill placement training and invites companies to recruit students on campus. Students can also apply for **internships at the companies** in which they are placed.
- Students are encouraged to enroll in **NPTEL SWAYAM online courses** and transfer their credits to elective courses. It saves students time for competitive tests like GATE, placement drives, and higher education.
- Advanced learners have the **semester abroad programme** to enroll, which allows them to spend a whole semester at an overseas institution, receiving exposure to foreign laboratories, students, and faculty members.
- Students are offered opportunities to exhibit at **conferences**, attend **workshops and seminars** at other institutes, and participate in extracurricular activities. During tutorial hours, advanced learners help slow learners in peer learning groups with challenging subjects in addition to their project work. They are strongly encouraged to submit technical papers to conferences that are Scopus indexed.

B. Slow learners

- Slow learners are assessed by their performance on internal and external exams. After regular classes, **remedial sessions** are set up to cater to the students individually, with course lecturers spending additional time with them to improve their academic performance.
- Slow learners are offered with **bridge courses**, to assist them and master basic ideas before the semester begins. The course topics are carefully chosen to provide comprehensive instruction in analytical courses such as engineering mathematics and departmental core courses.
- Slow learners are given a specially created **question bank and animated videos** to assist in their understanding throughout exams.

The figure below shows a master chart of how student's learning levels are measured, a list of strategies used to support slow & advanced learners, and outcome measures.

File Description	Document
Upload Any additional information	[View Document](#)

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response:

File Description	Document
Any additional information	[View Document](#)

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

KARE greatly emphasizes on the quality of the teaching-learning process by adopting various methodologies. The main objective of student-centric methods in the teaching and learning process is to facilitate both the learners and teachers to compete professionally by understanding the essence of the learning concepts. The figure below depicts the student-centric teaching-learning methods which are adopted in KARE.

Experiential Learning:

KARE gives great importance to Experiential learning, a pedagogy in which the learners are more

focused on doing things thereby learning the fundamental and advanced engineering key concepts.

- KARE follows OBE for all the programs offered by the university. To emphasize experiential learning, laboratory courses, theory with practical courses, and integrated courses are offered along with theory courses.
- KARE has state-of-the-art laboratories, used by students to get their theoretical concepts experienced through practice. Laboratory experience enhances practical knowledge and strengthens learning. Students are given time slots to perform additional experimental work.
- Autonomy in teaching and evaluation is given to select-faculty members to bring in more practical skills and experiential learning. This initiative has received very encouraging responses from students and faculty.

Participative learning:

KARE promotes Participative Learning to ensure and empower the understanding of the engineering concepts and to make effective utilization of the teaching resource as well.

- Complex laboratory experiments, report writing workshops, debates, and theme-oriented enacting programs are arranged to motivate students.
- Interactive teaching tools like Edmodo, Kahoot, and Google Classroom are extensively used. The online platforms allow sharing notes, discussing, debating, submitting assignments, and participating in online quizzes.
- Wi-fi-enabled campus and remote access to the library help in seamless online learning.

Problem-based Learning:

- The course curriculum is designed to improve student's problem-solving skills by expanding the knowledge base, developing the spirit of inquiry, and refining analytical skills, intellectual creativity, technical dexterity, and professional competence of students. Opportunities for experiential learning, all-around personality development, inculcation of relevant ethical and social values, and scientific temper are provided.
- The Community Service Project in the curriculum enables students to identify the problem faced by the neighborhood community and to propose practical solutions.

Industrial Visits

The sole purpose of Industrial Visits is to impart modern trends in Engineering Industries.

- As a part of the curriculum, industry visits are arranged and students understand the practicality and application of the concepts studied.
- Further, as per AICTE guidelines, industrial training is mandatory for engineering students under Non-CGPA credits.
- Student's participation in Industrial Visits enables hands-on training in advance concept leading to an understanding of Real-world problems.

Lab to Land Concept

KARE adopts the 'Lab to Land' concept to help the students to learn the implementation of the experiments conducted in the lab effectively on land. It is more effective for the students pursuing Agriculture and related courses. Eco-friendly products and materials produced in the laboratory are rolled out to society at an affordable cost.

File Description	Document
Upload any additional information	[View Document](#)

2.3.2

Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

KARE ascribes great importance to quality enhancement in the teaching-learning process which is ensured by the teaching and learning Policy. The teaching and learning environment in KARE are augmented with ICT-enabled teaching methodologies, which are widely adopted by 100% of faculty members in all the courses taught by them.

- Information & Communications Technology (ICT) enabled teaching methodologies using cutting-edge technology, are being followed by the faculty members in classrooms and seminar halls.
- Multimedia teaching aids like 'Impartus' video recording facilities, flipped classrooms, LCD projectors, and classrooms with internet-enabled computer/laptops/tablet systems are used in all the classrooms. Almost, 85% of the courses were captured through the Impartus platform which is also available for reusability.
- The faculty members effectively utilize Audio-Visual aids, to demonstrate the concepts to the students using the resources from the National Programme on Technology Enhanced Learning (NPTEL) to enhance the learning experience. The credits will be transferred to the students upon completing the online courses through NPTEL and other sources.
- Video courses (offline) from NPTEL are accessible to faculty and students from the server installed on the library premises.
- Students are given the same opportunity through another avenue mentored by faculty members through online webinars, assignments, and exercises, to educate them on the sustainable development goals. This sort of collaboration helps the students to develop team spirit and also makes them interact with their academic peers in other colleges in various parts of the country through an online forum.
- Apart from this, the Office of Director (FA&CLT) is offering training to faculty members to use digital pedagogy in teaching and learning. The training is offered in a systematic and focused way. As of now, 100% of faculty members are trained in both basic and advanced levels of digital pedagogy and these are implemented in their classrooms, using both online and offline modes.

> The FA & CLT office also offers training and promotes the use of smart interactive boards in all the departments.

- Online tests are conducted and e-assignments are given through various advanced online tools like Kahoot, quizzes, slido, etc. Faculty members utilize various interactive teaching aids such as Vidyard, Screencast-O-Matic, Impartus, etc., to disseminate the video lectures to the students.

File Description	Document
Upload any additional information	[View Document](#)
Provide link for webpage describing the " LMS/ Academic management system"	[View Document](#)

2.3.3

Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year)

Response:

2.3.3.1 **Number of mentors** ?????????????? ???????

Response: 524

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	[View Document](#)
mentor/mentee ratio	[View Document](#)
Circulars pertaining to assigning mentors to mentees	[View Document](#)

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers against sanctioned posts during the last five years

Response:

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document

2.4.2

Average percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. year-wise during the last five years

Response:

2.4.2.1 **Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
283	261	226	242	226

File Description	Document
List of number of full time teachers with Ph D/D M/M Ch/D N B Superspeciality/DSc/D Lit and number of full time teachers for 5 years	View Document
Any additional information	View Document

2.4.3

Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response:

2.4.3.1 **Total experience of full-time teachers**

Response: 3819

File Description	Document
List of Teachers including their PAN, designation, dept and experience details	View Document
Any additional information	View Document

2.4.4

Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years

Response:

2.4.4.1 **Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
86	34	49	92	62

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters (scanned or soft copy)	[View Document](#)

2.5 Evaluation Process and Reforms

2.5.1

Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response:

2.5.1.1 **Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
5.33	5	5	6	6

File Description	Document
List of Programmes and date of last semester and date of declaration of results	[View Document](#)
Any additional information	[View Document](#)

2.5.2

Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response:

2.5.2.1 **Number of complaints/grievances about evaluation year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
46	0	17	70	62

File Description	Document
Number of complaints and total number of students appeared year wise	[View Document](#)

2.5.3

IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution

Response:

2.5.3 IT INTEGRATION AND REFORMS:

The evaluation process and reforms followed in KARE are intense to ensure a transparent automated flow system with step-by-step practices. The office of Controller of Examinations has set Standard Operating Procedures for each process which enable timely completion of activities and also ensures the system to be user friendly.

KARE employs digital platforms such as Student Information System (SIS) and EDU-KARE as IT integration and reforms for the evaluation process on day-to-day basis. All processes related to examination such as timetable, seating details, question paper generation, mark and grade entries, result publication, and issuing of certificates are processed digitally.

SIS- A digital platform integrated as part of IT integration and reform

The unique features of KARE are as follows:

- **Approval/auditing of internal question papers by the programme coordinator (senior faculty),**

- **Setting of end semester question paper(s) by external faculties,**

- **Conduction of examinations on a slot-wise basis, to ensure free flow of strength between batches,**

- **Evaluation of answer scripts by external faculties,**

- **Absolute and relative grading patterns are practiced based on the mode and type of course.**

End-users of IT integration system

PROCESSES INTEGRATING IT:

Attendance Entry

The course faculties have to update the attendance for their respective course(s) on a day-to-day basis. The entries for On-Duty (OD) or Medical Leave (ML) shall be updated by clerks of the Departments after approval from IQAC officer / HoD respectively within a week's time.

Conduction of Examination

Question paper setting and generation by faculties were digitalized through online mode in EDU-KARE from the academic year 2017-2018. The faculties shall generate the question paper for their course(s) and the same shall be approved by the module and programme coordinator. Also, the details such as exam date, slot, time, and venue for students are displayed on the SIS portal for their reference.

Registration for Makeup / Arrear Examination

The students who haven't appeared for the internal assessments/semester examination owing to medical reasons shall apply for makeup examination within a week's time through SIS login with a valid medical certificate issued by an internal medical officer.

Online Valuation System and Mark Entries

The end-semester examination answer scripts are evaluated digitally. The answer scripts are scanned by the evaluation committee using high-speed scanners and are evaluated digitally. The answer scripts are identified using barcodes mapped with the student's registration number and are masked during evaluation. Marks secured by a candidate question-wise are updated online within a week's time for examining the outcome of the teaching-learning process.

Substantiation of Attainment

- **Saving of natural resources,**

- **Manual errors in the evaluation process such as total mistakes, marks awarded for additional questions answered by a candidate, etc. shall be avoided,**

- **Paper distribution through the online SIS portal,**

- **Transparency in the process and also promotes feasibility among the end-users.**

File Description	Document
Year wise number of applications, students and revaluation cases	[View Document](#)
Any additional information	[View Document](#)

2.5.4

Status of automation of Examination division along with approved Examination Manual

Response:

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	[View Document](#)
Current Manual of examination automation system	[View Document](#)
Any additional information	[View Document](#)
Annual reports of examination including the present status of automation	[View Document](#)

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Response:

- KARE has adopted Outcome Based Education (OBE) for the programs offered at the undergraduate level by defining the learning outcomes, focusing on the graduate attributes stated by the NBA in 2014. Six B. Tech programs are accredited by NBA and the remaining programs have adopted OBE and are in the process of getting accredited. Also, eleven programs are accredited by ABET.
- The Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) are drafted in correlation with the University's Vision and Mission. The steps to describe, how a student achieves the desired outcomes are shown below. The mappings of COs with POs and PSOs are displayed in the course plans, laboratory manuals, and Community Service Project reports done by the students, to disseminate the outcomes which are integrated with the Department and KARE vision and mission.
- A series of workshops are arranged as orientation programs for faculty members on OBE, Bloom's Taxonomy verbs, Graduate Attributes, and the formation of POs, PSOs, and COs. External Experts from reputed institutions are invited to share their expertise during each of the sessions. Pictorial representation of the process is given below;

- Programme Advisory Board (PAB) is an apex body of the programme to take decisions in all the matters pertaining to OBE. Various factors such as the programme vision and mission, fixing target values for COs and student outcomes, PEOs attainment, gap analysis, and approval of revision/refinement of PEOs are deliberated in this meeting. After approval, the POs, PSOs, and COs are printed in the syllabus book and published in university website.
- Various assessment tools (such as examinations, quizzes, and assignments) are used to evaluate and map the student performance to the respective COs. A quantitative valuation of all the outcomes is thereby recorded for continuous improvement.

KARE has shown more than 75% attainment levels for all the PSOs benchmarked for a particular student batch at their respective departments.

The following strategies are adopted for the **dissemination of the information:**

- The Vision and Mission of the University are published in University Website. (http://kalasalingam.ac.in/site/schools/). The Vision, Mission, PEOs, POs, and PSO of all Departments are disseminated in various venues inside the campus of KARE such as HoD's cabin, Faculty cabins, Laboratories, Classrooms, Meeting rooms, Corridors, etc..
- The Vision and Mission of the department, POs, PSOs, and COs are available in the Syllabus book, Course Plan, Laboratory Manuals, Department magazines &Event Brochures and in university website.
- For Faculty: External Experts from reputed institutions are invited to conduct series of workshops are arranged to orient faculty members on OBE.
- For Students: Freshman Induction Programme is organized for the newly joined students to explain the KARE Vision and Mission. Students are briefed on COs, POs, and PEOs through the respective advisors and course coordinators.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	[View Document](#)

2.6.2

Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution

Response:

- The Course Outcome (CO) attainment is calculated based on all assessments related to each course.
- The assessment process uses both direct (80%) and indirect (20%) measures to measure the attainment of each outcome.

- *Direct Assessment (Theory Courses):*

- *Sessional Examinations:* This assessment tool is initiated during the sessional examinations which are held twice a semester. Each sessional examination focuses on the attainment of course outcomes during the semester. Suppose the COs is found to be not attained. In that case, corresponding actions for improvement of the particular COs will be taken, so as to improve the attainment of CO in the end semester.

- *End Semester Examination: End semester examination is a metric for assessing the attainment of COs for a particular course at the end of the semester. End Semester questions are framed to consider all COs for assessment .*

- *Assignments:*An assignment is a qualitative performance assessment tool designed to assess the student's knowledge of engineering practices. It is a metric used to assess student's analytical and problem-solving abilities. The assignments are formulated based on higher-orderBloom's Taxonomy cognition levels. Each student is assigned with course-related tasks & assessments which are then used to assess their performance. An analytic rubric is developed to assess student's knowledge with respect to the learning outcomes. Assignments can be given as:
  - Quiz,
  - Seminar,
  - Open Book Test,
  - Case Studies,
  - Industry expert-based evaluation,
  - Research Article-based evaluation etc.

Direct (Laboratory Courses)

- *Internal*: The internal marks for laboratory courses are awarded based on rubrics framed by the course coordinator for the corresponding lab course, which comprises experimentation, interpretation, and result analysis. The assessment is done periodically during the regular lab sessions and also through internal practical exams.
- *Mini Project*: Mini projects provide an opportunity for students to demonstrate independence & originality, to plan & organize a project over a given period, and to serve as an enabler to put their plan into practice using the concepts, techniques & technologies which has been taught to them in their classes. Students must identify a problem related to the laboratory course and carry out a mini project on the problem defined. Two reviews are conducted during lab hours and the marks are awarded based on the rubrics defined by the course coordinator.
- *External*: The external examinations for laboratory courses are conducted at the end of the semester for 3 hours. It is evaluated based on rubrics framed by the course coordinator for the corresponding lab course.

Indirect Assessment

- *Course end Survey*: At the end of each semester, all the students are asked to provide their feedback on the knowledge level attained for each course outcome they have undergone during that semester with assigned rubrics. The course end survey is assessed based on rubrics designed by the course coordinator.

File Description	Document
Upload any additional information	View Document

2.6.3

Pass Percentage of students(Data for the latest completed academic year)

Response:

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 1506

2.6.3.2 **Total number of final year students who appeared for the examination conducted by the Institution.**

Response: 1617

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination	[View Document](#)
Upload any additional information	[View Document](#)
Paste link for the annual report	[View Document](#)

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response:

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's Research facilities are frequently updated and there is a well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

The research infrastructure and facilities at KARE have been continuously upgraded in terms of procuring newer equipment in the central laboratories, namely International Research Center (IRC), Materials Cluster Research Lab, KARE-National Instrumentation Technology Innovation Center, Science Technology and Innovation (STI) Hubs, and Atal Community Innovation Centre-Kalasalingam Innovation Foundation (ACIC-KIF) established with the support of Atal Innovation Mission, NITI Aayog, Govt. of India.

KARE has a proactive research management system abided by a well-defined Research Promotion Policy (RPP) in line with the long-term research growth vision for strategizing effective planning, implementation and impact analysis. Accordingly, the RPP of KARE is revised every three years, realizing a defined feedback mechanism. The current RPP-2020 is focused on promoting research excellence and innovation among the stakeholders through establishing state-of-the-art facilities and technologies. The policy has been in force involving long-term research growth through resource mobilization and motivation for quality research outcomes, awards and recognition, research fellowships and seed money for individuals and research groups, and expanding interdisciplinary collaborations at local, national and global levels. Furthermore, KARE has subscribed to various research databases, including ScienceDirect, Scopus, IEEE Xplore, PubMed, e-books from Springer and ProQuest etc., to analyze the research performance metrics of individuals and as a whole. To highlight at this juncture, KARE has its own SCIE Indexed journal published under Taylor and Francis with a title "AKCE International Journal of Graphs and Combinatorics", which is included in Web of Science database and has a current impact factor of 0.867.

In addition, to motivate faculty members to submit research proposals to funding agencies, KARE provides Professional Development Allowance for the faculty holding doctoral degrees and those pursuing doctoral programs on campus. KARE also provides research incentives to the faculty members for their publications in peer-reviewed journals, books and book chapters with monetary benefits from Rs.10000 to Rs.20000 on each publication and Rs.30000 for each granted Patent. Faculty members of KARE are always encouraged to broaden their subject knowledge and acquire technical skills through attending research programs in top-notch institutions and industries. For the same post-doctoral fellowships, short-term training courses, workshops and attending conferences are always encouraged for them. The faculty members are provided travel support and registration fees to participate in reputed conferences. Every year the institution earmarks a budget for the seed money proposal scheme. The seed money proposal scheme of KARE has been remarkably growing, where the proposal of state-of-the-art technology or facility is contested for financial assistance by any of the faculty/research groups. The proposals received every semester through a Standard Operating Procedure (SOP) are reviewed by the Seed Money Grant Approval Committee and University Research Board (URB) towards subsequent approval of the Board of Management. With the effective execution of the methods mentioned above,

KARE has experienced an exponential increase in research publications, as evidenced by an institute h-index of -83 (Scopus database) and an overall field-weighted citation impact of 1.07, according to SciVal Overview.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	[View Document](#)
Any additional information	[View Document](#)
URL of Policy document on promotion of research uploaded on website	[View Document](#)

3.1.2

The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response:

3.1.2.1 **The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
142.54	140.33	287.8	348.5	325.58

File Description	Document
Minutes of the relevant bodies of the University	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.1.3

Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response:

3.1.3.1 **The number of teachers who received national / international fellowship / financial support by various agencies for advanced studies / research year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
15	109	83	68	71

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the award letters of the teachers	[View Document](#)

3.1.4

Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the last five years.

Response:

3.1.4.1 **The Number of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows enrolled in the institution year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
33	68	60	42	21

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.1.5

Institution has the following facilities to support research

1. **Central Instrumentation Centre**
2. **Animal House/Green House**
3. **Museum**
4. **Media laboratory/Studios**
5. **Business Lab**
6. **Research/Statistical Databases**
7. **Mootcourt**
8. **Theatre**
9. **Art Gallery**
10. **Any other facility to support research**

Response:

File Description	Document
Upload the list of facilities provided by the university and their year of establishment	[View Document](#)
Paste link of videos and geotagged photographs	[View Document](#)

3.1.6

Percentage of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies (Data for the latest completed academic year)

Response:

3.1.6.1 **The Number of departments with UGC-SAP, CAS, DST-FIST , DBT, ICSSR and other similar recognitions by national and international agencies.**

Response: 28

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-version of departmental recognition award letters	[View Document](#)

3.2 Resource Mobilization for Research

3.2.1

Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).

Response:

3.2.1.1 **Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
103.95	91.87	146.96	216.12	382.5

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by non-government	[View Document](#)

3.2.2

Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).

Response:

3.2.2.1 **Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
1129.55	376.30	789.29	355.35	51.44

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the grant award letters for research projects sponsored by government	[View Document](#)
Any additional information	[View Document](#)

3.2.3

Number of research projects per teacher funded by government and non-government agencies during the last five years

Response:

3.2.3.1 **Number of research projects funded by government and non-government agencies during the last five years.**

Response: 103

3.2.3.2 **Number of full time teachers worked in the institution year-wise during the last five years..**

Response: 506

File Description	Document
Supporting document from Funding Agency	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Paste Link for the funding agency website	[View Document](#)

3.3 Innovation Ecosystem

3.3.1

Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge.

Response:

KARE encourages, facilitates, promotes, and safeguards scientific investigations and research innovations under its Policy for Innovation and Incubation (PII) guidelines. PII aims to identify, protect and leverage the bouquet of IPs that are generated from Project patents, copyrights, design rights and trademarks, amongst others, that serve the purpose of knowledge diffusion and commercialization through Technology transfer. To create an ecosystem for Innovation, KARE has on-campus Innovation, and Entrepreneurship Development Centre (IEDC) set up in 2014, in association with NSTEDB, Department of Science and Technology, Govt. of India. The primary role of IEDC is to systematize an entrepreneurial culture in Technopreneurship, Women Entrepreneurship and Rural Entrepreneurship. The KARE's IEDC was also recognised as a Business Incubator/Host Institution in 2018 by the Ministry of Small and Medium Scale (MSME), DST, Entrepreneurship Development Institution of India, Ahmadabad & Chennai and UBI Global, Sweden. IEDC & Institution Innovation Council (IIC) encourages pre-incubation specialities for student projects through orientation and awareness camps right from the first year. The primary tools to support our efforts are education on business plans, government & private funding, grants, skill- development, industry training, and real-time case studies. In the third year of grooming, students submit their business proposals where KARE supports training for project models and submit them for funding in both government and private agencies. IEDC has organized 50+ events, including camps, Faculty Development and Programmes, Technology & Skill Development Programs, Hackathons, ideation programmes, Demo day, domain-specific seminars and visits to several entrepreneurship centres. KARE-IEDC, through Intellectual Property Rights (IPR) Cell program, organizes focused awareness programmes to support products, patents and patent filing procedures. In the fourth year, the focus is on company registration, product development through incubation centers, Technology transfer and commercialization of the products. KARE facilitates innovation in all possible ways, including rendering office space with workstations, labs/equipment in University department/ research labs, International Research Centre, help in mentoring and negotiating with the suppliers for the material required, start-ups in idea development, internal financial support based on mentor recommendations, networking opportunity and establishing business contacts for the expansions of start-up setup.

Further, IEDC organises visits to various entrepreneurship centres such as the Centre for Advancing &

Launching Enterprises (CrAdLE)-Ahmadabad, IIT-Mandi, Catalyst-Himachal Pradesh, Start-ups Valley-Kerala, IIT-Madras, PSG-STEP-Coimbatore. The cell efforts have resulted in 30 patents in the assessment years. To summarize the impact, KARE received INR 146.2 lakh as the fund, won an award of INR 14 lakh cash from DST in 2017-18, IIC earned a 4-star and 5-star rating in 2018-19 and 2019-20, 12 technology-based start-ups, well positioned in Atal Ranking of Institutions on Innovation Achievements (ARIIA) ranking, and recognized as Business Incubation host institution from the Ministry of MSME, GOI with a grant of INR 250 lakh.

File Description	Document
Upload any additional information	View Document

3.3.2

Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development during the last five years.

Response:

3.3.2.1 **Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR),entrepreneurship, skill development year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
47	79	122	78	90

File Description	Document
Report of the event	View Document
Institutional data in prescribed format	View Document

3.3.3

Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

Response:

3.3.3.1 **Total number of awards / recognitions received for *research /* innovations won by institution / teachers / research scholars / students year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
60	62	35	48	36

File Description	Document
Institutional data in prescribed format	[View Document](#)
e- copies of award letters	[View Document](#)

3.4 Research Publications and Awards

3.4.1

The Institution ensures implementation of its stated Code of Ethics for research through the following:

1. Inclusion of research ethics in the research methodology course work

2. Presence of Ethics committee

3. Plagiarism check through software

4. Research Advisory Committee

Response:

File Description	Document
Code of ethics for Research document, Research Advisory committee and ethics committee constitution and list of members on these committees, software used for Plagiarism check, link to Website	[View Document](#)

3.4.2

The institution provides incentives to teachers who receive state, national and international recognitions/awards

1.Commendation and monetary incentive at a University function

2.Commendation and medal at a University function

3. Certificate of honor

4.Announcement in the Newsletter / website

Response:

File Description	Document
Institutional data in prescribed format	[View Document](#)
e- copies of the letters of awards	[View Document](#)

3.4.3

Number of Patents published / awarded during the last five years.

Response:

3.4.3.1 **Total number of Patents published / awarded year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
17	10	12	9	8

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.4

Number of Ph.D's awarded per teacher during the last five years.

Response:

3.4.4.1 **How many Ph.D's are awarded within last five years.**

Response: 189

3.4.4.2 **Number of teachers recognized as guides during the last five years**

Response: 102

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
URL to the research page on HEI web site	[View Document](#)

3.4.5

Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response:

3.4.5.1 **Number of research papers in the Journals notified on UGC website during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
854	580	1302	394	302

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.6

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:

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

2021-22	2020-21	2019-20	2018-19	2017-18
190	165	341	63	303

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.4.7

E-content is developed by teachers :

1. **For e-PG-Pathshala**
2. **For CEC (Under Graduate)**
3. **For SWAYAM**

4.For other MOOCs platform
5.Any other Government Initiatives
6.For Institutional LMS

Response:

File Description	Document
Institutional data in prescribed format	[View Document](#)
Give links or upload document of e-content developed	[View Document](#)

3.4.8

Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response:

File Description	Document
Bibliometrics of the publications during the last five years	[View Document](#)

3.4.9

Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response:

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	[View Document](#)

3.5 Consultancy

3.5.1

Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy.

Response:

Kalasalingam Academy of Research and Education (KARE) support dynamic revolution through sustainable industrial bonding by its Policy. Accordingly, KARE encourages the faculty members to

undertake consultancy services to solve industrial problems for which it facilitate the resources in defined terms and protocols. In general, KARE faculty members can take up to 35 days for consultancy in an academic year; however, the period is extendable based the mutual interest. The agreements with clients are honoured and acknowledged in prior under the directorate of consultancy. The agreement can be signed between individual faculty members and the industry, or sometimes between the departments and industry depends upon the need for the work to be done. However, the director of the consultancy office assists in providing support to oversee all the legal formalities of the agreement process. The revenue sharing is a predefined proportion indicated in the Policy. At the end of the project or in between the faculty consultant can claim a proportion of the income generated to the university as an incentive. KARE promotes the faculty expertise in the brochures and website and renders its sophisticated instruments for consultancy projects. Cutting-edge technologies, including scanning electron microscopes, X-ray Diffraction, and atomic absorption systems 3D printing, abrasive water jet, electron-discharge machining, and CNC controlled machines are available at KARE for product development. The established common facilities such as ACIC-Kalasalingam Innovation Foundation, Innovation and Entrepreneurship Development Cell, and National Instruments can also provide the opportunity for the faculty members and researchers to explore their areas of interest with the industrial experts. Furthermore, the KARE management supports the faculty by providing overhead money to cover the expenses incurred in supporting the consultancy project, such as marketing, drafting, contracts, costing the project, and invoicing. KARE facilitates Industry-institute interactions through training and seminars to adjoin industry experts and faculty members. Recent technology transfers, such as wastewater management, Artificial Intelligence, Machine Learning, Electric Vehicle and biotechnology research, are growing fields at KARE in industrial consultancy.

KARE has rendered consultancy in energy auditing for industries and government sectors with the facilities available in the CO_2 Sequestration Research Lab. KARE's startup and IPR policies support these activities. The University's Policy on Intellectual Property Rights guides the intellectual property procedure for consultancy projects. University policy is to retain ownership of intellectual property wherever possible. However, the university acknowledges that the client may require ownership in consultancy arrangements. If the client owns the foreground intellectual property rights, the client is expected to grant the university a perpetual and royalty-free license to teach and publish the project results unless otherwise negotiated. KARE has suitable startup and IPR policies (https://kalasalingam.ac.in/site/policies/) supporting these activities.

During the assessment years, 22 no. of consultancy projects involving 16 no. of faculty were taken up which lead to a total of 583.17 lakhs revenue generation for the University through both consultancy and corporate training and resulted in 80 MoUs with the outside Industry or organizations.

File Description	Document
Upload soft copy of the Consultancy Policy	[View Document](#)
Upload minutes of the Governing Council/ Syndicate/Board of Management related to consultancy policy	[View Document](#)
Upload any additional information	[View Document](#)
Paste URL of the consultancy policy document	[View Document](#)

3.5.2

Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response:

3.5.2.1 **Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

2021-22	2020-21	2019-20	2018-19	2017-18
116.87	47	82.3	226.25	110.75

File Description	Document
Institutional data in prescribed format	[View Document](#)
Audited statements of accounts indicating the revenue generated through consultancy	[View Document](#)

3.6 Extension Activities

3.6.1

Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years.

Response:

The KARE is committed to carving out a generation who would actively participate in sustainable community development & social welfare. KARE has been serving the society for more than 3 decades, impacting rural developments through technological innovation and entrepreneurial growth in the neighbour community. The extension activities are made available to nearby schools, villages and communities through the effective contribution of students and faculty in a consultative manner in line with the national welfare policies & priorities. Considering all factors, a well-defined Policy for Extension and outreach activities (PEO) is formulated to achieve excellence in extension activities by creating a vibrant ecosystem. As a part of this, the well-established Units/Bodies such as National Service Scheme (NSS), National Cadet Crops (NCC), Green Army, Youth Red Cross (YRC), and the University clubs functioning by their guidelines and protocols as mentioned in the policy. Following this process, various extension and out research activities have been conducted to sensitize the social commitment of an individual and holistic development of our students. To cultivate the social awareness and professional attitude towards community welfare among all the students, the KARE's academic curriculum has been designed with the mandatory requirement of academic credits course on the community service projects (CSP), imposing a systematic evaluation process. Further, the non-CGPA

courses offered through NSS and NCC participation helps sensitize the students towards holistic development by solving social issues measured through earned certificate of fulfilling requirement as per the Unit guidelines. The primary aim of offering those credit courses is to nurture the students' capability to manage their social needs, professional expertise, and skilful implementation of National Missions and schemes such as Swachchh Bharat Abhiyan, Unnat Bharat Abhiyan (UBA), Jandhan Yojana, Open-Defecation free (ODF), Beti Bachao-Beti Padhao, Vyasan Mukti (De-addiction), Voting awareness, Tree plantation, etc. to name a few. The initiatives taken as the outreach programmes in several nearby villages such as Malli, Mullikkulam, Pillaiyarnatham, Vadugapatti Viluppanur, etc. As an outcome, a visible improvement in the community has been noticed in community awareness of health & hygiene, cleanliness, upgrading innovation in farms, voting awareness, use of digital payments, and several other components of sustainable growth.

  It was also realized that the skills gained by our students through extension activities make them confident to well-perform in IEDC activities while getting the opportunity to interact & communicate with society for a better understanding of social needs. In a nutshell, our students and faculty from the chemical engineering department have received the "*Chhatra Vishwakarma Award*" from the Honourable Vice President of India, Shri M Venkaiah Naidu, on 20.01.2019 for their extension activity-based project on "Eco-Friendly Sanitary Napkins" under the theme of Empowerment of villages through Technologies. The total number of 85 Extension and 203 Outreach programmes organized by KARE during the assessment period are given in a separate table, including each activity detail and the impact on students & the community.

File Description	Document
Upload any additional information	[View Document](#)

3.6.2

Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years

Response:

3.6.2.1 **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
12	16	13	10	17

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copy of the award letters	[View Document](#)
Any additional information	[View Document](#)

3.6.3

Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response:

3.6.3.1 **Number of extension and outreach programs conducted by the institution those through NSS/NCC, Government and Government recognised bodies during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
38	16	52	95	38

File Description	Document
Reports of the event organized	[View Document](#)
Institutional data in prescribed format	[View Document](#)

3.6.4

Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response:

3.6.4.1 **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
2669	1495	6948	7478	3212

File Description	Document
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

3.7 Collaboration

3.7.1

Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

Response:

3.7.1.1 **Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
102	79	205	106	71

File Description	Document
Institutional data in prescribed format	[View Document](#)
Copies of collaboration	[View Document](#)

3.7.2

Number of functional MoUs 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:

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

2021-22	2020-21	2019-20	2018-19	2017-18
15	10	12	11	22

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of the MoUs with institution/ industry	[View Document](#)

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

KARE spans over a sprawling 163 acres campus with a built-up area of 26,25,435 sq. feet against the backdrop of the picturesque Western Ghats and has a sylvan setting with abundant greenery in its total area. The lush green picturesque campus creates an ambience that is suitable for a gurukul system where academic and research pursuits become possible.

Classrooms

KARE has 211 classrooms for UG and PG programs. All the classrooms are equipped with LCD projectors, Wi-Fi connectivity and a Green Board/Whiteboard. 30% of the classrooms are facilitated with lecture capturing systems. All the classrooms follow the standards of UGC, AICTE and the Council of Architecture.   Each floor on the academic blocks has notice boards, toilets for men, women and differently-abled. Ramps are available at all academic and administrative buildings to facilitate differently-abled persons. Lifts are also available at all academic buildings with more than 3 storeys.

Seminar Halls

11 Seminar halls are available to conduct various events such as seminars, conferences, guest lectures, cultural activities, etc. All the seminar halls are equipped with audio, projection facility, LAN, Wi-Fi Facility and sufficient power back with Generator and UPS.

Teaching and Research Laboratories

KARE has 147 well-established laboratories for hands-on training to UG and PG students. In addition, an International Research Centre (IRC) with state-of-the-art facilities such as Scanning Electron Microscope (SEM), Energy Dispersive X-ray Spectrometer (EDX), X-Ray diffraction Unit (XRD), Fourier Transform Infrared Spectrometer (FTIR), Atomic Absorption Spectrophotometer (AAS) and UV Spectro photometer have been established for PG, PhD scholars and faculty members.

Industry Supported Laboratories

Seven industry-supported laboratories such as BOSCH, BMW, Ashok Leyland, TAFE, Nanochip, Siemens and NI are established to improve the skill sets among the students. The institution has established linkage with UI path, Celonis, Juniper, Red hat, Blue prism, AWS and Palo Alto through institutional membership to train the students in the latest software and applications.

Computing Facilities

In today's world, computing facility has become the backbone for all the disciplines. KARE has established IT infrastructure spread across academic buildings, laboratories, common facilities and hostels using optical fibre cables. KARE has 3 GBPS bandwidth and over 1449 Wi-Fi access points. A Security solution from SOPHOS is used to secure campus IT facilities. In total, 3238 computer systems are available and out of which 2674 are exclusively earmarked for use by the students. All the computing facilities are enabled with the power backups such as UPS and generators for 24x7.

Library

The library has 99000+ volumes of books, 4600+ e-journals and 74000+ e-books. It has access to Scopus, India Business Insight database (IBID), RAxter Research Assistant (Literature review and analysis tool) and DELNET discovery portal. It also has access to free resources provided through the National Digital Library of India, Video and web courses developed by IITs under NPTEL. The library has 65 computers to support the users to search and reading documents. Printing, reprography and document scanning services are available.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.2

The institution has adequate facilities for cultural activities, yoga, games and sports (indoor & outdoor); (gymnasium, yoga centre, auditorium, etc.,)

Response:

Extra-curricular Activities (ECA) and Co-curricular activities (CCA) are major components aimed towards the holistic development of the students during their studies. The university has created ample space and facilities for its students to excel in various sports, culture, and fitness avenues. The K. S. Krishnan Auditorium in the institution is well-structured and well-ventilated, with a large seating capacity of more than 1000. The auditorium has been built with modern requirements to enhance the quality of education. It also provides the right ambiance and environment for presentations and conducting various events such as workshops, conferences, seminars, symposiums, guest lectures, etc. The auditorium has a centralized air-conditioning system, audio-visual facility, podium, LCD projector, and sufficient power back with Generator and UPS, etc. KARE has a separate facility for teaching yoga to all first-year students.

The yoga class includes physical exercises for health, meditation for mental health, and moral values for spiritual growth. Pranayama, Sun salutation and Yogasanas are taught in physical activities. Yoga practice is given to the students at "KalviVallal" Thiru.T.Kalasalingam memorial hall, which has an area of 1,1500 sq. ft to accommodate 75 students at a time.

The facilities to get trained in performing fine arts such as Musical Instruments Veena, Tabala, Violin, Harmonium, Mridangam, Anklets (*Salangai*), cymbals (*Thalam*), Thalakkattai, Guitar, Digital Piano with Stand, Speaker System, Amplifier, DJ Plus Mixer, Drum Set are available.

The sports facility has a multipurpose indoor stadium with wooden floorings for Badminton, Volleyball, and Kabaddi. Taekwondo, Wrestling, and Judo are practiced on the ground floor of the indoor stadium. The indoor stadium is furnished with a gallery having a capacity of 500 spectators during sports events. Table tennis, chess and carom are played in separate halls on the first floor of the indoor stadium. The outdoor sports arena has a 400 Mts standard mud track with 8 lanes raised border for athletics events. Basketball, Tennis and Volleyball courts have floodlights with fencing facilities to conduct state-level events. In addition, a Ball Badminton court, Cricket oval, football field, handball court, Hockey field, Kabaddi court, Kho-Kho court, and throw ball court are available on the campus for conducting national/state-level tournaments. A standard hi-tech gymnasium was established in the year 2000 and has been set up with all equipment like 16 station multi-gym, belt vibrator, cross-over machine, chest press, upright cycle, Karlakattai, late rowing bar, a power station with leg press, dumbbells, squat stand, Olympic weight benches, peck and deck butterfly, thigh press, elliptical cross trainer and weight lifting stand for training the students and ensuring their physical fitness.

A standard hi-tech gymnasium has been set up with all equipment like 16 station multi-gym, belt vibrator, cross-over machine, chest press, upright cycle, Karlakattai, late rowing bar, a power station with leg press, dumbbells, squat stand, Olympic weight benches, peck and deck butterfly, thigh press, elliptical cross trainer and weight lifting stand for training the students and ensuring their physical fitness.

File Description	Document
Upload any additional information	[View Document](#)
Geotagged pictures	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.3

Availability of general campus facilities and overall ambience

Response:

Physical Infrastructure

- KARE is a green eco-friendly campus with rich flora and fauna and the extent of greenery accounts for 40% of the total area.
- State-of-the-art 24x7 Wi-Fi enabled campus
- The hostels are well-equipped, spacious, serving multi-cuisine food with a dining capacity of 3000.
- There are four boys' hostels with 1220 rooms and three girls' hostels with 698 rooms can provide accommodation for 4500 students.

- A well-furnished guest house, catering to the needs of visiting guests and parents is available. 30 out of 38 rooms have an A/C facility and are provided with amenities such as television, wi-fi, etc.
- 6 staff quarters with a total of 40 houses are available to provide residential facilities for the teaching and the supporting staff. The Quarters are provided with round-the-clock security, water supply, uninterrupted power supply, internet, and medical facilities.

Refreshment and Stationery

- A multi-cuisine food court operated by Sodexo, ice-cream parlour and Stationery shop are available to cater the needs of all students.
- An organic vegetable shop selling organic vegetables cultivated in the agriculture farm of KARE by our students.

Health Care Services

- The Health Care Centre has facilities for providing preventive and curative health care to the students and the residents of the university campus. Two doctors are available along with the pharmacist.
- The institution has a 24x7 ambulance service

Lift

- The institution has elevators across all the multi-storeyed buildings with more than G+3 floors.

Ramp, Handrails and Wheelchairs

- Ramps and handrails are installed at all academic blocks with wheel chairs at various locations for the ease and safe access of facilities in the campus for the disabled persons.

RO Plant and Sewage Water Treatment Plant

- Water supply is maintained 24 x 7 through RO plant running with a capacity of 3000 litres per hour.
- Two sewage treatment plants with 500KLD and 300KLD capacity is available. They operate 24 hours, the treated water is used for the watering of gardens.

Power Generation and Power Backup

- HT service with a capacity of 1400kVA is availed from Virudhunagar Electricity Distribution Circle. Additional power need is met through solar power generation with a capacity of 791.22kw . The campus has power backup facility through 14 generators with a capacity of 2447.5kVA. 152

Solar streetlights brightens the campus conserving energy.

Transport Facilities

- A fleet of A/C and non-A/C buses are available for the students and the staff. Electrical vehicles and Bicycles are available for incampus mobility.

Banking Services

- Union Bank of India and Karur Vysya Bank branches operating on the campus provide banking services for the students, staff, and public.

ATM

- Two ATMs each from Union Bank of India and Karur Vysya bank available inside the campus.

Postal Service

- In-campus post office provides postal services for all.
- Courier service is also available to handle shipments and consignments.

Add-on Services

- The hairdressing facility available for boys.
- A Beauty parlour and tailoring shop is available for girls inside the campus for the inmates.
- Free laundry service for all the inmates

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.1.4

Average percentage of expenditure for infrastructure augmentation excluding salary during the last five years (INR in Lakhs)

Response:

4.1.4.1 **Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
4886.37	4640.00	4486.07	3990.26	3792.48

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.2 Library as a Learning Resource

4.2.1

Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

Response:

The library services were automated in the year 2004 using MODERNLIB software. In the year 2020, it was switched over to KOHA (Version 19.05), a full-featured Open-Source Integrated Library System (ILS). It is browser-based, interactive, user-friendly software, designed to meet the users' needs.

KOHA Facilitates:

- **Acquisition (Receiving the purchase suggestions, accessioning the new books received from vendors, and cataloguing are done through ILMS)**

- **Cataloguing**

- **Circulation (book issue, return, and renewal)**

- **Serial control**

- **Integrated with student's login page SIS**

- **MARC21 format for cataloguing bibliographic data of the resources.**

- **Multiuser support.**

- **Export and importing of records.**

- **Stocktaking and weeding out.**

Digitization

- **The Central Library is equipped with a modern high-speed scanner (up to 25ppm/10ipm (300 dpi)) for document scanning. It helps easy and effortless digitisation. Its key features are automated scanning without manual intervention for up to 50 pages with a high automatic document feeder (ADF) facility. Once scanned, the document can be shared with a workgroup via a local area network.**

- **The library has 65 computers, internet, scanning, and reprographic facilities to search, download and print documents. Library also houses a seminar hall with modern projection and online conference facilities.**

- **More than 4000 rare books and palm leaves were digitised under the Universal Digital Library (UDL) project, which are now available online for free on the UDL website (http://ulib.isri.cmu.edu/ULIBAboutUs.htm#partnersBkMark).**

- **An Institutional Digital Repository has been created using Open-Source software 'DSpace' for documenting and disseminating the scholarly contents produced at KARE and online access to the resources is given for the benefit of our faculty members, researchers, students, and supporting staff. Document scanners are used to digitize materials that are not 'born-digital'.**

- **Library provides online access to the subscribed e-journals, e-books, e-databases, and RAxter research discovery tool. The contents can be accessed by authorized users even from outside of the campus. DELNET and NDL membership facilitates members to access the resource from other libraries.**

- **More than 30,000 hours of video courses developed under NPTEL have been procured and online access to the contents is provided to the library users. The digital versions of the Ph.D. theses submitted to the institution have been uploaded to the Shodhganga repository, a reservoir of Indian theses.**

- **To assist in research reporting, anti-plagiarism systems such as iThenticate and URKUND are also made available.**

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

4.2.2

Institution has access to the following:

1. e-journals

2. e-ShodhSindhu

3. Shodhganga Membership

4. e-books

5. Databases

6. Remote access to e-resources

Response:

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)

4.2.3

Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response:

4.2.3.1 Annual expenditure for the purchase of books and journals including e-journals year-wise during last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
155.58	159.81	134.93	149.39	152.54

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)

4.2.4

Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year

Response:

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 2203

File Description	Document
Details of library usage by teachers and students (Library accession register, online accession details to be provided as supporting documents)	[View Document](#)
Any additional information	[View Document](#)

4.3 IT Infrastructure

4.3.1

Percentage of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities. (Data for the latest completed academic year)

Response:

4.3.1.1 **Number of classrooms and seminar halls with ICT facilities**

Response: 222

File Description	Document
Upload any additional information	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Paste link for additional information	[View Document](#)

4.3.2

Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

Response:

KARE maintains a well formularized IT policy for all its stake holders functioning under Academics, Research and Administration. The scope of the policy covers internet and network access, data storage and retrieval, maintaining login credentials, disaster management, power-backup, in-house software development, considering the safety and security of information.

Prior to the Academic Year 2017-18, KARE had 2232 Desktop PCs, 130 LCD projectors, 296 WiFi Access points, 1.3 Gbps Internet connection. Later in 2017-18 499 computers, 30 lecture capturing systems, 30 LCD projectors were added additionally, in 2018-19 one computer, 34 lecture capturing systems, 30 LCD projectors, 103 WiFi Access points were added additionally, and in 2019-20 101

computer systems, 50 LCD projectors, 250 WiFi Access points were added additionally. Also, the internet bandwidth was also increased from 1.3 Gbps to 2 Gbps. In 2020-21, 22 CCTV and 3 printers were added. In 2021-22 405 computers, 3 servers, 800 Wifi access points were added. The internet speed is also increased to 3 Gbps in 2021-22.

The IT policy covers all the IT infrastructure in Campus, Network and Security. This includes,

- 3 GBPS internet connectivity from Jio and BSNL.
- High speed internet connectivity with all administrative, academic blocks and hostels through fibre optic cables.
- Wireless internet connectivity in all blocks through Wi-Fi access points.
- Access to video lectures stored in Impartus Lecture Capturing System which are created through the devices installed in various classrooms.
- CCTV surveillance cameras that are installed across the campus to ensure the safety and security of inmates.
- Cyberoam 2500iNG-XP (Next Generation Firewall) which can support 9000 users concurrently is available. The same is renewed as Sophos XG-650 firewall since the academic year 2019-20
- Desktop Virtualization facility with VMWare server and 150 thin clients.
- The data centre hosting many servers which act as a backbone of IT operations inside the campus. Severs available in the campus for various purposes include ERP, Biometric, Accreditation and Ranking, COE office management.
- Technology-based software like Office 365 Pro Plus, Visual Studio Professional, SQL Server, Windows Server etc, MATLAB with scientific toolboxes, AutoCAD are available as part of campus license agreements with pertinent vendors.
- In-house software offering services like health centre, hostel room booking, purchase office, transport booking, faculty recruitment portal, and guest house booking by the KARE Software Development Team.
- Also, in EDU-KARE, in-house software development team developed modules for outcome-based mark entry and analysis (2015-16), automated software (WebApp as well as MobileApp) for pre-examination process including exam time table, student seating arrangement, faculty invigilation duty, result processing (2015-16), digital valuation by external experts (2017-2018). External question paper collection through secured web server (2018-2019) and online student verification process (2019-2020).

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

4.3.3

Student - Computer ratio (Data for the latest completed academic year)

Response:

File Description	Document
Upload any additional information	[View Document](#)
Student – computer ratio	[View Document](#)

4.3.4

Available bandwidth of internet connection in the Institution   (Leased line)

Response:

File Description	Document
Details of available bandwidth of internet connection in the Institution	[View Document](#)

4.3.5

Institution has the following Facilities for e-content development

    1.**Media centre**
    2.**Audio visual centre**
    3.**Lecture Capturing System(LCS)**
    4.**Mixing equipments and softwares for editing**

Response:

File Description	Document	
Upload any additional information	[View Document](#)	
Institutional data in prescribed format	[View Document](#)	
Links of photographs	[View Document](#)	

4.4 Maintenance of Campus Infrastructure

4.4.1

Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response:

4.4.1.1 **Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
5500	5100	5200	4800	3500

File Description	Document
Institutional data in prescribed format	[View Document](#)

4.4.2

There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

KARE's objective is to keep the campus environment clean, green, reliable, and ecofriendly through routine, periodic and efficient maintenance of all facilities to ensure a quality learning environment.

Maintenance of Physical Facilities

The physical facilities of our institution are maintained through the Estate Office. This office comprises a team of civil engineers, electrical engineers, plumbers and carpenters. The services of plumbers, electricians, and carpenters are made available round the clock in the campus. All the complaints pertaining to the above are rectified by the Estate Office, headed by an Estate Officer. Complaints are registered through an e-ticketing system KAlasalingam Facilities and Complaints Addressing System(KAFKA) https://kafka.kalasalingam.ac.in/(from 2018-19 onwards) or eo@klu.ac.in and the mobile numbers are displayed at various locations for quick rectification of complaints. As per the policy any registered request, based on the criticality, it is to be resolved within 24 hours to 1 week.

Housekeeping Services

Housekeeping services are undertaken by a team headed by the Sanitary Inspector. All the classrooms, laboratories and common places are cleaned daily in the evening and is strictly supervised by the sanitary inspector. The university has bagged the seventh rank, among the higher educational institutions, in the SWACHH campus rankings for the year 2018, released by the Government of India.

Maintenance of Classrooms, and Laboratories

Classrooms, teaching aids and laboratories are taken care of by the respective staff of the department and they are being monitored by the concerned Heads of the Department. The laboratory assistant takes care of the maintenance and repair works of his / her laboratory equipment. If any problem is identified, complaints are lodged through an e-ticketing system KAlasalingam Facilities and Complaints Addressing System(KAFKA) https://kafka.kalasalingam.ac.in/ (from 2018-19 onwards) or through the register available in the department and the Head of Department makes reports periodically to the maintenance section and will be rectified immediately. Moreover, a maintenance team from the Estate office does a

periodical maintenance of all the LCD projectors and the SMART classrooms.

Maintenance of Air conditioning systems

Split and window type air conditioners are maintained by inhouse team of AC mechanics and the Centralized air conditioning system units are maintained through AMC.

Maintenance of ICT Facilities

The networking department takes care of the maintenance of ICT and the wi-fi facility of the entire campus. Annual maintenance, purchase and renewal of the required software and the installation of antivirus are carried out by this department. To minimize the e-waste, electronic equipment like projectors, computers, printers, photocopiers etc. are serviced and are reused to the possible extent or disposed through buy-back arrangements.

Maintenance of Sports Facilities

The sports arena is maintained by the Marker and his supporting staff. They are responsible for maintaining the indoor and the outdoor stadiums, the play courts, and the gym in a pristine manner. Repairs, replacements, and damages are brought to the knowledge of the Physical Director immediately and necessary actions are taken to rectify them periodically.

Transport Maintenance.

Transport fitness certification, maintenance and augmentation of vehicles are done periodically, by the Transport officer and his team.

Electrical Maintenance

The electrical maintenance department has taken care of encompassing repairs, replacement of defective parts, regular testing of safety lights and systems, and maintenance of lighting fixtures, fan etc. The day-to-day maintenance work of all the electrical equipment, Transformers, Generators and Electrical machinery are carried out by the Electrical maintenance team, periodically. Apart from this, the government personnel from the electricity board, too, examines regularly. The university is managing a load of around 1300 kW power and a Generator capacity of 2447.5kVA without any break down or accident. This proper maintenance has attracted incentives many times. There are about sixty-one UPS of various capacity, across the campus to ensure efficient workflow.

Solar Panel Maintenance

The solar panels are cleaned with water twice a month. The checking of connections, the cleaning of burnt-out cables and solar inverters is checked every month by a team. The solar panel capacity is 791.2 kW and 60,871 kWH is the production per month. The solar energy app SOLAR EDGE supports the regular monitoring of the situation, both by the university and the company. These solar panels are with a warranty period and therefore, are maintained by the company.

Sewage Treatment plant Maintenance

The maintenance of sewage water treatment plant is carried out by the in-charge, regularly. There are two STP plants – treating an eight-lakh litre of water and a 6-lakh litre of water, which is used for the gardens. The AMC for maintaining it is done by the university.

Reverse Osmosis Plant Maintenance

Safe drinking water is ensured to all through the 3000-liter capacity RO Plant. Periodical maintenance of the plant such as cleaning/replacing of filters, membranes etc., is carried out under the supervision of Estate officer.

Garden maintenance

A separate team led by an experienced gardener do the timely and efficient maintenance of beautiful landscapes in the institute through pruning, trimming, lawn mowing, pest control and overall landscape garden maintenance by which they ensure healthier plants, and an aesthetic and thriving green oasis.

Hazard Analysis and Critical Control Point (HACCP)

Hazard Analysis and Critical Control Points are available in the Academic blocks to tackle the hazards at specific points with Fire Hydrants, Sprinklers and Smoke detectors. HACCP equipment are checked daily and maintained regularly.

Medical Services

KARE has a 24 x 7 Health Care Centre for providing preventive and curative health care to the students and the residents of the university campus. Two doctors are available along with the pharmacist. 30 beds are also available for providing immediate treatment to inpatients. The institution has a 24x7 ambulance service for the critical needs of the inmates. All the medical facilities are regularly maintained throughout the year.

File Description	Document
Upload any additional information	[View Document](#)
Paste link for additional information	[View Document](#)

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Average percentage of students benefited by scholarships and freeships provided by the institution, Government and non-government agencies (NGOs) during the last five years (other than the students receiving scholarships under the government schemes for reserved categories).

Response:

5.1.1.1 **Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)**

2021-22	2020-21	2019-20	2018-19	2017-18
6314	6007	6220	6086	5412

File Description	Document
Upload self attested letter with the list of students sanctioned scholarship	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.1.2

Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response:

5.1.2.1 **Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
6211	6260	6033	6224	5845

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.1.3

Following Capacity development and skills enhancement activities are organised for improving students capability

1. Soft skills

2. Language and communication skills

3. Life skills (Yoga, physical fitness, health and hygiene)

4. Awareness of trends in technology

Response:

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link to Institutional website	[View Document](#)
Link for additional information	[View Document](#)

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

1. Implementation of guidelines of statutory/regulatory bodies
2. Organisation wide awareness and undertakings on policies with zero tolerance
3. Mechanisms for submission of online/offline students' grievances
4. Timely redressal of the grievances through appropriate committees

Response:

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	[View Document]()
Link for additional information	[View Document]()

5.2 Student Progression

5.2.1

Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response:

5.2.1.1 **Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations,** *etc.)***) year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
599	546	652	661	309

5.2.1.2 **Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
628	569	703	685	317

File Description	Document
Upload supporting data for the same	[View Document]()
Institutional data in prescribed format	[View Document]()
Link for additional information	[View Document]()

5.2.2

Average percentage of placement of outgoing students during the last five years

Response:

5.2.2.1 **Number of outgoing students placed year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
1363	1498	1827	1930	1170

File Description	Document
Upload any additional information	[View Document](#)
Self attested list of students placed	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.2.3

Percentage of student progression to higher education (previous graduating batch).

Response:

5.2.3.1 **Number of outgoing student progressing to higher education.**

Response: 142

File Description	Document
Upload supporting data for student/alumni	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.3 Student Participation and Activities

5.3.1

Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.

Response:

5.3.1.1 **Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
40	6	52	42	82

File Description	Document
Institutional data in prescribed format	[View Document](#)
e-copies of award letters and certificates	[View Document](#)
Link for additional information	[View Document](#)

5.3.2

Presence of Student Council and its activities for institutional development and student welfare.

Response:

The University has the KARE Student Council Administration System and Scholar forum. KARE Student Council Administration System represents UG and PG students. The Department-wise /School-wise/Centre-wise Students are the base- tier, whose office bearers- are selected by consensus within the Department/School/Centre concerned. Faculty-wise aggregation of the office-bearers of the Department-wise /Centre-wise Students made and from that pool three personnel- President, Vice-President, and Secretary are selected, by consensus nomination, to represent the faculty concerned. The KARE Student Council Administration System is made up of members from the Faculty of Engineering, Arts and Sciences, Agriculture and Architecture.

Office bearers of the Student Council Administration System - Department Level/Faculty Level/University Level take part in the governance of relevant entities for Welfare Augmentation, Enhancement of Curriculum, Enrichment of Teaching-Learning and Evaluation, Eruditeness of Research, Innovation, Extension, Enlargement of Infrastructure including Learning Resources, Excellences of Student Support and Progression/Governance/Best Practices. They assist the Administration in ensuring a dynamic campus.

Special invitees for

Board of Studies Meetings: In all the 40 plus Boards of Studies student members take part as special invitees to air the collective views of the students of the Programs/Courses –regarding the structure, stockpile and contextual needs of the curriculum and also in the design of appropriate curriculum delivery exercises including the ICT support and practical exposures within and outside the classroom.

IQAC Student Membership: The Internal Quality Assurance Cell of the University has student/scholar representatives. Membership in University-run Cells /Clubs: In the University there are several Cells and Clubs, and student representatives, 2 to 3 students serve as members.

Constructive Activities: The Student Council Administration System's activities have been found to be constructive, particularly in terms of providing suggestions for new curriculum exercises on a regular basis, adopting ICT-based learning, campus cleanliness (tobacco-free culture, plastic-free responsible behaviour, water-body augmentation, and so on), creativity/society-oriented research pursuits, towing the line of accomplished alumni, and promoting team quality on campus and in the community.

Innovation and Entrepreneur Development Cell (IEDC): The student's members in IEDC have been found to be constructive with special focus on three areas - Technopreneurship, Women Entrepreneurship and Rural Entrepreneurship.

Hostel Administration Committees: In-mate Students Serve on Hostel Administration Committees: In all nine hostels, in-mate students serve on the Mess, Maintenance, Accounting, and Housekeeping Committees. The office bearers' calmness and temperament are evaluated to replicate the practise in other hostels or to limit the autonomy ambit.

Green Army: The Student Council Administration Systems have been found to be constructive in educating and advice co-students to follow environment friendly practices inside and outside the classroom and in the campus as well. The student team is aiming to bring zero pollution level in the university by means of adopting new technologies and by continuous monitoring.

Other committees: The Students Council Administration System members is actively participating in various other committees such as Library Committee, Sports Committee, Anti-Ragging Committee, Internal Complaints Committee and Grievance & Redressal Committee to uplift the quality of education and other amenities for the students.

File Description	Document
Upload any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.3.3

Average number of sports and cultural events / competitions organised by the institution per year

Response:

5.3.3.1 **Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
21	17	27	30	19

File Description	Document
Upload any additional information	[View Document](#)
Report of the event	[View Document](#)
Institutional data in prescribed format	[View Document](#)
Link for additional information	[View Document](#)

5.4 Alumni Engagement

5.4.1

The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

The alumni association contributes to the development of the institution. The Alumni Association has been registered as a society under section 10 of Tamil Nadu Act 27 of 1975 having registration number 63/2008 with 24,000+ members. Many of the members are occupying leading positions in the country and abroad. To name a few Mrs. V. Vanitha (1988 BE CSE) an IPS officer heading the coastal security group, Ramanathapuram in Tamil Nadu; D. Hariharan (1989 BE CSE), Senior Vice President, Bank of America; Dr. S. Nallayarasu, Professor, IIT Madras (1989 BE Civil); Mr. P. Balamurugan (1997 BE Mech. Engg.) Assistant Controller of Patents and Designs, Government of India; Mr. Solomon Nesakumar IPS (2000 BE ICE), Deputy Commissioner of Police, Kolkata; Mr. V. Ramasubramanian (2004 BE Mech. Engg.) Scientist (G), VSSC, ISRO, Kerala; Mrs. Archana (2010 B.Tech. ECE) Topper of the Tamil Nadu Public Service Commission 2019, Ms. Vishalini (2019 B.Tech. CSE) has the highest verified IQ of 225 and youngest CCNA certificate holder and many more. The almaconnect platform is being used to connect with different Alumni members where all related information is shared through the portal. The MoU is established with Almaconnect for customizing and maintaining an Alumni portal for kalasalingam university on Alma Connect.

Alumni meets are conducted periodically for networking strengthening social relations and sharing expertise with the students for guidance placements. In addition to these reunions, several other events are held each year where alumni members serve as resource persons for guest lectures, training programs, one-credit courses etc. Alumni also serve as members of Board of Studies (BoS) and Program Advisory Committee (PAC) where various aspects of quality assurance and enhancement are discussed during the meeting and necessary actions are taken based on the alumni feedback. The alumni association and the alumni of KARE contributed financially sum of Rs. 221.2 Lacs during the last five years. Some alumni engagement through various activities are listed below for the last 5 years.

Alumni support for the development of the institution through financial support during the last five years to

1. Contribute towards the purchase of new computer desktops
2. Enhance teaching learning processes by procuring new LCD projectors, Video Capturing facility, modern lab equipment etc.
3. Modernize the seminar hall with the latest technologies
4. Constitute financial awards for the best community service projects
5. Construct of new classrooms with all teaching aid systems
6. Maintain the sophisticated research-based equipment in the International Research Centre
7. Conduct career guidance programs for the students

Alumni support for the development of the institution through other services during the last five years.

1. 89 alumni members have served as resource persons in guest lectures/seminars organized by various departments.
2. 32 alumni members have served as resource persons in faculty development programs organized by various departments.
3. 8 one-credit courses were conducted by utilizing alumni as resource persons.
4. Many alumni members have served as advisory board members in various departments and also as members of board of studies of various departments.

File Description	Document
Any additional information	[View Document](#)
Link for additional information	[View Document](#)

5.4.2

Alumni contribution during the last five years (INR in Lakhs)

Response:

File Description	Document
Any additional information	[View Document](#)
Link for any additional information	[View Document](#)

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance.

Response:

Vision: *"To be a Center of Excellence of International Repute in Education and Research".*

Mission: *"To Produce Technically Competent, Socially Committed Technocrats and Administrators through Quality Education and Research".*

Both the vision and mission statements have been approved by the Board of Management of KARE and are uploaded on the website.

KARE adopts flexible governance mechanism to ensure realization of its vision and mission. Governance is based on the philosophy that adequate autonomy to administrators would result in greater efficiency towards achieving the stated objectives in a time-bound manner.

The following are the Statuary and non-Statuary bodies to ensure efficient Academic and Administrative Governance

Statuary bodies

- Board of Management (BoM)
- Academic council
- Planning and Monitoring committee
- Finance committee
- Board of Studies

Non-statuary bodies

- Internal Quality Assurance Cell (IQAC)
- Anti-Ragging Committee
- Student Grievance and Redressal committee
- Internal Complaints Committee
- Anti-Discrimination committee

Vision and Mission as reflected in Academic governance

- Quality education is ensured by incorporating industry oriented dynamic curriculum, rigorous process of implementation supported by an academic governance structure.
- Curricula are developed for the holistic development of students to gain the information, skills, solve societal problems and uphold national and global standards and values, according to

KARE's mission statement.

- ICT-enabled teaching-learning infrastructure facilities are provided to meet the Regulatory Bodies' requirements.
- Establishment of a state-of-the-art International Research Center (IRC) with latest high-end instruments enabling advanced research in material science including nanotechnology.
- Policies towards, Research, Consultancy, Entrepreneurship and Patents have motivated the faculty to scale newer peaks in achieving excellence.
- KARE has received DST grants to establish the National Center for Advance Research in Discrete Mathematics. The centre also publishes an International Journal titled "AKCE Journal of graphs and combinatorics" through Taylor & Francis.
- IQAC monitors internally the quality of education through various committees.
- To encourage the students to get exposed to societal problems, "Community Service Project" has been included in the B.Tech. Curriculum.
- KARE has signed MoU with National and International Institutions and Industries through Industry – Institution Cell
- KARE has separate Institutional Entrepreneurship Development Cell (IEDC) for startup projects. More than 10 start-up companies Funded by National Science & Technology Entrepreneurship Development Board (NSTEDB)-DST, Government of India.

Vision and Mission as reflected in administrative governance:

- The administrative organogram of the university depicts the role and responsibility of each of the functional head. School is headed by the Dean who is responsible to administer the functions of the departments attached to his/her school. Deans report to the Vice-Chancellor who is the Chairman of the BoM which is the highest decision-making body.
- Each school is granted operational autonomy for Academics, planning of Extra/Co-curricular activities, Budget allocation and operation, etc. The Heads of the Department are granted autonomy in planning their departmental activities.
- The Program Advisory Board of each department provides timely advice and suggestions in ensuring seamless functioning of the department.All the statutory bodies of KARE function according to well-defined policies and procedures that are transparent also in coordination with appropriate hierarchy.
- KARE develop long term plan and Annual strategic perspective plan with the participation of all stake holders to meet vision and mission.

File Description	Document
Any additional information	[View Document](#)

6.1.2

The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

- The Planning and Monitoring committee along with industry experts and stakeholders of the Institution has developed a 10-year Strategic Plan (Vision-2026). The objectives of the Strategic plan are in line with vision and mission of the University.
- Annual Strategic Perspective Plan is prepared by the office of IQAC every year based on the feedback received from the various sections of the Stakeholders. The Autonomy is given to each level for effective implementation of the Annual Strategic Perspective Plan. IQAC will monitor and review the progress of this Plan.

- KARE follows a decentralized and participative management in decision making.
- A bottom-up approach is adopted including all stakeholders in planning and execution of various Policies. In its constant endeavor towards ensuring quality education, the Board of Management, provides valuable suggestions and advice towards holistic growth of the Institution.
- There are 10 Schools and 27 Departments in KARE. Each school is headed by the Dean, while the Departments by the HoD. Schools and Departments are autonomous entities which are entitled to create/amend course curriculum, conduct Program Advisory Board and Board of Studies meetings, organize regular classes, continuous assessment, student progression, research workshops, guest lectures, approve staff/student leaves, collect feedback from various stakeholders, recommend purchase of required hardware/software and maintenance of Department Association, Finances in a completely decentralized manner
- ERP software modules developed in-house like Exam Administrative System (EASY), Faculty Information System (FIS), Smart SMS (SSMS), Parents Corner (PACO), Attendance Information and Maintenance System (AIMS), Staff Attendance and Leave Tracking (SALT) and Student Information System (SIS), helps the university in extending the autonomy further in administering various day to day activities seamlessly.
- The hostel management committee, comprising student members plays an active role in formulating various hostel policies leading to the comfort of inmates.
- Class committee comprising student members and faculty helps the department in efficient deployment and utilization of its resources and time. Students' Council further strengthens the process of decision making by providing timely suggestions.
- Alumni Association contributes its might in various policy making committees such as curriculum review, placement training, IQAC etc.,
- All the departments are having the practice of conducting the parent teacher meetings once in a semester. The feedback from parents will taken into account for improving teaching learning process.
- Various statutory and non-statuary committees such as Board of studies, Anti-ragging, Grievance redressal, Gender equity cell, Library committee, Women empowerment cell, etc., contribute towards framing of policies and SoPs as prescribed by AICTE/UGC.
- In addition to the above, Board of Management, Academic Council, Planning and Monitoring Board and Finance Committees comprise members drawn out from various domains and these committees take active role in nurturing the growth of the university as per its Strategic Plan-2026.
- KARE follows participative Management approach on Curriculum development process.

File Description	Document
Any additional information	[View Document](#)

6.2 Strategy Development and Deployment

6.2.1

The institutional Strategic plan is effectively deployed.

Response:

Kalasalingam Academy of Research and Education has a Strategic Plan (Vision-2026) prepared by Planning and Monitoring Board along with industry experts and stakeholders of the Institution. The Strategic Plan (Vision 2026) is approved by Board of Management. It is evident in academic and research by various rankings and accreditation. A Sample Case study on Research also submitted with this metric. Annual Strategic Perspective Plan is obtained from each Department, Cell/Committee/Club and offices by the IQAC and an Impact Analysis Report will be prepared to improve the quality in Academic, Research. The midterm review will be conducted by IQAC to review the deployment of Annual Strategic Perspective Plan. Midterm corrections also done based on the review meeting.

The Strategic Plan contains various key performance indicators which covers all the academic, Research and administration of the university. It took its final shape after detailed deliberations at various levels. Key performance indicators (KPI) included in the Strategic Plan focused towards:

1. Strengthening of Teaching Learning
2. Impetus to Research, Development and Consultancy
3. Patents and Entrepreneurship
4. Infrastructure
5. Accreditations and Rankings
6. Green Campus
7. Outreach Activities

The university has taken utmost care in achieving the prescribed KPIs to the fullest extent. On the Academic front the university overhauled its course-curriculum adopting the principles of lifelong learning and creation of global employees. Implementation of CBCS across all the programs offered by the university resulted in flexible curriculum. Continuous monitoring of academic performances resulted in higher pass percentages, Also a strong recruitment and retention policy further contributed towards strengthening Teaching and Learning and creation of a learner centric environment.

A well-thought-out research promotion policy helped the university in achieving excellence in Research Publications, increase in number of funded research projects, both by Government and private sector. As an outcome of the same university made progress in creation of IPR and patents. As a cyclic effect, the patents resulted in nurturing the entrepreneurial aspirations of the students.

Investments were made towards strengthening both physical as well as learning infrastructure. A state of the art 'Visvesvaraya Block' was constructed and made available to the students from 2019-20. Learning infrastructure included procurement of campus wide MATLAB, upgradation and augmentation of laboratory infrastructure and ICT facilities. Enhancement of renewable energy capacity, focus towards

water conservation and reduction of carbon footprint were other key areas which attracted sizable investments. Academic and Administrative Audit (AAA) will be conducted by ISO Certified auditor once in a year.

Sustained efforts towards achieving the goals prescribed in the strategic plan resulted in greater NAAC scores and better NIRF rankings. In its endevour towards building Synergy with society, steps were taken to understand the needs of the neighborhood and creating technology to Ease the day to day living of the masses through initiatives such as CSP and organization of outreach activities by NSS.

A detailed compliance report also prepared on effective implementation of the Strategic Plan (Vision Plan 2026) by IQAC.

File Description	Document
Any additional information	[View Document](#)

6.2.2

The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

Response:

KARE is well known for its transparent administrative setup. It is visible in the organogram of the University. The Administrative setup is effective by creating various policies and SoP on the Policies. KARE has established various Statutory and Non- Statutory Bodies in line with the UGC Regulations.

Various Statutory Bodies:

1. Board of Management
2. Academic Council
3. Planning and Monitoring Board
4. Finance Committee
5. Board of Studies

The Board of Management Meeting is conducted once in every three months. It is effective by approving the Action taken Report in every successive meeting.

KARE has active Academic Council along with External experts from Industries. The Meeting is conducted tri-annual. The Suggestions given by the council is implemented after getting approval from the Board of Management. The Board of Studies collects the feedback from various stakeholders for the revision of the existing curriculum. Feedback is collected from industrial experts too to ensure that the curriculum caters to the students as per the industrial needs.

The Planning and Monitoring Board and the Finance committee too, function effectively, as a consequence of the regular meetings conducted, as per the Regulations. The Resolutions taken in the meeting are implemented after getting the approval from the Board of Management.

Apart from the Statutory Bodies, KARE has the following Non- Statutory Bodies:

1. Internal Quality Assurance Cell
2. Anti Ragging Committee,
3. Anti-Ragging Squad,
4. Student Grievance and Redressal committee,
5. Internal Complaints Committee,
6. Anti-Discrimination Committee,
7. Women Empowerment cell.

In addition to the Memorandum of Association (MoA), KARE has created various protocols such as Service rule book of the Institution, Powers and Duties of officers and faculty, e-Governance Policy, Admission Policy, Research Policy, IT Policy IPR Policy, e-Waste Policy, Energy Policy, Faculty Appraisal and Promotion Policy etc., for effective and efficient functioning of the University. Each faculty appointed in the institution should comply with the Service Rules of the Institution.

Further the committees framed for the welfare of the students, namely the Student Council, the Hostel Committee, the Library Committee and the Scholarship Committee, meet regularly and discuss the needs of the time to ensure proper functioning

For effective monitoring in the Academic progress of the student, the class committee is framed for every class. The Class Committee Chairperson reviews periodically the progress of the classes, monitors the syllabus coverage for every course and resolves issues related to slow-learners.

The Class Coordinator of each class is responsible for monitoring the overall development of the students.

For a group of 25-30 students, there is a Faculty Advisor who helps the students in getting general advice on the academic programme. The Faculty Advisor is the point of regular contact with the parents/guardians of their wards.

The faculty members are bestowed with the responsibilities of being the Programme Coordinator, the Module Coordinator, the Course Coordinator, to facilitate the academic needs of various courses and some faculty are Assistant Wardens and Deputy Wardens, shouldering the administrative needs.

The effectiveness of these bodies is evident through the minutes of the meetings and the implementation of their resolutions. These Committees work at various levels for the effective functioning of the Institution. Regular meetings are conducted to take decisions. Resolutions are made and the appropriate actions are taken by the authorities of KARE.

File Description	Document
Any additional information	[View Document](#)
Link to Organogram of the University webpage	[View Document](#)

6.2.3

Institution Implements e-governance covering following areas of operation

1. **Administration**
2. **Finance and Accounts**
3. **Student Admission and Support**
4. **Examination**

Response:

File Description	Document
Screen shots of user interfaces	[View Document](#)
ERP (Enterprise Resource Planning) Document	[View Document](#)
Details of implementation of e-governance in areas of operation, Administration etc (Data Template)	[View Document](#)
Any additional information	[View Document](#)

6.3 Faculty Empowerment Strategies

6.3.1

The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff .

Response:

KARE is striving for improving the quality of teaching and non-teaching staffs. Annual appraisal is one of the way to ensure the same. KARE has well defined Policy on Career Advancement Scheme (CAS) for Appraisal and Promotions. KARE keeps updating the policy as per experiences and feedbacks from stakeholders along the guidelines of UGC/AICTE. In the past 5 years, 2 major revamps have been done.

Appraisal Process

CAS policy has a dual purpose of faculty appraisal as well as faculty training by setting standard benchmarks through the detailed rubrics. The process was carried out centrally which involved submission of self-appraisal by individual faculty followed by criteria-wise evaluation and review by a central review team. The analysis and consolidation are done by the IQAC office and

recommendations are submitted to the Vice-Chancellor.

From 2018-19, the appraisal process is made decentralized through the involvement of Deans and HoDs of the department. A faculty submits his/her self-appraisal to the HoD. The HoD verifies the faculty contribution and forwards his/her recommendation to the School Dean. The Dean offers his/her recommendation after conducting the discussion with the faculty members and submits to the IQAC office. The IQAC does complete verification, wherever required, and placed the faculty members into four categories based on the marks obtained in Teaching Research and Professional Development Activities (TRP) report and submits the analysis to the Vice-Chancellor for approval and necessary actions.

Promotion Avenue

KARE follows a transparent performance-based system for promotion. The Vice Chancellor office invites promotion application from faculty members once in a year. The committee constituted by Vice Chancellor carefully scrutinizes the applications based on the CAS Policy and recommends the shortlisted candidates to the Vice-Chancellor for final decision.

Welfare Measures

A strong welfare measure is in place for all the teaching and non-teaching staff of the institution. Over the years, many schemes are evolved and listed as below:

Teaching Staff:

1. **Professional development allowance or research incentives**

2. **Seed money for research**

3. **Rewards and 'out of term' promotions based on performance**

4. **Sponsorship for seminars, workshops, conferences, FDPs**

5. **Support for self-development viz, higher studies, research and post-doctoral research**

6. **Revenue share in consultancy projects**

7. **Reimbursement of major medical expenses**

8. **Well-furnished quarters**

9. **Free Medical Treatment for staffs in Health Center**

10. **Guest House Accommodation for senior faculty**

11. **Wi-Fi connection**

12. **Individual cabins**

13. **Sabbatical leave**

14. **Sponsored patent filing**

15. **Advanced grant**

16. **Incentive for incubation initiatives**

17. **Reduced work load for faculty involving research**

18. **IQAC awards for teaching and non-teaching staffs**

19. **Organization of sensitization program on gender issue by ICC cell**

Teaching and Non-teaching Staff:

1. **Hostel Accommodation**

2. **Concessional Food & Transport facility**

3. **Group insurance**

4. **Maternity and Medical leave**

5. **Bank loan facility**

6. **Day Care center for babies of employees**

7. **IQAC awards for teaching and non-teaching staff.**

8. **Reimbursement of major medical expenses**

9. **Free Medical Treatment for staffs in Health Center**

10. **Concessional admission fee in schools and colleges for wards**

File Description	Document
Any additional information	[View Document](#)

6.3.2

Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.

Response:

6.3.2.1 **Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
424	317	389	428	468

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc. during the last five years (Data Template)	[View Document](#)

Other Upload Files	
1	[View Document](#)

6.3.3

Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response:

6.3.3.1 **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
65	74	96	89	94

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres)	[View Document](#)
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	[View Document](#)

6.3.4

Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response:

6.3.4.1 **Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
431	416	384	431	468

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	[View Document](#)
Details of teachers attending professional development Programmes during the last five years (Data Template)	[View Document](#)

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

KARE has well- defined policy on Resource Mobilization and Optimum Utilization of Resources. The main purpose of Resource Mobilization and Optimum Utilization of Resource Policy is to ensure the Accountability and Transparency.

The resource mobilization is carried out by the following Sources:

- Fee collection from Students
- Interest on Corpus Fund
- Earnings from Research Consultancy
- Earnings from Training Programmes
- Donations from philanthropists
- Alumni contributions other than the scholarships
- Research Grants
- Rent from infrastructure facilities

The main goal of the strategy for mobilization of funds is to ensure adequate funds flow for maintenance and development expenses for growth and expansion as per KARE -Strategic Plan (Vision plan)- 2026.

The institution's budget preparation is based on teaching, research, and rural upliftment. The best estimates of funding available from each of its primary revenue sources support the budget. The sustainability aspect is given serious consideration in the budget and expenses. Depending on the optimal utilization, the allocation of funds is modified from year to year so that optimal growth can be achieved. Prudent use of resources is ensured by academic, research, administrative, and financial audits. Planning and Development Board prepares the plan of expenses in consultation with stakeholders, the Finance Committee is responsible for observance of regulations relating to maintenance of accounts of income and expenditure, and the BoM approves them. To control expenses in the long-run, systems such as solar power generation, e-Governance in Academic and Administration, water recycling, solid waste recycling are adopted.

The revenues are from tuition fees, interest on the corpus fund, philanthropic support including industry and alumni contributions, consultancy, non-Government funds and research grantsservice revenue such as housing and dining, Infrastructure rent such as Usage of Auditorium, Swimming pool and sports facilities by the nearby community and government organizations. The core expenses include salaries and benefits for the staff, academic and administrative support, operation and maintenance existing infrastructure, expenses towards new infrastructure and facilities, and student services including financial aid and scholarships.

To increase closer interaction and monitoring, personalized guidance, and UG students' participation in research a lower student-faculty ratio is required. To improve student-faculty ratio which is seen as a surrogate for teaching quality, high priority is given. However, to achieve an international good standard of the student-faculty ratio of less than 10, the tuition fee cannot be a major source of income and hence other sources are being explored. Further, library, ICT including wi-fi, and laboratories are essential elements to improve the quality of the educational and research experience and sufficient priorities are given. To attract the rural youth, many scholarships and financial aids schemes are planned with sufficient budget allocation.

KARE plans its utilization of financial resources through the Annual Budget. The Annual Budget is prepared based on the actual expenditure of the previous year and proposed academic and administrative development. This budget is ratified by the Finance Committee and approved by the Board of Management. The actual expenditure is done against the approved budget that is monitored by the process of internal and external audits.

File Description	Document
Any additional information	[View Document](#)

6.4.2

Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response:

6.4.2.1 *Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).*

2021-22	2020-21	2019-20	2018-19	2017-18
71.19	0	149.589	0	0

File Description	Document
Details of Funds / Grants received from government bodies during the last five years (Data Template)	[View Document](#)
Any additional information	[View Document](#)

6.4.3

Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response:

6.4.3.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
68.25	38.5	60.50	61.7	18.25

File Description	Document
Institutional data in prescribed format	[View Document](#)
Any additional information	[View Document](#)
Annual statements of accounts	[View Document](#)

6.4.4

Institution conducts internal and external financial audits regularly

Response:

KARE abides by all the mandatory requirements of the statutory provisions and mandates. It conducts internal and statutory external audits regularly.

KARE has well defined Audit policy in terms of conducting Internal and Statutory Auditing. The Institution maintains the Financial Accounting every financial year starting from April to March. Annual Budget is prepared by Finance Committee and duly approved by the Board of Management.

The Main purpose of conducting Internal Auditing is to ensure continuous critical appraisal of the functioning of each departments/Offices of the Institution and to suggest improvements thereto and strengthen the overall governance of the Institution. Internal Auditing is done once in every quarter. An Auditing team including external member appointed by the Board of Management is responsible for internal Audit. The Audit Schedule is prepared to conduct Internal Audit. The prior notification will be sent to every office of the University before the auditing Process. The Audit team thoroughly checks all day-to-day transactions initiated under various departments and offices of the University. The action taken report and observations during the auditing will be submitted to the Finance Committee and the same will be approved and implemented by the Board of Management. KARE has qualified Auditors to supervise the Internal Audit Functions and they ensure that all the functions and procedures decided in the Finance Committee/ Board of Management are strictly adhered to.

KARE invites external auditor to conduct annual statutory audit in terms of, transaction audit, compliance audit and submit their reports annually.

The financial statements prepared by the institution are independently audited by a firm of Chartered Accountants. The external auditor is appointed by the Board of Management on the recommendation of the Finance Committee for a period of one year and is subject to renewal thereafter upon satisfactory performance. The process takes care of the regulatory requirements of various stakeholders.

The External auditor scrutinizes the bank accounts, financial statements and ledgers of the institution with reference to its transactions. A Compliance report will be prepared based on the Objections and Comments given by the External Auditors. This report will be ratified in the Board of Management every year.

File Description	Document
Any additional information	[View Document](#)

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes by constantly reviewing the teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals.

Response:

IQAC Mechanism for institutionalizing the quality assurance

IQAC has taken several initiatives to ensure quality in all aspects, few of them are given below:

I. Design and Implementation of Quality Metrics

II. Stakeholder Feedback Analysis on curriculum and other dimensions

III. Online Data Collection and Documentation of activities

IV. Instituting IQAC awards for Departments, Faculty and Students.

V. Autonomy based Course

IQAC has taken several initiatives to ensure quality in teaching learning. Few practices institutionalized as a result of these initiatives are discussed as below:

1. Effective OBE based system

Faculty members are selected across different departments and are given full autonomy to teach atleast one course per semester under autonomy scheme. The faculty has freedom to decide the extent of lateral coverage and depth in any given topic. From the approved list of evaluation methods, the faculty handling the course under autonomy scheme is expected to select a minimum of 5 evaluation schemes. This initiative has also improved the quality of teaching in faculty members as well.

2. Quality improvement in special courses

With an explicit purpose of improving practical skills of students, KARE has taken initiatives to offer special courses like Theory with Practical Component, One Credit Course and Laboratory with Project. This has boosted the morale of other faculty members also to think and practice bringing in quality in offering these special courses. As an outcome of this, many students have presented their project works in various student seminars and conferences, filed for patents and taken to entrepreneurship initiatives by the students.

3. Promoting Digital Pedagogy

The Office of Center for Learning Technology has taken special initiative to promote use of digital pedagogy among the faculty members to improve the quality of teaching learning. We have also installed Impartus lecture capture system in all the departments which is used by the students extensively. The IQAC office plays a key role in promoting the use of digital pedagogy by recognizing the best performing faculty members during the IQAC day. IQAC office also recognizes those faculty members who have demonstrated the maximal usage of the Impartus lecture capture system amongst students. These initiatives of IQAC has tremendously improved the participation of almost all the faculty members in adopting digital pedagogy across the campus.

4. Collaboration with IUCEE

KARE is an institutional member of Indo Universal Collaboration for Engineering Education (IUCEE)

which is actively involved in improving the quality of engineering education on the initiative of IQAC. IQAC is also coordinating the KARE-IUCEE initiatives for improving teaching learning. Particularly, we have utilized the webinars offered by different experts available with IUCEE to improve the quality of laboratory courses, UG projects, training leaders and promotion of online teaching. We are also training students in leadership skills through a special programme.

5. Specific Initiatives in Teaching Learning Process during Pandemic

        The IQAC along with CLT organized orientation and training programs for all the faculty members about the various online meeting platforms as well as the usage of various teaching tools such as Kahoot, Hot Potatoes, Quizz etc., during the pandemic period. An exclusive online examination platform designed and utilized for the conduction of MCQ pattern examination.

File Description	Document
Any additional information	View Document

6.5.2

Institution has adopted the following for Quality assurance

1. Academic Administrative Audit (AAA) and follow up action taken

2.Confernces, Seminars, Workshops on quality conducted

3. Collaborative quality initiatives with other institution(s)

4.Orientation programme on quality issues for teachers and students

5. Participation in NIRF

6.Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA).

Response:

File Description	Document	
Upload e-copies of the accreditations and certifications	View Document	
Upload details of Quality assurance initiatives of the institution (Data Template)	View Document	
Paste web link of Annual reports of University	View Document	

6.5.3

Incremental improvements made for the preceding five years with regard to quality (in case of first cycle), Post accreditation quality initiatives (second and subsequent cycles).

Response:

NAAC Peer Team visited KARE in October 2015. The esteemed members of the PRT have provided several suggestions in quality improvement. The IQAC in its meeting dated March 2016 deliberated upon these suggestions and chalked out a time band action plan towards its implementation. The IQAC in its subsequent meeting monitored the program in implementation of those quality initiatives and provided further guidance towards augmentation of the same.

The quality initiatives are as follows:

- In the teaching learning process based on the deliberations taken in the meeting held in the academic year 2016-17 a complete revised CBCS system has been followed and at present a complete
- IQAC has taken initiative to promote the usage of ICT among faculty and students. The *Impartus* video capture facility is installed in classrooms and the faculty who are actively engaged in using the *Impartus* are recognized during the annual IQAC day function. IQAC has also actively promoted the use of digital pedagogy.
- Project auditing and recognizing both the students and faculty guides during the IQAC day function is one of the initiatives which has contributed to the quality enhancement.
- IQAC has, through the institutional collaboration with IUCEE (Indo Universal Collaboration for Engineering Education), supporting students' participation in project presentations. In the past 2 consecutive years, our students have won first prize in the student events organized by IUCEE.
- IQAC revised the quality metrics to give more importance to the academic performance of the departments while maintaining the performance of the departments in research and student activities. The assessments of departments based on quality metrics helped the departments to improve the overall quality.
- IQAC has come up with parameters for the performance evaluation of the central administrative offices. These offices are evaluated once in a year and recommendations are given for their improvement. Many notable outcomes are visible as a result of these initiatives such as the improved contribution of IEDC of the university and improved publication and research grant statistics of the R & D office.
- IQAC played an important role in creating the School concept wherein allied departments are combined under one School. This has helped the sharing of facilities and participate in inter-departmental projects. While the HoDs take care of the day-to-day administration, the Deans are responsible for giving overall visionary leadership to the departments.
- IQAC developed in-house software for online collection of data. Online system is implemented in a full-fledged way for conducting entrance examination, payment of all fee, course registration, mark and attendance details, hostel & transport booking, grievance registering, faculty and student data collection system, sanction of leaves etc. The faculty attendance and salary is also based on the biometric system connected to the ERP.
- IQAC instituted the concept of mentor-mentee system wherein a faculty mentors a couple of other faculty members in teaching, research and administrative functions. The outcome of this initiative has resulted in a core team of faculty members who can take up the task of offering leadership to others.

File Description	Document
Any additional information	[View Document](#)

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

The institution is sensitive to gender equity and parity. The institution has promulgated a Policy for Gender Equality and supports girls throughout their pathway from education to employment.

Academic and Research Initiatives

- **Admission Scholarship:** To promote the gender equity, the eligible students are provided with equal opportunities in getting scholarships based on various schemes.
- **Sports Quota**: Girl students who excel in sports are admitted through sports quota and are given full scholarships with boarding and lodging for the entire duration of the program.
- **Courses Related to Gender:** The commitment of KARE in promoting gender equity and equality is reflected in the courses that are introduced at both undergraduate and post-graduate levels.
- **Research:** KARE gives equal opportunity to women in the research activities. Out of the 618 scholars pursuing research at KARE, 267 are women scholars.
- **Appointment of Faculty Members and staff:** About 30 percent of the faculty members are women. Twenty-three faculty members were appointed to the leadership positions during this period.

Co-curricular and Extra-curricular activities

- A Women Empowerment Cell has been constituted to support and uplift the women members of the campus community. Girl students participate in various extracurricular activities (NSS. NCC) and sports events including Taekwondo, Gymnasium and Swimming pool.

Facilities

The institution provides the following facilities for women such as:

- **Safety and Security:** KARE is a gated community with a single entry and exit point manned 24X7 by security guards who are ex-servicemen. A proportional number of lady security guards are also appointed and deputed both in the main gate as well as in the Ladies' hostels. CCTV cameras at various locations on the campus, ensure additional safety for the campus inmates. A full-fledged health center, with regular doctors and nurses, offers immediate medical care.
- **Counselling** is provided to students at different levels such as academic counselling, career counselling, and personal-social Counselling besides gender-related counselling. Through the Faculty Advisory system of KARE, academic counselling is provided to the students. Psychological counselling is provided by trained external counsellors (under an MoU) and the faculty members of our Social Work department.

- The **common room** facilities in all the academic buildings and hostels are provided with requisite facilities and also attached restrooms.
- The campus also has a **day-care centre** to cater to the needs of infants and children of the faculty and staff members. This is equipped with cradles, a play area for children and trained caretakers.
- Separate **Shower Rooms and Lockers** are available in the Swimming Pool.

Impact of the Initiatives

- **Fellowship and Awards:** Faculty members of KARE being selected for various National and International fellowships and awards. During the fellowship, KARE provides them leave with a salary so that the young women faculty members can build their careers.

- **Entrepreneurship:** With the support provided by Atal Incubation Centre and IEDC, 16 of KARE's faculty/students have start-up companies that are being incubated at KARE.

Women Alumni who excel in their career: KARE provides a solid foundation for the students not only in academics but also in co-curricular and extra-curricular activities.

File Description	Document
Specific facilities provided for women in terms of: a.Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	[View Document](#)
Annual gender sensitization action plan	[View Document](#)

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Response:

File Description	Document
Geotagged Photographs	[View Document](#)
Any other relevant information	[View Document](#)

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **E-waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The institution has established a system for the management of various wastes produced in the campus, to provide a clean environment through the concept of Reduce, Recycle, Reuse which in turn creates wealth and also supports wellbeing of students, faculty and staff and to enhance the quality of life within the campus and to the society. The institution generates wastes such as waste paper, cardboard, computers, electronic equipment, glass, batteries, wood, concrete, sericulture, agriculture and food wastes. KARE has a well-defined solid waste management plan. Both degradable and non-degradable solid wastes generated in the campus are collected using separate bins at various points. Sufficient number of collection bins are available throughout the campus. They are collected and brought to a central location by designated workers using trucks.

Liquid waste generated in the hostels and academic blocks are treated by two sewage treatment plants, one with 300 KLD and another with 500 KLD capacity. The recycled water is used for flushing the toilets using the dual pipeline system and for irrigating the lawns and gardens through sprinkler and pipe networks.

Hard water is treated by RO plant and is supplied to the different drinking water tanks available at various locations in the campus. The plant has a capacity of 7000 LPH. Treated water samples are tested once a month by the Department of Chemistry.

Biomedical wastes such as blood-stained cotton, sharps and microbial cultures generated by the Department of Biotechnology and health care centre are segregated and collected using various colour coded bins. Biomedical wastes generated within the campus are subjected to sterilization using an autoclave that kills harmful pathogens. HEI entered an agreement with M/s Ramky Energy and Environment Ltd., to dispose off the decontaminated wastes.

The HEI adopts a 3R policy (Reduce, Reuse and Recycle) for the management of waste including E-waste. Computers, servers, projectors and other electronic equipment are subjected to maximum utilization by having regular maintenance, preventive maintenance and other check-ups. Toners are reused. The used electronic equipment is also disposed through vendors including a buy-back mechanism. HEI entered an MoU with Green GREEN ERA RECYCLERS, Coimbatore for the disposal of E-Waste.

Other Initiatives: The degradable solid wastes such as agricultural residues and food wastes are used for the production of fertilizers using vermicomposting. Part of the food waste is used for the generation of biogas through the two biogas plants present in the campus. Agricultural residues such as coconut sheaths are used for the preparation of reinforced composite materials and they are moulded into door panels. Silk cocoons collected are used to prepare bio-crafts and waste pupae are used to prepare animal feeds. The chemical wastes generated are diluted and neutralized. It is mixed with nutrients, used for the cultivation of azolla which is used as a biofertilizer. Fly ash, marble dust, granite dust, Ground Granulated Blast-furnace Slag (GGBS), paper burnt ash and sugarcane bagasse ash are used as source materials for the manufacture of eco-friendly construction products such as concrete bricks and paver blocks.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	[View Document](#)
Geotagged photographs of the facilities	[View Document](#)
Any other relevant information	[View Document](#)

7.1.4

Water conservation facilities available in the Institution:

1. **Rain water harvesting**
2. **Borewell /Open well recharge**
3. **Construction of tanks and bunds**
4. **Waste water recycling**
5. **Maintenance of water bodies and distribution system in the campus**

Response:

File Description	Document
Geotagged photographs / videos of the facilities	[View Document](#)
Any other relevant information	[View Document](#)

7.1.5

Green campus initiatives include:

1. **Restricted entry of automobiles**
2. **Use of Bicycles/ Battery powered vehicles**

3. **Pedestrian Friendly pathways**
4. **Ban on use of Plastic**
5. **landscaping with trees and plants**

Response:

File Description	Document
Various policy documents / decisions circulated for implementation	[View Document](#)
Geotagged photos / videos of the facilities	[View Document](#)
Any other relevant documents	[View Document](#)

7.1.6

Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

1. **Green audit**
2. **Energy audit**
3. **Environment audit**
4. **Clean and green campus recognitions / awards**
5. **Beyond the campus environmental promotion activities**

Response:

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	[View Document](#)
Certification by the auditing agency	[View Document](#)
Certificates of the awards received	[View Document](#)
Any other relevant information	[View Document](#)

7.1.7

The Institution has disabled-friendly, barrier free environment

1. **Built environment with ramps/lifts for easy access to classrooms.**
2. **Divyangjan friendly washrooms**
3. **Signage including tactile path, lights, display boards and signposts**
4. **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
5. **Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response:

File Description	Document
Policy documents and information brochures on the support to be provided	[View Document](#)
Geotagged photographs / videos of the facilities	[View Document](#)
Details of the Software procured for providing the assistance	[View Document](#)
Any other relevant information	[View Document](#)

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

The faculty and students of the institution are from diverse cultural, linguistic, regional and socioeconomic environment. The students, faculty members (including visiting faculty) and staffs are from various states/ union territories of the country such as Andhra Pradesh, Telangana, Kerala, Uttar Pradesh, Karnataka, Bihar, Orissa, West Bengal, Assam, Kashmir, Andaman and Tripura and from other countries such as Taiwan, Sri Lanka, Iran, Mauritius, Nepal, Malawi, Mexico, Poland, UK, USA etc. The Institution provides an inclusive environment, inculcates tolerance and harmony towards various regional, cultural, linguistic and communal diversities since they reach the institute and leave as a successful person.

The institution also offers courses on various foreign languages such as German, Mandarin, Korean, Romanian, French and National Languages such as Hindi. Malayalam, Telugu. The institution has also established a Korean Language Center in collaboration with Soongsil University, South Korea and a Taiwan Education Center was established in collaboration with the Taipei Economic & Cultural Centre in India. Korean and Mandarin courses are offered through these centers. This provides an opportunity for the students to understand and appreciate the other cultures. These clubs not only take care of delivering the languages but also teach the students about the various cultures adapted in different countries and states.

To promote the inclusivity without showing the difference in terms of gender/ socio economic/ caste/ religion, the institution celebrates various festivals related to the cultural, religious and linguistic harmony. Students from various regions are allowed to participate in these celebrations thereby have a chance to understand and appreciate other cultures and their festivities.

Cultural fests have carved a niche in the institution for social interaction. These activities give students a chance to more know about people of different passions and cultures that paves a way for socialization. Interaction with students from different backgrounds aids in development of their interpersonal skills.

The faculty and students of Catering Science and Hotel Management organize food festivals of various regions (such as Chettinad Food Festival, Punjab Food Festival, Chinese Food Festival and Kerala Food Festival). This provides an opportunity for the campus community to appreciate and enjoy specialty foods served in other regions.

To learn the cultural and religious activities of other people, various courses like Cultural Diversity, India's Diversity and Business, Cross Cultural HRM, Mass Media, Culture & Society and Regional Cuisine offered as open/humanities electives. This will provide an opportunity for the students to appreciate the diverse culture of our country.

The institution aims to create an inclusive environment to foster social integration through various training programmes to students, farmers and underprivileged community. Skill based training programmes were provided to underprivileged student community so that they can get better career options. Besides this, the institution also provides support to nearby farmers by training them in rural technologies such as vermicomposting, azolla and mushroom cultivation, production of geopolymers etc. so that they can enhance their income. This is also supported by funding through DST-SEED project. Skill and Personality Development Program Center was established for SC / ST students.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

Response:

The HEI conducts various programs to create awareness and sensitize the students, faculty and staff about their constitutional obligations/rights as citizens of India. The programs include a mandatory non-credit course 'Indian Constitution' for UG engineering students and 'Environmental Science' course to UG engineering, and science and humanities students.

KARE's curriculum includes a variety of courses aimed at instilling civic obligations in students. The courses include Professional Ethics, Human Resource Management and Labour Law, Political Economy, Introduction to Climate Change, Green Computing, Individual and Society, Indian Economy, Contemporary India and Education, Chemical Technology & Society, Ethics and Corporate Social Responsibility, Information Security and Cyber Laws, Media Censorship & Ethics and Social Work Research and Statistics.

In addition, special lectures are arranged on various topics by the departments to create awareness among the students. The programs include:

Voter Awareness: Lectures are organized for the students to create awareness about the electoral process and the importance of voting in a democracy. Voting awareness campaigns are conducted for the public as well. These programs are organized by our students under the paradigm of SVEEP (Systematic Voters' Education and Electoral Commission) as pronounced by the Electoral Commission of India. Besides, our staff and students are also encouraged to participate in election duties.

Youth Parliament: Students' are future of democracy. Hence, a platform was created for the youth to participate and express their ideologies and share their opinions. This helps in transforming the outlook of young minds for their involvement and access in social and rational causes thereby encouraging the youth to serve the society by entering into public life.

Lectures are organized on various themes that impact the nation the students also get a chance to express their opinion and get their doubts cleared from the experts.

The Institution enthusiastically participates in the Digital India movement taken forward by the Government of India. There is an active participation in encouraging the students to register for NPTEL courses. During the lock-down period new initiatives were taken that align with the Digital India Movement such as online course delivery and evaluation. Various processes of the institutions such as fee collection, course registration, hostel room booking and transport booking are done through digital mode.

The leadership Programmes such as *IUCEE Leadership Summit* was attended by the administrators. Attending the IUCEE Annual Leadership Summit has helped the administrators to share their experiences with their peers and collaborate with them to achieve SDG 4, that could transform the higher education sector in the Indian context. Students also attended *IECEE-EWB Student Leadership Course 2020 and IUCEE-NEP pilot Student Leadership and Sustainability Course 2022*. This course emphasizes on the importance of developing 21st century skills including leadership skills which focuses on UN Sustainable Development Goals.

Sample evidence can be found in the following link:https://ssrnaac2022.kalasalingam.ac.in/index.php/s/yXMpxnR97F5QonE

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

1. The Code of Conduct is displayed on the website
2. There is a committee to monitor adherence to the Code of Conduct
3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff

> 4. **Annual awareness programmes on Code of Conduct are organized**

Response:

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	[View Document](#)
Code of ethics policy document	[View Document](#)
Any other relevant information	[View Document](#)

7.1.11

Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

KARE celebrates National and International Commemorative Days, by organizing various events, to inculcate/infuse tolerance, communal harmony, and sense of societal, national & international responsibility, spirit of nationalism and international brotherhood and inclusivity amongst the students.

National commemorative days celebrated:

Independence Day is celebrated, on 15th August, to commemorate the independence of India and to promote nationalism and patriotism towards the nation. Republic day is celebrated to commemorate the enactment of the Indian constitution, on 26th January. On these occasions followed by flag hoisting and parade by NCC cadets, speakers highlight the sacrifices made by our freedom fighters and leaders of our Nation, which instil and inspire the spirit of nationalism in the minds of students.

KARE celebrated Teachers' Day on September 5 as a tribute to the contribution made by the teachers to society and to mark the birth anniversary of Dr. Sarvopalli Radhakrisnan. During the celebration, various events are conducted, and the students participate in the celebration to pay their gratitude to faculty. KARE celebrated Engineer's Day on September 15 to commemorate the birth anniversary of the great Indian Engineer, Mokshagundam Visvesvaraya, the 'Father of Modern Mysore', who helped in building some of the architectural marvels including Krishna Raja Sagar dam in Karnataka.

National Unity Day is celebrated to commemorate the birth anniversary of Sri Sardar Valla Bhai Patel on the 30th of October; events themed 'culture and unity' are conducted during the celebrations. The birth anniversary of Swami Vivekananda, the maker of modern India, is celebrated on 12th January as National Youth Day with an intention to spread awareness amongst the young minds to have a strong mind and body, so that they can contribute to the society. National Service Scheme Day on September 24th and the Birthday of Bipin Chandra Pal on November 07th. Gandhi Jayanti is celebrated on 2nd October every year to mark the birth anniversary of Mohandas Karamchand Gandhi, Father of our nation. As he is the Pioneer of the philosophy and strategy of non-violence, his birthday is observed as World

non-violence day.

International commemorative days celebrated:

World Students' Day is celebrated on October 15th to commemorate the birth anniversary of Dr A. P. J. Abdul Kalam, the "Missile Man of India" to inculcate the values to be practiced and igniting young minds for innovation. KARE celebrated International Yoga Day on 21st June, to raise awareness on physical, mental and spiritual practice among students. KARE celebrated World Water Day, on March 22 to emphasize the significance of safe, clean, fresh water and to raise awareness of the global water crisis. Besides these, the institution also celebrated International Women's Day on March 8. Essay Writing, Speech Contest (Elocution), Poem Writing and various other competitions and cultural events are conducted to encourage student participation.

File Description	Document
Geotagged photographs of some of the events	[View Document](#)
Any other relevant information	[View Document](#)
Annual report of the celebrations and commemorative events for the last five years	[View Document](#)

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

Response:

Best Practice I

1. Title: Poornakalasha**-** Empowering youth by offering comprehensive and holistic education

2. Objectives of the Practice

The primary objective of this practice is to offer holistic education that can provide technical skills, creative and critical thinking, social-awareness and, to instill self-confidence among the students, which will enhance their problem-solving ability with the society in mind to meet SDGs 2,3,6 and 7.

3. The Context

Developing socially conscious technocrats is the need of modern India. Keeping this in mind, our curriculum offers various opportunities to the students. This includes:

- Creating an innovative ecosystem by establishing a conducive environment that promotes

    intellectual ability by partnering with industries to offer industry-oriented courses to make the students industry ready.

- Experiential learning through X-component introduced in the curriculum, lab-based projects, projects with societal relevance brought in by 'Community Service Project' (CSP). The students are also encouraged to work as multidisciplinary teams, where in students from more than one domain are encouraged to work on a single project.
- Physical training provided by motivating them to participate in NCC, sports, games and yoga.
- Co-curricular events organized by the departments which helps the students exhibit their talents.
- Mandatory non-credit courses (non-CGPA) allow the students to participate in various co-curricular and extra-curricular activities and help in the over-all development of the students.

4. The Practice

The institution has developed a unique system of education which provides ample opportunity for the students to develop critical thinking and to promote innovation. Opportunities are provided to participate in various activities that enhance inter-personal and leadership skills.

Few of the departments partner with few industries like IBM, Siemens, Nanochip and Automotive Research Association of India (ARAI). The industries participate in designing the curriculum, training the faculty and co-teach few courses. The institution also partners with TCS in designing curriculum for B.Sc. Computer Science, B.Sc. Information Technology and B.Com. programs.

All the students are encouraged to participate in the one-credit courses offered by the industry personnel. Besides this, the students also attend webinars and workshops organized with industry focus. Students also participate in various competitions, that instill creativity and promotes their intellectual ability.

The programs organized by IEDC has been culminated into nine student start-ups which are incubated by KARE. The facilities created at Kalasalingam Innovation Foundation (ACIC-KIF) helps the students to get an opportunity to work on real-world problems.

Both male and female students are motivated to enroll in NCC which cultivates discipline and promotes also participate in various sports activities. Students also won various medals in national and international competitions held at various places. All UG students should mandatorily complete Community Service Project (CSP) as a part of their curriculum. This provides experiential learning with a societal relevance. The successful completion of CSP results in product development, patent, publication and participation in project contests. Selected projects are sent for external funding like TN State Council for Science and Technology (TNSCST), EWB, etc. Also, students are encouraged to attend various awareness programs organized by Indo-Universal Collaboration for Engineering Education (IUCEE). A set of non-credit courses (non-CGPA) that are mandatory, for the under graduate students, provide an opportunity to the students to participate in various co-curricular and extra-curricular activities. This results in the over-all development of the students.

5. Evidence of Success

The knowledge and technical skills acquired by the students helped them in getting highly paid jobs in the industries or enrolment in higher studies. Based on the opportunities provided, the students have developed many innovative equipment or solutions. Some of the processes/ products were patented. Students driven projects supported by DST through EDI resulted in the establishment of companies by

the students with faculty as mentors.

Students participate in various technical events organized by the institution or other organizations and won prizes. The skills that they developed during the course of study helps them in getting either highly-paid jobs or higher studies in premier institutions.

Our students enthusiastically participate in NCC, sports and games which is evident by the laurels that they have brought to the institution by participating in various competitions. Our engineering students are actively involved in solving community-based issues though Community Service Projects. All projects culminated into product-based solutions or development of software-based solutions.

6. Problems Encountered and Resources Required

Implementation of any new initiatives would be a challenging task. Even though the opportunity is provided to all students, not all students are enrolled in programs such as industry oriented one-credit courses. Motivation is necessary to bring all the students in to the fold.

In case of CSP, identification of the social issue and providing solution (product development) need to be completed in one semester which demand more effort in a shorter duration. To address this issue, laboratories are made available for the students beyond working hours. The intense exposure of faculty and expert guidance during reviews helped a lot in timely completion.

Best Practice II

1. Title: Anveshana - Fostering Research Excellence among the Students and Faculty

2. Objectives of the Practice

- To organize sensitization programs for the students and research scholars on Research Methodology including statistical tools and Research Ethics.
- To organize orientation programs for the students, research scholars and faculty to learn about the resources and expertise available in the institution.
- To provide university research fellowships, post-doctoral fellowships and also financial support in the form of seed money for research and innovative projects.
- To encourage quality research publications by providing training in manuscript writing.
- To provide help for young faculty in grant-writing by organizing grant-writing workshops.

3. The Context

The development of a country depends of the research and development activities that result in quality publications, patents and innovative processes that can be translated into product development. Quality research originates from Higher Education Institutions. Because of the lesser number of research scholars and post-doctoral fellows, the out-put of research is also lower. The quality of research can be enhanced by employing faculty members who are trained in premier institutions in India and abroad, fostering research collaborations and establishing research facilities that is accessible to the faculty, research scholars and students. Hiring enough quality man power by offering research and post-doctoral

fellowships could also contribute to quality research and could result in increase in the number of publications.

4. The Practice

In order to promote excellence in research, the institution has adopted a step-wise strategy that include establishing research facilities, training our faculty members and students and, offering research fellowships.

International Research Center that was established with state-of-the-art equipment is accessible to all the faculty and students free of cost. More number of research fellowships were created for each of the departments. Besides the research scholars and post-doctoral fellows, the UG and PG students are also encouraged to participate in the on-going research activities with the guidance of faculty members.

University Research Fellowships are provided to about 60-80 research scholars every year which results in increase in the number of PhDs produced by the institution. This contributes to quality man-power to the national pool. The post-doctoral fellowships provided to the PhD holders helps them enhance their research expertise and also increase the number of quality publications. Research Methodology has been included as a mandatory course for the research scholars who are enrolled for PhD and this covers both ethics and statistical tools that helps the scholars. Research scholars are encouraged to attend conferences, workshops and training programs that help them in enhancing their knowledge and technical skills.

The progress of the Research Scholars is reviewed regularly in the Department Research Committee meetings conducted in the presence of external experts. Our faculty members are also encouraged to apply for the prestigious post-doctoral fellowships such as NPDF offered by DST and Kothari Post-doctoral fellowship offered by UGC. Some chose to go abroad for their post-doctoral training. The faculty members are given sabbatical leave during the fellowship period. Faculty members are encouraged to apply for summer fellowships offered by Indian National Science Academy and TNSCST Young Scientist Fellowship program. Together these initiatives contributed to increase in the number of quality publications.

5. Evidence of Success

The success of the practice is reflected in the creation of an International Research Center that houses state-of-the-art equipment with Rs 5 crores of institutional funding. This enabled our students and research scholars to make use of the facilities at no cost and this can be correlated with the increase in number of publications in the field of Materials Science.

The basic facilities that have been created with institutional funds helped the faculty to file research grants and the institution has obtained research grants to the tune of Rs. 2742 lakhs during the assessment period. There is substantial increase in the number of University Research Fellows and Post-doctoral Fellows during this period. All these initiatives together have contributed to the increase in number of publications in high-impact journals. The number of publications has increased to 2772 publications in the past five years. 10 research articles with more than 10 impact were published in journals.

6. Problems Encountered and Resources Required

The institution has a locational-disadvantage; being situated in a rural area far-from major cities it is difficult to attract global talent. But this is overcome by with increasing in pay for the faculty.

Offering research fellowships helps in attracting better research scholars who could contribute to improving the research contributions and increase the number of publications.

File Description	Document
Best practices in the Institutional web site	[View Document](#)
Any other relevant information	[View Document](#)

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

KALASHA CONNECT - Commitment to Help the Under Privileged

The founding philosophy of KARE is to "Empower Under Privileged People". The institution is committed to the people who are in a socially disadvantaged state. Keeping this in mind many programs have been designed for the upliftment of rural community in and around the campus. The Institution is located in a predominantly rural area in one of the aspirational districts of Virudhunagar in the state of Tamil Nadu. The campus is surrounded by villages.

The institution organizes various programs for the training people in this region which increases their livelihood. The training includes mushroom cultivation, vermicomposting, art making from cocoon waste etc. In the campus, vermicompost is prepared from agriculture and kitchen waste and is sold to the farmers at a nominal cost. Training is also provided to the farmers in this region on vermicomposting. The institution also has a mushroom cultivation unit, where mushroom is produced and sold at a nominal cost. Training is also provided to men and women on mushroom cultivation.

Our students are constantly involved in engaging the community by helping them in keeping the environment clean. They participate in various activities such as: Cleaning of temples, Cleaning of ponds, help in hundi collection money counting etc.

Social Welfare Initiatives

As part of the societal commitment the institution has started a separate Department of Social Work by introducing MSW program in the curriculum. The faculty and students conduct various programs for the betterment of life to women particularly those living in rural and tribal areas. The programs include:

- Life Skill programs for rural / tribal women
- Sensitization Program for Tribal Women and Youth at many villages
- Legal Guidance for Women
- Entrepreneurial Skill Development among Tribal women and
- Youth Awareness Program on Issues in Early Marriage and Early pregnancy
- Workshop on Societal Initiatives for Entrepreneurial Skill Development among Tribal women and Youth at Mamaram, Kotagiri in association with Bhabha Atomic Research Centre (BARC).

Program for the Speech and Hearing Impaired (SHIP)

Our institution is the first one in Asia to offer BTech program for children with speech and hearing impairment. The program, formally inaugurated by the late President of India, Dr A.P.J. Abdul Kalam, is catering to the needs of the students throughout the country. There are no separate schools after 10th students for students with Speech and Hearing impairment. Our program admits students after 10th and in the first two years, the students are prepared for Senior Secondary Examination conducted by NIOS (National Institute of Open Schooling, MHRD, Govt of India). Then the students are allowed to continue their degree in the respective departments. The center is equipped with Speech and Audiology Lab to monitor and enhance the speech and hearing levels of these students. The class rooms are fitted with Loop induction facility and LCD monitors to aid in teaching and learning process. Almost all the students of the passed-out batches are placed in MNC's with good annual package comparable with the salary of any normal graduates. **The institution takes pride in helping these differently-abled students integrate in the main stream of nation building.**

Bachelor of Education (B.Ed.) in Special Education

As specialized teachers to train students in Special Education programs are hard to find, KARE has initiated a B.Ed. program in Special Education, that is recognized by the Rehabilitation Council of India.

Extending help for visually challenged youth

KARE has joined hands with, Karna Vidhya Foundation, a Chennai based organization for helping the visually challenged youth coming from rural areas by offering a Skill Development and Employability Program. The institution is extending its facilities for offering a 6-month training for these youth in Information and Communication Technology tools so that they can be placed in industries.

Promoting Societal Welfare through Government initiatives

As part of Unnat Bharath Abiyan the institution has adopted 5 villages and has also conducted many activities to promote Swachh Bharath in various villages.

This includes:

- The institution has conducted various awareness campaigns to educate the public about Global warming; Greenhouse gas emission and cleanliness. The campaign include: Swachhata Melas, Door-to-door meetings, Village or School-level Rallies, Street Plays, Folk songs, Dance performances, wall Paintings on public walls and government buildings and organizing movie screenings
- Waste Collection Drives were also conducted; the people were taught to segregate solid waste

into non-biodegradable and biodegradable waste, proper Transportation of Household waste, development of Compost Pits. Help was provided in the construction of toilets

The institution is empowering people in this region who are socio- economically backward by making them more confident by offering various skill-development programs though it is a challenging task.

File Description	Document
Any other relevant information	[View Document](#)
Appropriate web in the Institutional website	[View Document](#)

5. CONCLUSION

Additional Information :

Atal Community Innovation Center-Kalasalingam Innovation Foundation (ACIC-KIF) is a section-8, non-profit community innovation center established in April 2021 jointly by Kalasalingam Academy of Research and Education (KARE) and Atal Innovation Mission (AIM), NITI Aayog, Govt. of India. The aim of ACIC-KIF is to promote economy, employment, and enable community-oriented innovations. It is funded to the tune of 5 Crores with the AIM providing 2.5 Crore as grant-in-aid for establishment of the facilities and host Institutions' matching contribution of 2.5 Crores with a resolve to generate community-oriented innovations in the region. The ACIC-KIF has also done technology transfer, licensing, and invoked other business models as required for commercializing innovations. ACIC KIF signed MoU from 14 various Corporate partners and 4 academic partners. This center has incubated 55 startups so far.

The Institution continues to do indefatigable work in getting projects and research centers. It has received DST funding to establish the National Center for Advanced Research in Discrete Mathematics. KARE has got the state-of-the-art International Research Centre(IRC) with splendid high-end instruments for advanced research in material sciences and life sciences. KARE is equipped with state-of-the-art research equipments like Scanning Electron Microscope, Energy Dispersive X-ray Spectrometer, X-Ray Diffraction Unit, Fourier Transform – Infra-Red Spectrometer and Atomic Absorption Spectrophotometer. IRC caters to the needs of KARE members and offering services to nearby institutions and industries. KARE has an h-index 83 (Scopus). KARE publishes a scopus indexed journal 'AKCE International Journal of Graphs and Combinatorics' through Taylor & Francis. Multistoried separate hostels with plenty of facilities provide accommodation to thousands of students. The institution has spent an exorbitant sum to create a world-class swimming pool and indoor stadium for sports. Furthermore, KARE gives utmost importance to Intra-mural and Extramural activities for the holistic development of students. KARE has introduced many scholarship schemes like the first-graduate scholarship, free-hostel accommodations which are provided to students from economically weaker sections. Sports scholarships are provided to students who excel in sports. Innovation and Entrepreneurship Development Centres(IEDC), established with DST grants, provides institutional mechanism to create an entrepreneurial culture. It is providing financial support to students for converting idea into prototype and prototype into commercial product. The incubation center of KARE is approved by Ministry of MSME and so far 13 student start-ups have been incubated in the institution. Agricultural Engineering Department was established in the year 2016. For attaining the best student outcome of the Agricultural Engineering Department, the university has bought a farm land of 615123 m2 for academic purposes of the agricultural engineering students.

Concluding Remarks :

- Kalasalingam University is the first institution in Asia to offer the special B.Tech. Program for the Speech & Hearing Impaired Persons (SHIP). This course is aimed at those people who need special attention and give them an opportunity to adapt themselves to the real time challenges in the Engineering field. The University has framed the curriculum and syllabus in such a way that after the completion of this course, these students will be on par with other Engineering graduates to cater to the needs of industries. This course was inaugurated by the former President of India Honorable Dr.A.P.J. Abdul Kalam on 5th January 2007.

- KARE has established the Kalasalingam Technology Business Incubator (KTBI) to put its technical and professional knowledge to the best of its use for practical applications. With more than 300 trained engineering faculty, and access to sophisticated equipment in the University laboratories, Incubation Centre and International Research Centre the pre incubation activities up to prototype level can be speeded up in the KTBI with significantly improved chances of survival of the Start-ups. Apart from that the institution have provided various seed funding opportunities to our students and SMEs community towards innovation & start-up.

- KARE provides research fellowships for PhD Scholars, financial incentive for research paper publication, scholarships for sports persons with 100 percent fee waiver.

- KARE has such a conducive environment for the student community for teaching learning, research, placement and for the development of technical knowledge serving the rural population of Socially and Economically Backward Communities.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification
2.4.4	**Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the last five years** 2.4.4.1. **Number of full time teachers receiving awards from state /national /international level from Government/Govt. recognized bodies year wise during the last five years** Answer before DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>95</td><td>42</td><td>82</td><td>97</td><td>74</td></tr></table> Answer After DVV Verification : <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>86</td><td>34</td><td>49</td><td>92</td><td>62</td></tr></table> Remark : Value have been updated as per relevant attachments
3.2.1	**Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the last five years (INR in Lakhs).** 3.2.1.1. **Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs).** Answer before DVV Verification: <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>138.45</td><td>91.87</td><td>173.71</td><td>216.12</td><td>382.5</td></tr></table> Answer After DVV Verification : <table><tr><td>2021-22</td><td>2020-21</td><td>2019-20</td><td>2018-19</td><td>2017-18</td></tr><tr><td>103.95</td><td>91.87</td><td>146.96</td><td>216.12</td><td>382.5</td></tr></table> Remark : Value have been updated as per relevant attachments
3.2.2	**Grants for research projects sponsored by the government agencies during the last five years (INR in Lakhs).** 3.2.2.1. **Total Grants for research projects sponsored by the government agencies year-wise during the last five years (INR in Lakhs).**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
1169.90	376.30	789.29	355.35	51.44

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1129.55	376.30	789.29	355.35	51.44

Remark : Value have been updated as per relevant attachments .

3.3.3

Number of awards / recognitions received for research/innovations by the institution / teachers / research scholars / students during the last five years.

3.3.3.1. Total number of awards / recognitions received for *research /* innovations won by institution / teachers / research scholars / students year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
75	54	52	67	82

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
60	62	35	48	36

Remark : Value have been updated as per relevant attachments

3.4.3

Number of Patents published / awarded during the last five years.

3.4.3.1. Total number of Patents published / awarded year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
166	57	118	92	27

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
17	10	12	9	8

Remark : Value have been updated as per relevant attachments

3.5.2

Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

3.5.2.1. **Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
116.87	47	82.3	226.25	110.75

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
116.87	47	82.3	226.25	110.75

3.6.2	**Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the last five years**

3.6.2.1. **Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
22	21	21	23	19

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
12	16	13	10	17

Remark : Value have been updated as per relevant attachments

3.6.3	**Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

3.6.3.1. **Number of extension and outreach programs conducted by the institution those through NSS/NCC, Government and Government recognised bodies during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
44	16	72	106	50

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
38	16	52	95	38

Remark : Value have been updated as per relevant attachments

3.6.4	**Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years**
	3.6.4.1. **Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2669	1495	5042	4833	3212

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
2669	1495	6948	7478	3212

3.7.1	**Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year**
	3.7.1.1. **Total number of Collaborative activities with other institutions / research establishment / industry for research and academic development of faculty and students year-wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
111	87	271	119	79

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
102	79	205	106	71

Remark : Value have been updated as per relevant attachments

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
15	11	15	13	27

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
15	10	12	11	22

Remark : Value have been updated as per relevant attachments

4.4.1	**Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years** 4.4.1.1. **Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)** Answer before DVV Verification: Answer After DVV Verification : Remark : Value have been updated as per relevant attachments

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
6596.91	6207.75	6253.32	6036.29	5774.96

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
5500	5100	5200	4800	3500

Remark : Value have been updated as per relevant attachments

5.3.1	**Number of awards / medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) during the last five years.** 5.3.1.1. **Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
40	6	52	45	110

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
40	6	52	42	82

Remark : Value have been updated as per relevant attachments

6.3.3	**Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.**

6.3.3.1. **Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
71	81	109	111	107

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
65	74	96	89	94

Remark : Value have been updated as per relevant attachments

6.4.2	**Funds / Grants received from government bodies during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).**

6.4.2.1. *Total Funds / Grants received from government bodies for development and maintenance of infrastructure (not covered under Criteria III and V) year wise during the last five years (INR in Lakhs).*

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
30.84	0	149.589	0	0

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
71.19	0	149.589	0	0

Remark : Value have been updated as per relevant attachments in related metrics

6.4.3	**Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)**

6.4.3.1. Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
33.75	38.5	33.75	61.7	18.25

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18

| 68.25 | 38.5 | 60.50 | 61.7 | 18.25 |

Remark : Value have been updated as per relevant attachments from related metric 3.2.1

2.Extended Profile Deviations

Extended Profile Deviations
No Deviations